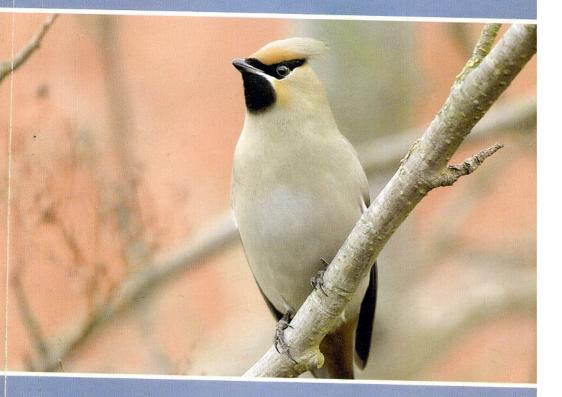
The Sussex Bird Report

No. 58 2005



Published by The Sussex Ornithological Society

SUSSEX BIRD REPORT NUMBER FIFTY-EIGHT, 2005

Recorder: CW Melgar Editorial Team: PN Paul ,I Barnard, Dr JA Cocks ,J Curson, RJ Fairbank, JA Hobson, P James, Dr JA Newnham, A Thomas & Dr BJ Yates.

CONTENTS

Page Editorial 3 Review of 2005..... 4 Classified Records - Introduction 16 Systematic List 18 Escapes & Feral Birds..... 188 First and Last Migrant Dates..... 194 Breeding Surveys in Defined Areas..... 196 Contributors, Acknowledgements and Surveys..... 200The Sussex Ringing Report for 2005, RDM Edgar and S McKenzie..... 207 Ivory Gulls in Sussex, RJ Fairbank..... 214 Diseases of Garden Birds, RT Pepper..... 226 The 2004/05 Waxwing Invasion, A Thomas..... 233 Expansion of the Breeding Bird Survey in Sussex, Dr H Crabtree..... 238 Gull-billed Tern Lingering on the Sussex Coast, Summer 2005, CW Melgar 248 A Review of the Results of WeBS in Sussex. Dr JA Newnham et al..... 250 Map of Sussex and mini gazetteer..... 284

The publication of the 2005 Sussex Bird Report was supported by a generous legacy from the late E.G. Robus and a contribution from West Sussex County Council.

Cover photograph by Ian Barnard Waxwing at Littlehampton, January 2005.

Published in December2006 by THE SUSSEX ORNITHOLOGICAL SOCIETY (www.sos.org.uk)



Best Annual Bird Report

Placed joint 1st in the 2004 competition.

Sussex Bird Report 2004 — Amendments & Corrections.

Very few errors in the 2004 *Report* were brought to the Editor's attention; details of the more significant of these and of any additional records for previous years can be found under the relevant species in the Systematic List.

Text Illustrations:

John Davis	Blackbird, Black Brant, Crossbill, Goosander, Great Crested Grebe, Hoopoe, Storm Petrel.
John Reaney	Bewick's Swans, Fieldfare, Hobby, Ivory Gull, Osprey, Red-Backed Shrike, Wheatear.
Bob Greenhalf	Grey Phalarope.

Photographic acknowledgements: The Photographic Editor would like to thank those photographers who submitted photographs of Sussex birds taken in 2005, many of which appear in this *Report*. Once again, the quality of the transparencies received was outstanding.

Views expressed by contributors to the Sussex Bird Report are not necessarily those of the Editor and the Council of the Sussex Ornithological Society.

EDITORIAL

Thanks are again due to the many contributors who submitted their records for inclusion in this 58th Sussex Bird Report. This year there has been a huge increase in the number of records and contributors. Much of this increase comes from the data recorded through the BirdTrack project (organised by the BTO on behalf of the BTO, RSPB and BirdWatch Ireland) but additional records have also been generated by the enlargement of the Breeding Bird Survey in Sussex and the exchange of data with the Sussex Biodiversity Records Centre. A full list of acknowledgements to those submitting records, and to the many people who took part in regular surveys and counts, is given on pages 200 - 206.

Number\Year	2001	2002	2003	2004	2005
Submitting records	383	472	507	590	796
Records received	49,553	60,031	59,040	65,730	87,586
Species recorded	257	261	258	262	263
Birds ringed	32,833	45,650	52,449	57,538	58,739
Species ringed	123	104	113	119	124
Species on county list	384	386	388	389	389

The species accounts were written by a large team of authors, namely CJR Barfield, IT Barnard, S Bayley, Mrs VP Bentley, PM Brayshaw, C Brooks, W Coleman, DEG Copeland, JR Cowser, Mrs H Crabtree, DE Crawley, J Curson, P Everitt, RJ Fairbank, D Green, AC Gutteridge, JA Hobson, CA Holt, A House, P James, ME Kalaher, G Kennett, R Knight, Rev PJ Le Seuer, SH Linington, DJ Madgin, R Menhenett, GA Metcalf, JA Newnham, TW Parmenter, PN Paul, RT Pepper, A Perry, A Podmore, J Pryor, CJ Reay, GCM Roberts, A Thomas, AB Watson, JA Whitman and TJ Wilson. The initials at the end of each species account identify the writer to whom sincere thanks are extended.

Thanks are also due to **Paul James**, **Phil Jones**, **Leonard Mann**, **John Newnham**, **Robin Pepper**, **Adrian Thomas and Barry Yates** who read through the species accounts and suggested a number of improvements. As in previous years, some of the draft accounts have been altered and edited to reflect the suggestions made and to summarise the records in a more accessible form for future researchers. I trust that this action will not have offended any of the authors but, if it has done so, I offer my sincere apologies.

In addition to those already mentioned, special thanks go to **Tony Cocks** for editing the scientific papers, **Jon Curson** for writing the Review of the Year, **Ian Barnard** for selecting the photographs for inclusion in the Report, **John Hobson** for organising the writing (and for the assembly) of the Systematic List, **John Newnham** for organising the computerisation of all the records and **David Brothwell** for typesetting the text.

Last year's Report was awarded joint first place in what was the last year of the BTO's Best Annual Bird Report Competition. This is a fitting reward for all the time and effort that has to be put into the production of the Report by so many people.

Nick Paul, November 2006

REVIEW OF 2005

by Jon Curson

As in previous years, this review of 2005 is a chronological summary, month by month, of the year's weather and significant birds, including high counts of various species, first and last arrival/departure dates and other interesting and unusual records. A total of 263 species was recorded in the county, which is slightly more than the 258 species recorded last year. The totals recorded since 1996 range between 257 (in 1998 and 2001) and 269 (in 2000).

There were a number of rare and exciting species recorded in 2005. A Great Spotted **Cuckoo**, which turned up at almost the exact location and time as the previous one 15 years ago, provided a very welcome repeat for those few who missed that long-staying bird. A long-staying Kumlien's Gull in the Brighton area from January to March was the first record for the county of this North American race of Iceland Gull. A Green-winged Teal at Pulborough Brooks was only the 10th county record and a Caspian Gull at Pebsham Pond (Filsham) in February was a good example of a sub-species seldom recorded in Sussex but which is probably under-recorded. The autumn provided a bonanza of rare *Phylloscopus* warblers, including record numbers of **Yellow-browed Warbler**, the county's third Greenish Warbler, fourth Dusky and Western Bonelli's Warblers, and 11th & 12th Radde's Warblers. In complete contrast, and due probably to a change in wind direction at the end of October, there was only one Pallas's Leaf Warbler. A very good autumn also provided Sussex's third (and disappointingly short-staying) Laughing Gull, 10th and 11th Little Buntings (including the latest one recorded), the largest recorded influx of Continental Coal Tits, two Penduline Tits, good numbers of Sooty and Balearic Shearwaters, Leach's Storm-petrels and Grey Phalaropes, and a movement of **Brambling** in early November which eclipsed anything previously seen in the county.

The pair of **Red Kites** that first nested last year bred again, rearing three young and record breaking numbers were recorded in the county. Four pairs of **Honey-buzzards** reared young, **Little Egrets** and **Ravens** continued their colonisation as breeding species and, although there was no evidence of nesting, a pair of **Stone-curlews** summered on the Sussex downs for the first time since 1981. Arrival and departure dates were broken by the earliest **Garden Warbler** and **Honey-buzzard**, the latest ever **Hobby** and the first May record for **Waxwing**.

Photographs of some of the birds listed in this review can be found within the Report and on Ian Barnard's Birds of Sussex web-site <u>www.thebirdsofsussex.co.uk</u>, Monthly summaries of the year's weather can be found at <u>www.bbc.co.uk/weather/ukweather</u>.

JANUARY was mild but unsettled during much of the first two weeks, with gales at the end of the first week, although there was a brief spell of settled, sunny weather on the 2nd-3rd. Settled anticyclonic weather arrived on the 13th-16th with the first overnight frosts of the year but daytime temperatures remaining mild. Atlantic depressions returned on the 17th and unsettled weather with high winds dominated for the next five days, although it was not particularly wet and rainfall for the month as a whole was below average. The final week was more settled and noticeably cooler with snow showers in the east of the county on the 25th, although milder weather returned at the very end of the month. Scarce and unusual birds remaining from 2004 included the Lesser Scaup at Scotney Court GP (until 14 March), Black Brant at West Wittering (until the 27th), a group of nine White**fronted** Geese at Easton Farm (Earnley) which were last seen flying over Pagham Hbr on the 3rd, the Great Grey Shrike in Ashdown Forest (until 27 March) and at least one of the two Twite at West Wittering (until the 27th).

On the 1st there was a Greater Scaup at Ivy Lake (Chichester GP) and two more at Brooklands (which stayed until 12 March). A Great Skua flew past Telscombe Cliffs, with another past there the following day. There were also 18 Wood Larks at Stansted Park and 150 Brambling at Stapleash Farm (Chilgrove), which was a high count for the first winter period. On the 2nd Red-necked Grebes were seen at Darwell Res and Michelham Priory and an unseasonal Arctic Skua was seen off Worthing Beach. On the same day **Waxwings** started arriving in the county in unprecedented numbers with up to 2000 birds present at the peak in February. The next day saw arrivals of a Eurasian Bittern at Burton MP, which was seen regularly until 22 March, and also a second-year Kumlien's Gull in the Brighton area, which remained until 21 March. The latter ranged between the Marina and King Alfred in the early part of its stay but settled down at Roedean mini golf course from 1 March. This is the first record of this North American race of Iceland Gull for Sussex. On the 5th a Pale-bellied Brent Goose arrived at West Wittering, staving until 8 February. Two Sandwich Terns at Chichester Hbr were seen regularly until the end of January. The following day there were four **Pale-bellied Brent** Geese at Pagham Hbr, which stayed until the 22^{nd} . There were also three Sandwich Terns at Climping Gap and three Water Pipits at Sidlesham SF (which stayed until 31 March with four seen on the 8th). On the 7th a Great Skua flew past Brighton Marina, on the 8th a Little Auk was seen at Selsev Bill and on the 9th a Glaucous Gull flew past Telscombe Cliffs, the first of four seen during the first winter period.

On the 13th a first winter male **Long-tailed Duck** arrived at Emsworth Channel (Chichester Hbr) and was seen there regularly until 23 March. On the 15th another **Long-tailed Duck** was recorded flying over Rye Hbr. The 16th continued the duck theme with a **Red-crested Pochard** at Chichester GP, a **Greater Scaup** at Bewl Water, ten **Smew** at Castle Water (Rye Hbr), which was the highest count of the year, and a **Water Pipit** at Barcombe Res. On the 19th there were 100 **Sanderling** at Goring Beach and two days later a **Great Skua** flew past Brighton Marina. A female **Greater Scaup** was recorded on the 25th at Waltham Brooks and the following day a **Red-necked Grebe** flew past Telscombe Cliffs and a **Great Skua** was picked up dead at Rye GC. On the 27th an **Iceland Gull** was seen at Pagham Hbr, the only one of the year of the race *glaucoides*. The next day a **Glaucous Gull** was found at Cuckmere Haven and was seen regularly until 8 February, although it could be elusive at times. It was recorded as a first or a second-year bird but the author of this review considers that it was without doubt a first-year bird (based on bill pattern, eye colour and plumage). On the 30th eight **Little Stints** at East Head (Chichester Hbr) was the highest count of the first winter period.

The January *WeBS* count recorded 7195 **Dark-bellied Brent Geese** and 1084 **Eurasian Teal** in Chichester Hbr and 386 **Pochard** in Rye Bay.

FEBRUARY was also remarkably mild for the first half of the month, although there was an overnight frost on the 7th, although four nights later southeast England enjoyed one of its mildest February nights on record. This period was also noticeably dry, with below average rainfall again during the month overall. Temperatures took a plunge as a cold front moved through on the 12th, and fell even more noticeably on the 18th as another cold front introduced Arctic air and snow showers in the east. The last week saw blizzards affecting many parts of eastern England and there was some significant snowfall in the

eastern part of the county during this period. The month began with two Pale-bellied Brent Geese at Scotney Court GP on the 1st and two Red-necked Grebes off Worthing the following day. Five Eurasian Bitterns at Castle Water on the 5th was the highest count of the year and a Great Skua flew past Birling Gap (Beachy Head). The following day another Red-necked Grebe was seen flying past Selsev Bill. On the 8th 3000 **Razorbills** past Brighton Marina set a new high day count for the county and the same number was recorded there on the 17th. Also on the 9th a Water Pipit was at Thorney Deeps (Chichester Hbr) and the following day 40,200 Common Gulls roosted on Bewl Water, which was the highest count of the year for this species. A Sandwich Tern at Selsev Bill on the 12th was perhaps a wintering bird rather than an early migrant. There was a Little Auk off Worthing Beach on the 13th and a male Green-winged Teal at Pulborough Brooks on the 16th was only the 10th county record. There was also a **Twite** at Peacehaven on the 16th which staved until 14 March. On the 19th a second-winter **Caspian** Gull at Pebsham Pond was a good record of a sub-species which is not often recorded in the county but which is probably a regular visitor. On the 21st the White-fronted Goose flock at Scotney Court GP peaked at 140, on the 25th there were three Water Pipits at Fishbourne SF, on the 27th a Great Grey Shrike was found west of Partridge Green which staved until 27 March and on the last day of the month a Spoonbill at Pagham Hbr was also seen on several days in March and was the first of 17 seen during the year

The February *WeBS* count recorded 7278 **Dark-bellied Brent Goose** and 812 **Common Shelduck** in Chichester Hbr and 3286 **Eurasian Wigeon** at Amberley Wild Brooks.

MARCH continued cold during the first week, with more snow over the Weald and the east of the county in particular. A thaw began on the 9^{th} and much of the remainder of the month was dominated by a southwesterly airflow and rather unsettled but mild weather. with high pressure briefly settling things down from 18th-21st. Despite the unsettled nature of most of the month, rainfall was below average once again. On the 1st a Twite was seen briefly at Widewater (Lancing) and on the 2nd 260 Tree Sparrows in the Pannel Valley was by far the largest flock recorded during the year. The following day 400 Chaffinches at Stapleash Fm was also the highest count of the first winter period. On the 7th two Palebellied Brent Geese at Pagham Hbr were perhaps two of the four seen there in January. On the 9th a Long-tailed Duck flew past Selsey Bill and one was also seen there from the 13th to the 24th. The arrival of spring was heralded on the 10th by the first **Sand Martin** at Funtington and the first Northern Wheatear at Rye Hbr. On the 12th a Scandinavian Rock Pipit was seen at Shoreham Fort and the next day three found in the lower Cuckmere stayed until the 16th. The spring theme continued on the 13th with the first eight **Yellow Wagtails** of the year at Weir Wood Res. Also on the 16th a pair of **Garganey** at the Breech Pool (Pagham Hbr) and two Common Redstarts at Selsey Bill were the first of the year. On the 18th a Stone-curlew flew over Roedean and the first two House Martins of the year were at Lewes Brooks.

On the 19th the first **Barn Swallow** was recorded at Shopham Bridge (Byworth), the first **Ring Ouzel** of the spring was at Sheepcote Valley (Brighton) and there were seven **Black Redstarts** at Beachy Head with eight at Selsey Bill the following day when the first **Little Ringed Plover** of the year also arrived at Chichester GP. A **Spoonbill** which flew past Selsey Bill on the 21st may have been the Pagham bird. On the 23rd at Pagham Hbr a **Hoopoe** was the first of five and the first **Whitethroat** of the year was seen there while the first **Willow Warblers** of the year were at Ovingdean and Ashdown Forest. The following

day **Ospreys** over Brighton and Pett Level were the first of 23 that were seen up to 10 Jun. The first **Nightingale** of the year was at Wyckham Farm (Steyning) and the first **Sedge Warbler** was at Castle Water on the 25th, while the following day **Serins** were seen at Cow Gap (Beachy Head) and Brighton Marina. On the 28th another **Serin** was seen at Edburton and a **Garden Warbler** at Rowland's Castle was the first of the year and set a new early arrival date for this species by 2 days. The month ended with the first **Cuckoo** of the year heard at Polegate on the 31st.

APRIL was typically changeable, with showers and rain interspersed with spells of more settled and sunny weather. The middle of the second week produced the longest spell of settled weather and the last week was particularly wet with Atlantic fronts bringing some significant rainfall. Overall rainfall was about average but it was a noticeably warm month with temperatures significantly above the average. On the first day of the month a first-winter Glaucous Gull was seen at Brighton Marina and the first Tree Pipit of the year was at Southease. On the 2nd the first Arctic Tern was recorded at Brighton Marina, while, on the 3rd, four Black-necked Grebes were seen there, a Hoopoe was at Rickney Marshes (Pevensey) and a Great Spotted Cuckoo was found at Adur Recreation Ground, almost exactly the same location as the last one in the county 15 years previously. It did not linger but thankfully was relocated at the mini golf course at Brooklands on the 5th, where it remained until the 9th. A first-winter Glaucous Gull on the Adur Estuary on the 4th may have been the same as the Marina bird of three days earlier; presumably the same bird then moved to Brooklands and remained there until the 6th. On the 7th the first Whinchat of the year was at Pulborough Brooks and the following day an immature **Spoonbill** was at Widewater. As usual, there were frequent first sightings in mid-April, with 11 Manx Shearwaters past Brighton Marina, a Eurasian Reed Warbler at Piddinghoe on the 9th. Hobbies at Ambersham Common and at Brooklands on the 10th, a Swift in off the sea at Church Norton, Pied Flycatchers at Hodcombe (Beachy Head) and Church Norton on the 11th, a Grasshopper Warbler at Seaford Head on the 13th, an early Pomarine Skua past Selsey Bill the following day, Wood Warblers at Paines Wood (Arundel) and Cissbury Ring on the 16th, and Turtle Dove and Lesser Whitethroat at Toot Rock (Pett). The last **Redwings** of the winter were noted at Burgess Hill on the 17th.

On the 18th 21 Great Skuas flew past Birling Gap in 4 hr and the following day 26 Velvet Scoters which flew past there was the highest count of the spring. Also on the 19th, 296 Little Gulls past Splash Point (Seaford) was the highest count of the spring for this species and the first **Spotted Flycatcher** of the year was at Pulborough Brooks. On the 22^{nd} the first **Roseate Tern** of the year at Brighton Marina was followed by another one there on the 30th. A first-summer male **Black-winged Stilt** was at Pulborough Brooks on the 23rd (staying until 25th) when 123 Mediterranean Gulls at Rye Hbr was a record; the seventh year in a row that the highest count has been exceeded for this species! A Woodchat Shrike arrived at Combe Haven on the 25th (staying until the 27th), while 270 Common Terns, 12 Arctic Terns and 18 Sandwich Terns feeding inside Brighton Marina was unusual. A **Black Kite** which flew over Hailsham on the 27^{th} was presumably the same bird seen over Boreham Bridge (Pevensey Level) on 1 May, and a White Stork drifted northeast over Hailsham on 28th. On the last day of the month two Honey**buzzards** at Hollingdean (Brighton) were the first of the year, setting a new county arrival date record. There was also a Stone-curlew and the county's 13th Subalpine Warbler at Beachy Head, and a count of 373 Whimbrel at Rye Hbr was the highest at this regular spring stopover site.

MAY saw low pressure producing significant rainfall and thunderstorms over much of Britain but, as so often is the case, the southeastern corner of the country missed out on much of this rain and rainfall in Sussex was below the seasonal average vet again. The night of the 4th-5th was unseasonably cold with a ground frost in the north of the county, and it remained cold and rather windy for the next four days before high pressure returned and temperatures rose to more typically May values. The period 10th-15th saw high pressure bringing warm daytime temperatures but chilly nights, before pressure fell again and an easterly wind brought some much needed but patchy rain to East Sussex on the 14th. An unsettled end to the month saw a southerly airflow with very warm temperatures on the 27^{th} and a period of heavy rain on the 30^{th} . The month started with a Honeybuzzard and a first summer female Black-winged Stilt in the lower Cuckmere on the first day. One **Waxwing** was still in the county, representing the first May record, and the last Fieldfare of the winter was at Balcombe. The following day a summer plumaged Great Northern Diver and three Roseate Terns flew past Brighton Marina and there was a Hoopoe at Henfield Levels. On the 3rd the first Nightiar of the year returned to Ashdown Forest and on the 5th a White Stork which drifted northeast over Bodiam may have been the Hailsham bird from the end of April and the bird which was seen over Pett Level the following day. On the 7th a **Gull-billed Tern** seen at Rye Hbr was presumably the same bird seen subsequently at Widewater on the 21st, at Selsey and Worthing on the 22nd and on the R Adur at Shoreham Airport on the 26th where it was seen until 6 June. A Roseate Tern was seen at Selsey Bill on the 8th and the following day White Storks were seen over Stanley Common and the Cuckmere. Also on the 9th a Montagu's Harrier graced Thorney Deeps (until the 15th) and 15 Hobbies over Amberley Wild Brooks was a high count for the year in what have become regular spring 'gatherings' of this species, usually at wetland sites where they hawk Hairy Dragonflies.

The following few days produced some good seawatching with another summer plumaged Great Northern Diver past Brighton Marina, 54 Pomarine Skuas (the highest spring count), a **Roseate Tern** past Splash Point on the 12th and, three days later, three more **Roseate Terns** past Brighton Marina. Also on the 12th a **Hoopoe** at Beeding Brooks was probably the same as the one at Henfield ten days earlier. On the 14th a **Spoonbill** was at Pagham Harbour and on the 18^{th} another **Hoopoe** was found at Upwaltham. On the 21^{st} a Montagu's Harrier flew in off the sea at Pagham Hbr and the next day a Cattle Egret turned up for a four-day stay at Southease and a Wryneck appeared at Woods Mill. (It was probably the same bird as that seen in a nearby garden the following day). On the 27^{th} a Honey-buzzard was at Thorney Island and on the 29th up to 6 Common Quail were calling at Steep Down (Lancing) (until 10 July) which were, along with one at Steyning Round Hill, the first records for the year. Also on the 29th there was a Black-necked Grebe at Barcombe Res, another Hoopoe at West Dean (until the 30th) and two European Storm-petrels at what is becoming the traditional summer site of Selsey Bill (there were also two there on 5 June). May ended with a **Red-rumped Swallow** at Birling Gap on the 30th, a **Montagu's Harrier** at North Marden being mobbed by a pair of Common Buzzards and a European Bee-eater at Hodcombe, both on the 31st.

JUNE started rather damp with coastal fog for the first week but high pressure then began to dominate the weather, resulting in some very warm temperatures. The middle of the month was mostly fine and dry but the last week saw unsettled and thundery weather with some torrential downpours. Rainfall was about average over the UK as a whole but Sussex was slightly less wet than many areas further north and west. A pair of European **Bee-eaters** at Shoreham on the 1st stayed until the following day, while less exciting but interesting nevertheless was a leucistic **House Sparrow** at Henfield. On the 3rd there were two **Red-backed Shrikes**, a male at Amberley Wild Brooks and a female at Combe Haven. On the 6th a **White Stork** soared south over South Bersted and a **Honey-buzzard** came in off the sea at Brighton, while a **European Golden Plover** at Sheepcote Valley was rather unseasonal. On the 8th there were three **Red Kites** at Steyning in what was another record breaking year for this species. On the 11th there was a **Common Rosefinch** at Goring Gap, three **Little Stints** at Barcombe Res which were the first of the autumn, and a **Short-eared Owl** at Pulborough Brooks which was considered to be a late spring bird. Forty four **Mistle Thrushes** at Chilgrove on the 19th was a high count for the year and the following day there was another **White Stork** in a field at Wartling, with presumably the same bird roosting at Ringmer on the 22nd. On the 24th a **White Stork** at Chichester was probably the Wartling/ Ringmer bird and another **Honey-buzzard** flew over Hollingdean. The following day three **Roseate Terns** at Ternery Pool (Rye Hbr) was a high count with one or two being seen daily from 14 June to 24 July.

The county's breeding birds experienced mixed fortunes. Little Egrets were confirmed or thought to have bred at six sites (four in West and two in East Sussex) and a pair of Garganev in the Pannel Valley was the only confirmed breeding of this species. It was generally a good year for raptors; four pairs of **Honey-buzzard** raised seven young and a 5th pair failed at the egg stage. The pair of **Red Kites** returned to nest at the same locality in the west of the county for their second year, raising three young, and 22 different birds were seen within the home range of this pair over the year. A pair of Goshawks was seen in the east of the county and there was probably also a pair in the west, but no breeding success was noted at either site. Peregrines continued to do well with 16 pairs breeding successfully and raising a total of 42 young. Sadly, waders generally fared considerably less well than the raptors, though there were some notable successes, including 11 pairs of **Avocet** which raised 24 young at panel Valley. Thirty nine pairs of Oystercatcher bred at five sites, with 26 of them being at Rye Hbr. although no details of breeding success are known. A pair of **Stone-curlew** was present on a private downland site during the summer but without evidence of breeding. This was the first summering in the county since 1981. Little Ringed Plover bred at three different sites with five pairs raising at least six young. There were pairs at seven other sites which probably also bred. Forty two pairs of Ringed Plover attempted to breed but only 34 were successful, the lowest total since 1981. Thirty four pairs nested on the Flat Beach at Rye Hbr where hatching success was good but fledging success poor. A total of 84 pairs of Lapwing bred at 12 sites, with probable breeding at a further 12. Redshank breeding was confirmed at only eight sites (four less than last year).

Thirty seven pairs of **Mediterranean Gull** bred at Rye Hbr, raising more than 40 young. Eleven pairs of **Great Black-backed Gull** nested at six sites and raised at least ten young but no details of nesting success are known for the five pairs in Brighton. This species was first recorded nesting in Sussex as recently as 2000. The only recorded breeding **Little Terns** were at Rye Hbr where 18 pairs raised 20 young, slightly better than last year. Also at Rye Hbr, at least 200 pairs of **Sandwich Tern** raised over 300 young which although about 25% down on last year was a very impressive count. This is by far the most important breeding colony in the county. **Common Terns** did quite well with 153 pairs at Rye Hbr raising more than 200 young, while at New Lake (Chichester GP) 85 young were raised and a pair raised three young at Arlington Res.

Barn Owls had an excellent year, with breeding confirmed at 169 sites (111 in West and 58 in East Sussex). This is nearly double the total of 97 sites recorded last year and was reflected over much of England, probably due to a combination of a good berry and nut crop the previous year and a mild winter which resulted in very high numbers of rodents. Most pairs laid eggs two weeks earlier than normal and one pair raised two broods. Lesser Spotted Woodpeckers were reported as breeding or probably breeding at six sites, with territorial activity noted at another four: this is the same situation as last year and the species' position as a breeding bird in the county remains rather precarious. The 72-73 pairs of Wood Lark which bred was an increase on the 54-55 pairs reported last year. The 89 territories of Wren in Brighton Wild Park was a slight decline on the 102 there last year. A singing Black Redstart at Portobello was the only suggestion of breeding this year, but the 46-47 pairs of **Common Redstart** reported was up on the 38 pairs breeding last year. Five reeling Grasshopper Warblers were recorded and the estimate of 100 pairs of **Dartford Warbler** was very similar to the 97-102 estimated last year. Just eight singing Wood Warblers were recorded, split between the northwest of the county and Ashdown Forest, a similar number to last year. At least six singing male Willow Tits were recorded at West Dean Woods, which contributed to a welcome increase in records overall during the year. **Ravens** had another good year; four pairs were present in suitable breeding habitat and, of these, two pairs each raised two young. Just 7-10 pairs of Tree Sparrow bred in the Brede Valley (3-5 pairs down on last year) and smaller numbers were recorded from four other sites.

JULY saw the unsettled weather from the end of June continuing for the first week, but the middle of the month was largely warm and dry, except for a cold front which introduced cooler air during the 18th-22nd. The last week saw a return to unsettled weather patterns with frequent showers in Sussex and an impressive tornado in Birmingham on the 28th! Rainfall was about average for the second month in succession. The month began with the first Wood Sandpiper of the year at Rye Hbr. A Eurasian Bittern at Castle Water on the 4th provided hope that this species might breed in the county soon. The 7th produced two Spoonbills at Rye Hbr and a Roseate Tern at Chichester Hbr. A Caspian Tern past Portobello on the 8th was the 16th county record and the first since 2001. A **Melodious Warbler** at Hodcombe on the 17th was also present the following day and the 19th provided a **Spoonbill** at Cuckmere Haven and the first returning **Purple Sandpiper** of the autumn at Brighton Marina. On the 20th there were two **Balearic** Shearwaters off Telscombe Cliffs and the following day there was a White Stork over Hamden Park (Eastbourne) and the first of 48 autumn Osprevs was at Pagham Hbr. **Balearic Shearwaters** put in a notable appearance at the end of the month with one past Saltdean on the 23rd, two past Brighton Marina on the 25th, another one past Saltdean the following day, singles past Brighton Marina and Southwick on the 30th and one at Shoreham Harbour on the 31st. Also on the last day of the month a Honey-buzzard was seen at Edburton.

AUGUST began with showers and some more general rain during much of the first week, followed by a few days of high pressure and then more unsettled weather for much of the rest of the month, with an unseasonably deep low pressure system on the 24^{4h} bringing some heavy rain. It settled down for the last two days of the month and became very warm. Rainfall was below average. A White Stork reportedly at Downash (Pevensey Level) for six weeks from mid-July to the end of August may have been the one seen over Willingdon on the 3^{rd} and at Hamden Park in late July. A total of 249 Sedge

Warblers trapped at Pannel Valley on the 9th was the high count of the autumn. On the 13th a **Balearic Shearwater** flew past Birling Gap and the next day another one was seen at Selsey Bill. The 17th produced a **Spoonbill** over Seven Sisters CP and a **Stone-curlew** at Beachy Head and the following day there were five **Wood Sandpipers** in the Pannel Valley. The first of 24 **Wrynecks** this autumn arrived at Barcombe Cross on the 19th in what was a very good autumn for the species. On the 22nd a **Spoonbill** flying past Seaford Head may have been the Seven Sisters bird and a juvenile **Spotted Crake** and an **Aquatic Warbler** were trapped in the Pannel Valley. The next day another **Balearic Shearwater** flew past Brighton Marina. On the 28th 65 **Shags** flew past Selsey Bill in 3 1/2 hr and a second **Aquatic Warbler** was trapped at Pannel Valley. The following day the last **Wood Warbler** of the year was at Pagham Hbr and on the 30th a **Honey-buzzard** was in fields west of Selsey. On the last day of the month further **Honey-buzzards** were seen at Pannel Valley and Beachy Head, the first **Hen Harrier** of the autumn was a ringtail at Beachy Head and a third **Aquatic Warbler** was trapped at Pannel Valley.

SEPTEMBER started with a cold front pushing across the region on the 1st but pressure then built to give a very warm first week. It then became distinctly more autumnal with frequent weather fronts giving unsettled weather and thunderstorms with torrential downpours in some places. Rainfall was close to average over the UK as a whole but there was a wide variation due to the scattered nature of the frequent thunderstorms and Sussex was once again drier than many places. The month got off to a good start on the 1st with a **Pectoral Sandpiper** which stayed at Pulborough Brooks until the 5th and three **Honey-buzzards** at Beachy Head. The raptor theme at Beachy improved the next day when eight Marsh Harriers was a high count in what was a good year for this species, with about 88 different birds seen. Other species seen at Beachy Head on the 2nd included a Corncrake, 25 Whinchats (the highest count of the year), and a Western **Bonelli's Warbler** which stayed until the 4th but moved into a private garden during the latter part of its stay. Elsewhere there were four **Pied Flycatchers** at Pulborough Brooks. On the 3rd another **Honey-buzzard** was seen at Hollingdean and a **Roseate Tern** at Selsey Bill was the last in what was a good year for this species. The following day an unusually viewable Barred Warbler began a three-day stay at Newhaven Tide Mills. A Pectoral **Sandpiper** was found at Chichester GP on the 6th, staying until the 11th. On the 8th another Spotted Crake was trapped in the Pannel Valley and a Red-necked Grebe was at Sovereign Hbr (Eastbourne) where it was also seen on the 16th.

On the 9th a **Honey-buzzard** was at Saltdean and another was at Littlehampton GC two days later. On the 10th a fourth **Aquatic Warbler** was trapped at Pannel Valley and on the 15th the last **Common Quail** of the year was seen there. Two days later **Short-eared Owls** at Pannel Valley and at Pagham Hbr were the first of the autumn. On the 18th a fifth **Aquatic Warbler** was trapped at Pannel Valley and 49 **Magpies** at Whitbread Hollow was the highest count of the year. On the 19th the last **Honey-buzzard** in a good year for this species was at Sheepcote Valley and the last **Nightingale** was at Weir Wood Res. Two days later, four **Garganeys** at Pagham Hbr were also the last of the year. On the 22nd a **Continental Coal Tit** at Ovingdean was the first of a large influx involving approximately 19 birds and on the 24th the last **Turtle Doves** were at West Itchenor and Brighton. The following day there was an early **Richard's Pipit** at Sheepcote Valley. The summer exodus continued with the last **Cuckoo** at Goring on the 27th, while on the 28th a juvenile **Sabine's Gull** was seen at Southwick Canal, the last **Nightjar** of the year flew over Warnham LNR and the last three **Tree Pipits** departed Pannel Valley. As a further

sign of the changing season, four **Redwings** at Wakehurst Place on the last day of the month were the first of the winter.

OCTOBER was typically dominated by southwesterly winds and Atlantic weather fronts throughout the month, although the 14th-18th was more settled. Sussex saw about average rainfall but many northern and western areas had a very wet month. The first day of October saw the last Wrvneck of the year at Beachy Head and three Continental Coal Tits at Pett Level staved until 11th. The following day the last Garden Warbler was at Beachy Head and on the 3rd the first Yellow-browed Warbler was seen there in what turned out to be a record autumn for this species. On the 4th a **Sooty Shearwater** flew past Fairlight, the last Little Ringed Plover of the year was at Sidlesham Ferry and the first Fieldfare of the winter arrived at Barcombe. The following day a Pectoral Sandpiper began a week-long stay at Weir Wood Res and a Continental Coal Tit was at Cow Gap. On the 6th four more Yellow-browed Warblers arrived at Beachy Head. The following day was a red letter 'Phyllosc' day as the county's third Greenish Warbler began a threeday stay at Cow Gap, a Radde's Warbler was found at Hodcombe, a Dusky Warbler began a four day stay at Climping and a Yellow-browed Warbler was trapped at Pannel Valley. The last Pied Flycatcher of the year was also at Hodcombe. On the 8th a Little Bunting trapped at Pannel Valley was the 10th county record. a Wood Sandpiper at Sidlesham Ferry was the last of the year and a Continental Coal Tit at Birling Gap stayed until the following day, when yet another three Yellow-browed Warblers were found at Beachy Head.

On the 10th more Continental Coal Tits arrived with one at Brooklands and one at Littlehampton GC. On the 11th a Eurasian Bittern at Warnham LNR provided the 3rd record for this site and further Yellow-browed Warblers were seen at Beachy Head and Shoreham Sanctuary, while a male **Penduline Tit** dropped in briefly at the former site. On the 12th the last **Sand Martin** of the year was at Pulborough Brooks and a second Radde's Warbler was trapped at Pannel Valley. The following day 380 Siskins which flew over Climping were probably not that remarkable except that in the previous year only 84 were recorded during the whole of October. On the 14th a Great White Egret was seen at Pett Level, a second Richard's Pipit was at Thorney Airfield and 200 Lesser Redpolls flew over the Pannel Valley. On the 15th the last Yellow Wagtail of year was at Pagham Hbr, a Yellow-browed Warbler was at Littlehampton GC and a Continental Coal Tit was at Goring. The following day a Shore Lark was found at Seaford Head, remaining until 25th, and another Yellow-browed Warbler was seen at Beachy Head. The Siskin revival continued on the 17th with 350 over Sheepcote Valley. The next day 60 Yellow-legged Gulls at Pagham Hbr was the highest count of the year, the last Swift flew over Burpham, the last Sedge Warbler was at Pannel Valley and there were 48 Ring Ouzels at Cissbury Ring with 53 seen at Beachy Head the following day.

On the 20th the Continental **Coal Tit** influx continued with individuals at Church Norton and Rottingdean, and another **Yellow-browed Warbler** was found at Holywell (Eastbourne) on the 21st. On the 22nd the last **Grasshopper Warbler** and the last **Yellow-browed Warbler** of the year graced Sheepcote Valley, while 130 **Goldcrests** at Seaford Head was not only the highest count of the year but an unusual concentration in that part of the world. Elsewhere there were **Continental Coal Tits** at Cow Gap until the 23rd and at Birling Gap. The Ashdown Forest **Great Grey Shrike** returned on the 23rd and there was one at Pagham Hbr the same day. Also on the 23rd, 800 **Stock Doves** flew over Brighton during a large passage of Wood Pigeons. On the following day three **Spoonbills** roosted at

South Stakes Island (Chichester Hbr) and 500 **Greenfinches** fed on Shoreham Beach where a large flock remained for much of the rest of the year. A **Great Grey Shrike** at Pulborough Brooks on the 25th may have been the Pagham bird of two days previously and the following day a **Whinchat** and a late **Spotted Flycatcher** at Wisborough Green were the last ones of the year. The only **Pallas's Leaf Warbler** of the year was at Church Norton from the 29th until 1 November. Windy conditions on the 30th resulted in a **Balearic Shearwater** past Birling Gap, a **Manx Shearwater** (the last one of the year) past Telscombe Cliffs, a **Leach's Storm-petrel** plus a juvenile **Long-tailed Skua** past Brighton Marina. Also on the 30th another **Continental Coal Tit** was at Church Norton. On the last day of the month 260 **Dark-bellied Brent Geese** flew south over Bewl Water and a **Grey Phalarope** at Climping was the first of seven in a good year for this species. Also of special interest in October, a **Lesser Whitethroat** appeared in a Burgess Hill garden in mid-month and was present until the following spring.

NOVEMBER started as October had finished, with strong, warm southwesterly winds and frequent depressions during the first two weeks, although as with the last couple of months, this produced less rainfall in the southeast than in more northern and western areas. High pressure built during the third week giving more settled but colder weather and the last week became noticeably colder as cold fronts introduced Arctic air across the country. Sussex missed out on the snow that affected some western areas during this time and it was quite a sunny month with slightly less than average rainfall in the southeast. Bearing in mind the weather, it is perhaps not surprising that the first few days of November were dominated by sightings of seabirds blown in on the gales. On the 1st a Grey Phalarope appeared at Pulborough Brooks and remained until the 11th. On the 2nd another Grey Phalarope was at Brighton Marina. It stayed until the following day when two Sooty Shearwaters and eight Leach's Storm-petrels flew past the same locality and another Leach's Storm-petrel was picked up exhausted in Peacehaven, but unfortunately died in care on 5th. On the 4th there was a **Red-necked Grebe** at Glyne Gap and the last Osprev of the year was seen at Ovingdean. The star bird of the day though was an adult Laughing Gull, also at Ovingdean, which performed very well before being pushed off by a very high tide. This bird was part of an unprecedented influx of Laughing Gulls into the country. There was also a Water Pipit at Thorney Deeps. A large count of 1206 **Brambling** moving east at Beachy Head on the 5th shattered the county record. The 5th was a busy day with 40 Bullfinches at Whitbread Hollow, the last (and very late) Willow Warbler of the year at Church Norton, a Red-necked Grebe at Telscombe Cliffs, six Spoonbills at Pagham Hbr (with seven there on the 9th), 175,000 Wood Pigeons over Brighton and a Water Pipit at Barcombe Res (which remained to the end of the year). The seabird theme continued on the 6th with six Sooty Shearwaters past Birling Gap, three more past Ovingdean (plus four Leach's Storm-petrels) and a further seven past Selsey Bill. Also on the 6th a **Red-backed Shrike** found near Newhaven stayed till the 9th and was the second latest ever recorded in the county. A Red-necked Grebe was at Darwell Res on the 7th and a Grey Phalarope appeared at Brooklands (staying until the 14th). The 8th provided yet more winds and seabirds with a juvenile Sabine's Gull, two Sooty Shearwaters, six Leach's Storm-petrels and a Grey Phalarope at Brighton Marina. and a Sooty Shearwater plus two Leach's Storm-petrel at Climping. The last Common Redstart of the year was at Newhaven. On the 9th a Hobby in the Pannel Valley was the last of the year and the latest ever in the county and the last Common Tern of the vear was at Thorney Island. On the 11th another Sooty Shearwater flew past Brighton Marina and the following day a Grey Phalarope at Widewater joined the Brooklands bird later.

Passerines made an appearance on the 14th with a **Penduline Tit** trapped at Pannel Valley and the next day the last Arctic Tern of the year (and a very late bird) was at East Head. On the 17th a second **Little Bunting** trapped at Pannel Valley was the 11th county record and the latest by two weeks. There were also two Pale-bellied Brent Geese at Chichester Hbr and another, plus a Black Brant at Pagham Hbr, all of which remained until the year's end. A Black Brant at West Wittering also stayed into 2006. A Grey Phalarope north of Greatham Bridge on the 18th may have been the Pulborough bird that was seen at the beginning of the month. The 19th saw a final exodus of late summer migrants with the last Ring Ouzel at Cissbury Ring, the last Eurasian Reed Warbler at Pannel Valley and the last Whitethroat at Arundel WWT. A flock of 20-38 Wood Larks in the North Marden area on the 21st remained until 23 December and the last House Martin of the year was at East Head on the same day. On the 22^{nd} there was a Little Auk at Thorney Island and also a **Bean Goose** (most likely of race *rossicus*) there which staved until 5 December and was possibly an escape on account of its approachability and damaged bill and leg. The following day there were four Whooper Swans at Pagham Hbr and the last Northern Wheatear of the year was at Nutbourne. On the 24th a Goosander appeared at Princes Park (Eastbourne), where it stayed until 29 December and the last ten Barn Swallows of the year were at Hove. On the 28th a Little Auk was seen at Church Norton and the following day an Eastern/Siberian Chiffchaff was at Coldwaltham SF. November ended with a Lapland Bunting over Thorney Airfield on the 30th and two Rednecked Grebes off Church Norton on the 31st, one of which stayed until 6 December.

DECEMBER was relatively warm during the first week with southwesterly winds, but high pressure led to frost and some dense fog during the second week. The third week was variable and the last week was noticeably colder with some significant snowfall in the east of the county. Rainfall was once again below the average for the time of year. On the 1st a Slavonian Grebe arrived for a five day stay at Princes Park. On the 2^{nd} a Black-necked Grebe arrived for a two day stay at Pulborough Brooks and there were two Little Auks at Brighton Marina, with one still there the following day. Another Little Auk flew past Selsev Bill on the 3rd, and on the 4th a Eurasian Bittern was seen at Pulborough Brooks while six Short-eared Owls at Rodmell was the highest count for the year. The following day 16 Snow Buntings at Camber Sands was also the highest count of the year. On the 8th 13 Whooper Swans (including nine young birds) in fields west of Selsey was the largest group in the county since 1986 and the next day four **Snow Buntings** at Firle Beacon was an unusual inland record. There were four Black Redstarts at Southwick Beach on the 10th and on the 13th two **Black-necked Grebes** in Thorney Channel and 2500 **Lapwing** at East Guldeford Level, which was a high count for the year. A Cattle Egret at Chalder Farm (Pagham Hbr) on the 16th remained into 2006 and there were two Eastern/Siberian **Chiffchaffs** at Coldwaltham SF. A count of 400 **Chaffinches** at Stapleash Fm on the 18th was the high count of the second winter period and the next day a high count for the year of 20 Hawfinches was made at the same location. A Pale-bellied Brent Goose appeared at Shoreham on the 20th, and on Christmas Eve a Great Grey Shrike was at Heyshott and four Sandwich Terns seen at Goring were possibly the four that were in Chichester Hbr for most of December. Christmas Day was sensibly spent celebrating but on Boxing Day four Water Pipits were seen at Sidlesham SF. On the 28th 90 Dark-bellied Brent Geese landed on Bewl Water following snow showers and 68 Slavonian Grebes off Church Norton (present till 31^{st}) represented a new county record and also exceeded the 1% international threshold level for this species. There were two **Black-necked Grebes** at Selsey Bill on the 29^{th} and on the final day of the year 44,500 **Starlings** roosting on Brighton's Palace Pier was by far the highest count of the year and was the only location where a very large roosting flock formed.



CLASSIFIED RECORDS FOR 2005

This list covers all species in Categories A and C of the BOU check list with records of Category D species listed separately.

The Category A and C species are again listed in the new order announced by the BOU in October 2002 and include the further minor adjustments made by the BOU since that date. There have still been no corresponding changes to Euring Numbers which continue to be shown against each species.

No further changes have been made to the English names of species as introduced in last year's Report.

Preceding each species account, there is a brief description of its status in the county. In most cases the term used is the same as in *Birds of Sussex* although some have been amended to take into account recent changes in status. The terms and their corresponding numerical ranges are as follows:

	Breeding pairs	Winter / Passage
Very rare		1-10 records in total
Rare	less than annual	Less than annual
Very scarce	1-10 per year	1-20 per year
Scarce	11-100	21-200
Fairly common	101-1000	201-2000
Common	1001-5000	2001-10,000
Very common	5001-30,000	10,001-60,000
Abundant	30,000+	60,000+

Seawatching records were received from several sites. The following table lists the hours watched in each month at the five locations for which this information was available:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selsey Bill	25	19	63	163	154	55	69	44	31	37	49	35
Worthing Beach	14	16	28	72	53	13	8	11	11	29	12	5
Telscombe Cliffs	27	18	21	42	37	13	14	25	14	11	17	9
Splash Point (Seaford)	19	21	44	103	54	0	0	0	0	0	0	0
Beachy Head	0	2	18	42	23	3	0	0	0	0	0	0

Many tables which are included in the accounts for wetland bird species refer to the monthly *WeBS*[°] counts – the Wetland Bird Survey. These counts are undertaken on a fixed date each month during the winter, and sometimes during the summer months as well. During 2005 the recommended dates were 16 Jan, 13 Feb, 13 Mar, 10 Apr, 8 May, 26 Jun, 24 Jul, 21 Aug, 18 Sep, 16 Oct, 6 Nov and 4 Dec.

In the *WeBS'* tables, "nc" signifies that the site was not visited while "-" indicates that the site was visited but none of that species was seen. It is important to note that figures quoted in the tables may appear to contradict those in the text. This is because counts made on set dates may not reveal higher or lower figures which feature throughout the remainder of each month. Prior to 1996 the sites displayed in these tables were randomly selected, invariably choosing sites with the highest counts. Between 1996 and 2003 the tables presented sites where any of the monthly counts held 5% or more of the county total for that month. However, the tables in the 2004 and in this Report show only sites where this figure is reached during the core (Sep – Mar) monthly counts.

BBRC	British Birds Records Committee	RSPB	Royal Society for the Protection of Birds
BBS	Breeding Bird Survey	RBRG	Rye Bay Ringing Group
BTO	British Trust for Ornithology	PH	Public House
BOU	British Ornithologists Union	R	River
CBC	Common Bird Census	SF	Sewage farm or works
СР	Country Park	SP	Sand Pit
Fm	Farm	SSSI	Site of Special Scientific Interest
GP	Gravel Pit	SWBS	Scarce Woodland Bird Survey
GC	Golf Course	WeBS	Wetland Bird Survey
Hbr	Harbour	WBBS	Wetland Breeding Bird Survey
IUCN	The World Conservation Union	WinGS	Winter Gull Roost Survey
MP	Mill Pond	WWT	Wildfowl & Wetland Trust
МО	Many Observers	ha	hectare(s)
LNR	Local Nature Reserve	hr	hour(s)
NR	Nature Reserve	km	kilometre(s)
NNR	National Nature Reserve	km ²	Square kilometre(s)
O/S	Offshore	m	metre(s)
Res	Reservoir	nc	no count
N,E,S,W etc.	As cardinal compass points		

The following abbreviations are used in the Systematic List as standard practice:



0152 MUTE SWAN Fairly common resident. Amber listed species of medium conservation concern.

Cygnus olor

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	644	616	586	263	369	419	449	417	727	662	769	594
Chichester Hbr	111	112	65	33	99	96	135	105	166	128	207	173
Chichester GP	43	64	29	nc	nc	nc	nc	nc	64	68	63	38
Climping	86	123	80	nc	nc	136	121	143	130	112	86	52
Waltham Brooks	33	35	5	16	2	7	-	2	7	4	-	13
Adur (Steyning-Henfield)	8	20	25	nc	nc	nc	nc	nc	27	24	28	41
Henfield Brooks	38	38	52	nc	nc	nc	nc	nc	6	24	50	36
Iford Brooks	45	24	47	nc	nc	nc	nc	nc	9	8	10	15
Eastbourne Lakes	42	9	47	nc	nc	nc	nc	nc	57	63	59	40
Pevensey Levels	50	41	52	57	51	39	28	35	49	61	46	62
Rye Bay	8	4	22	48	107	119	91	53	25	19	50	2

The monthly *WeBS*' counts at the principal sites were as follows:

Reports of grazing herds in the first winter period not shown above included 79 on 2 Jan on the Upper Adur Levels, 107 on 9 Feb at Brede Valley, 50 on 5 Mar in the Arun Valley between Offham and Houghton and 48 on 30 Mar at Chichester GP.

Nesting activity was first noted at Barcombe Res on 16 Apr, on 22 Apr at Wicks Farm (Yapton), on 2 May at Forest Row and by 6 May at Knepp Castle. There were 27 reports of successful breeding as shown by the presence of cygnets (numbers in parenthesis) starting on 18 May at Aldingbourne Rife (9)(all fledged), Iford Brooks (6), Thorney Deeps (3)(two fledged), Barcombe Res (2), Forest Mere (Liphook) (2), Sefter Farm (Pagham) (5)(four fledged), Patching Pond (5), Steyning Levels (2 & 6), Warnham LNR (3), Southease (R Ouse) (3 and 4) and Upper Beeding (3).

During the summer, a herd of 59 was counted at Steyning Levels on 26 Jul while at Barcombe Res there was a consistent population with an average monthly maximum count of 17 from May to September. In the autumn, Hove Lagoon hosted a herd which varied from 32 on 11 Oct through a peak of 39 on 14 Nov to 36 on 10 Dec. There were 60 for a few days in early November at Crutches Farm (Winchelsea) and 119 on 24 Nov at Tortington (Arundel). The highest winter count at Partridge Green SF was 72 on 16 Dec. [WEC]

0153. **BEWICK'S SWAN**

Cygnus columbianus

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern

	Jan	Feb	Mar	Apr	Oct	Nov	Dec
County Total	77	45	-	2	-	11	66
Amberley Wild Brooks	38	-	-	-	-	6	-
Arun Valley (Offham to Houghton)	-	43	-	-	-	-	31
Pulborough Brooks	27	-	-	-	-	5	16
Henfield Levels	11	-	-	-	-	-	4
Rye Bay	-	-	-	-	-	-	2

The monthly *WeBS*' counts at the principal sites were as follows:

A herd of 35 at Burpham (Arun Valley) on 3 Jan included 14 juveniles but the largest herd noted in that area was of 43 on both 29 Jan and 13 Feb. The 11 birds at Henfield Levels on 11 Jan included five juveniles. The figures in the above table show that numbers in the Arun Valley, the county's most important area for this wintering species, remained reasonably constant. Records were noticeably fewer in February and numbers fell away after the 21st. The last record from the Arun Valley was of four at Pulborough Brooks on 18 Mar.

Birds were first noted back in the Arun Valley on 19 Nov when six were seen at Greatham and five, probably the same, at Pulborough Brooks. The highest count for the month was of ten at Burpham on the 29^{th} . Numbers then increased slowly to 16 at Burpham on 13 Dec, 24 at Bury on the 16^{th} and a peak count of 35 (including six juveniles) at Houghton on the 29^{th} . The only other records away from the Arun Valley were of two at Henfield Levels on 4 Dec with four (including two juveniles) there on the 13^{th} and two at Castle Water (Rye Hbr LNR) on the 27^{th} .

The adult bird which was reported last year carrying a ring marked 14J returned to the Arun Valley for at least its second and third winters. It was sighted at Burpham on 6 Jan and again on 27 Dec. It is heartening to have such confirmation of both successful migration and site fidelity. [WEC]

0154. WHOOPER SWAN

Cygnus cygnus

Very scarce winter visitor and passage migrant. Amber listed species of medium conservation concern

There were just five records of this species. An adult bird seen at Brighthams Fm (Partridge Green) on 2 Jan (BRC *et al*) is considered to be the feral bird which has been in the area of Henfield Levels for several years and was originally either an escapee or a lingering injured bird. Presumably it was this bird which was also seen there on 6 Nov. Another bird at Glynde Levels on 23 Jan (ARK) may have been the long-staying adult feral bird seen regularly in the Cuckmere Valley/Glynde area in 2003 and previous years. Two adult birds seen at Chichester GP on 16 Jan and again on 3 Feb (CWG) may have been the ones seen there last year.

The remaining records were of undoubtedly wild birds: four were seen and photographed at Pagham Hbr on 23 Nov (IML) and a group of 13 (including nine juveniles) recorded at Selsey West Fields on 8 Dec (DIS) was the largest group seen in the county since 23 December 1986. [WEC]

0157.01 TAIGA BEAN GOOSE

Anser fabalis fabalis

Scarce winter visitor and passage migrant.

The only record for the year was of a first winter bird on Thorney Island from 22 Nov to 5 Dec (CBC). It was considered most likely to have been of this race, but its approachability and a damaged leg and bill mean that the possibility of it being an escape cannot be dismissed. (AH)

0159. WHITE-FRONTED GOOSE

Anser albifrons

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern.

More than usual were present in West Sussex in the early part of the year. Up to three birds were reported regularly on Thorney Deeps until 19 Feb. The group of nine seen near Easton Fm (Earnley) on 31 Dec 2004 was present until 3 Jan, when they were last seen heading over nearby Pagham Hbr. Four birds were seen flying west past Selsey Bill on 9 Jan and three were seen regularly in the Pulborough Brooks/Amberley Wild Brooks area until 4 Mar. Further north, one was briefly with Greylag Geese at Warnham LNR on 5 Jan. In the east, one was seen at Weir Wood Res on 15 and 16 Jan and, at Scotney Court GP, six birds first seen on the 6th increased to 30 on the 26th, 110 on 13 Feb and a peak of 140 on the 21^{st} .

Elsewhere, in a good first winter period for this species, further birds were seen at Charleston Reedbed (one on 30 Jan), Pevensey Levels (57 on 10 Feb), up to five on Pett Level between 16 Feb and 7 Mar, a single bird with Greylags at St George's Retreat (Ditchling Common) from 20 Feb until 13 Mar, 3 W over Crowlink on the 14 Mar and a first-winter bird in the Cuckmere Valley between 18 Mar and 5 Apr.

By contrast, there were only three autumn sightings: an unprecedented 600 flew southwest high over Pannel Valley NR on 15 Oct (PEJ), one was seen at Glynde Levels on 6 Nov and another singleton was at Scotney Court GP on 27 Dec. [AH]

0161. GREYLAG GOOSE

Iford Brooks

Rye Bay

Glynde Brooks

Amber listed species of medium conservation concern.

15

34

28

1

460

Anser anser

19

44

34

4

80

580

-

2

218

	~ ~														
The monthly We	The monthly WeBS' counts from the principal sites were as follows:														
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov De															
County total	unty total 245 610 354 240 166 183 161 1201 667 506 971 36														
Amberley Wild Brooks	66	92	7	19	20	-	-	-	-	82	170	116			
Pulborough Brooks	74	15	36	19	3	1	-	235	180	33	48	64			
Warnham MP	-	2	-	nc	nc	nc	nc	nc	43	-	•	-			
Ardingly Res	Ardingly Res 8 nc nc nc nc nc Nc 55														
Weir Wood Res	-	-	-	-	-	7	nc	327	220	159	70	nc			

nc

64

126

_

98

174

Increasingly common introduced resident and winter visitor; scarce passage migrant.

Numbers were slightly lower in the first winter period compared to 2004. Significant numbers not included in the WeBS' counts included 200 birds at Weir Wood Res on 2 Jan, 100 on Henfield Levels on the 11th and a flock of 112 recorded several times in February and March at St George's Retreat (Ditchling Common). The only seawatching record was a report of 10 E past Brighton Marina on 3 Apr.

nc

49

87

nc

nc

173 153

nc

nc

nc

nc

601

_

nc

199

Five reports of confirmed breeding were received. The first goslings were sighted at Shinewater Lake (Eastbourne) on 30 Apr, when two adults and three young were seen. At Henfield Levels there were two pairs with two and three young respectively on 2 May. At Northpoint GP (Rye) a pair with four goslings was seen on 8 May and three well grown young on 22 Jun. At Troutbeck (Eridge), two pairs fledged nine young from broods of six and five. Up to four juveniles were seen at Pannel Valley NR on 18 May.

In July, the first post-breeding flocks not included in the above WeBS' counts were noted at Arlington Res on the 14th, when 52 birds were present, and at Rye Hbr LNR, where 105 birds were present on the 21st.

By the end of September these assemblies had largely dispersed, presumably after moulting. The only subsequent non-WeBS' counts of note came from Weir Wood Res where up to 150 remained till the year end, Pannel Valley NR with 62 on 14 Nov, and Rye Hbr LNR with a peak count of 56 on 17 Dec. [AH]

0166. CANADA GOOSE

Branta canadensis

Common and increasing introduced resident and partial migrant.

-														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
County total	1672	1196	1114	324	369	349	425	2193	1967	1370	2433	1758		
Chichester Hbr	37	27	29	15	22	24	55	85	37	72	51	73		
Chichester GP	74	84	37	nc	nc	nc	nc	nc	128	96	114	63		
Petworth Park	71	98	121	72	41	91	146	82	61	53	18	53		
Amberley Wild Brooks	144	4	2	10	21	-	-	-	40	80	447	352		
Waltham Brooks	97	5	2	4	8	-	2	-	115	2	97	-		
Pulborough Brooks	200	22	13	6	16	3	16	22	100	18	157	210		
Weir Wood Res	-	-	2	10	16	26	nc	366	163	193	131	nc		
Barcombe Res	84	6	25	2	3	•	26	169	292	•	87	50		
Glynde Brooks	66	91	106	53	130	nc	nc	nc	nc	110	100	25		
Arlington Res	2	4	2	5	2	20	20	42	642	6	4	3		
Cuckmere Haven	205	47	58	nc	nc	nc	nc	nc	38	155	367	69		
Eastbourne Lakes	144	134	88	nc	nc	nc	nc	nc	3	11	13	89		
Pevensey Levels	200	84	19	22	6	nc	nc	12	12	52	180	50		
Bewl Water	100	290	404	nc	nc	nc	nc	900	77	158	340	413		
Rye Bay	74	105	95	77	75	174	153	351	29	263	188	200		

The monthly WeBS' counts from the principal sites were as follows:

In addition to the above figures, there were some large counts during the first winter period, notably 231 at Rye Hbr LNR on 3 Jan and 404 at Bewl Water on 16 Jan, and three-figure counts were made at Weir Wood Res, Barcombe Res and Henfield Levels. As usual there was little evidence of passage from seawatching sites, as county totals of 32 E and 10 W during March and April reflect.

The first breeding report of the year came from Ebernoe Furnace Pond, where a pair was seen nesting on 2 Apr. Thereafter records of confirmed breeding were received only from Thorney Deeps, Easton Fm (Earnley), Knepp MP, Weir Wood Res, King George's Field (East Grinstead), Firle Park, Iford Brooks, Bewl Water, Barcombe Res, Pannel Valley NR, Rye Hbr LNR and Troutbeck (Eridge). Unusually, no young were fledged at Pulborough Brooks. However, birds were recorded as present in 25 BBS' 1-km squares (mostly different to those listed above) giving a county total of 159 birds present during the breeding season, although this is probably a gross understatement.

A post-breeding count of 100 birds in the lower Cuckmere Valley on 19 Jul was followed by a peak count of 397 on 26 Aug. Other big counts, additional to the WeBS' figures above, included 222 birds at Rye Hbr LNR on 27 Aug, 750 on Arlington Res on 4 Sep and 400 at Barcombe Res on the 22nd. At Arlington Res, 1550 birds on 20 Oct was the biggest count anywhere in the county, and the third highest ever recorded in Sussex at a single site. There were few noteworthy counts away from traditional sites. [AH]

0167. BARNACLE GOOSE

Branta leucopsis

Very scarce winter visitor, often in severe weather, and an increasingly common feral resident. Amber listed species of medium conservation concern.

The year began with reports of the usual scattering of presumably feral flocks. Peak numbers during the first three months included 52 (including two hybrids) at Barcombe Res (many of which remained there to the year-end with a peak of 47 on 20 Aug) and 32 at Scotney Court GP. The only other flock in double figures was ten birds at Pett Level on 26 Feb. Other records were of a peak count of five at Rye Hbr LNR on 6 Feb and 23 Apr and either one or two birds at Chichester Hbr, Petworth Park, Weir Wood Res, Pevensey Levels and Bewl Water.

During the autumn, feral flocks continued to be reported from the above sites, along with a single bird seen intermittently in the Pulborough/Amberley area. A single bird in the Pagham Hbr/Selsey West Fields area consorted regularly until the year's end with the large local Brent Goose flock following its arrival on 30 Nov. It could conceivably have been a wild individual, as could the two birds that were present from 12 Nov until 17 Dec on Thorney Deeps. [AH]

0168. DARK-BELLIED BRENT GOOSE Branta bernicla bernicla Common winter visitor and passage migrant; a few oversummer. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	8729	9971	6076	20	10	6	8	-	13	850	3429	5321
Chichester Hbr	7195	7278	5109	19	8	6	8	-	13	759	3031	4757
Pagham Hbr	1388	2654	755	1	1	-	-	-	-	83	351	33
Climping	144	39	208	nc	nc	-	-	-	-	-	21	524

The monthly WeBS' counts at the principal sites were as follows:

Although the two western harbours continue to hold the majority of the wintering population, the Climping area appears to be of increasing importance. Elsewhere, there was just a scattering of records in January, with peaks of two birds at Pett Level on the 1st, four at Rye Hbr LNR on the 3rd, two at Widewater (Lancing) on the 9th and five at Scotney Court GP on 6 Feb.

The first indication of spring migration was 79 E in 1 hr past Splash Point (Seaford) on 6 Feb. Numbers increased thereafter, with 2000 birds passing Brighton Marina on the 25^{th} , rather earlier than in 2004. The highest counts were generally recorded at Splash Point where passage on peak days in March included 425 on the 14^{th} , 520 on the 17^{th} and 1075 on the 21^{st} . On 3 Apr, 1076 flew east there and, the same day, what were presumably the same birds were reported as 998 past Selsey Bill and 1074 past Worthing Beach. Thereafter, very few birds were reported from seawatching sites, until two final groups of ten passed Telscombe Cliffs on 11 and 12 May.

	Ja	Jan		Jan Feb		Ма	Mar		Apr		Oct		Nov		Dec	
	Е	W	Е	W	Е	W	Е	W		Е	W	Ε	W	Е	W	
Selsey Bill	9	1	11	11	1051	1	1450	2		2	125	24	738	6	14	
Worthing Beach	24	7	20	22	504	-	1221	-		46	816	4	114	1	3	
Telscombe Cliffs	14	-	30	-	1122	2	290	-		-	7	1	106	4	1	
Splash Point (Seaford)	32	-	641	-	3032	-	1526	-		-	-	-	-	-	-	
Birling Gap	-	-	10	-	1485	1	1418	-		-	128	-	-	-	-	

The monthly totals at the principal seawatching sites were as follows:

A single bird that was recorded passing Worthing Beach on 2 Jun and another that paused on a set-aside field near Birling Gap the following day were the last spring migrants. The only other reports during the summer months came from Chichester Hbr, with a maximum of nine birds seen on 12 Aug, and Pagham Hbr, where a singleton was reported several times.

Two birds recorded in Pagham Hbr on 17 Sep may have been the first returnees, but a flock of five birds past Southwick Beach on the 25th may have a better claim. Numbers built up in October with regular sightings from Rye Hbr LNR, including 48 E on the 7th and 51 roosting overnight on the 20th, and from the principal seawatching locations and wintering sites, including 450 on Thorney Island on the 12th. An unusual inland sighting was of 260 birds heading south over Bewl Water on 31 Oct.

The first four-figure counts were not noted until 17 Nov when 2000 birds were reported from East Head (Chichester Hbr) on the 17th and 1000 were seen in Pagham North Fields on the 24th. Good numbers were again seen at Climping, with a peak of 600 on 10 Dec.

There was a scattering of records from elsewhere in the county in November, with peak counts of 20 at Cuckmere Haven on the 4th and 13 at Rye Hbr LNR on the 19th. Elsewhere there were singletons on Pannel Valley NR on 6 Nov, two at Birling Gap (Beachy Head) on the 19th feeding on set-aside and one on the R Adur (Shoreham) on the 22nd. In December, there were five birds at Widewater (Lancing) on the 3rd, one on Weir Wood Res on the 19th and, unusually for this inland site, a flock of 90 birds landed on Bewl Water after snow showers on 28 Dec. [AH]

0168.01 **PALE-BELLIED BRENT GOOSE** Branta bernicla hrota Very scarce winter visitor and passage migrant. Amber listed species of medium conservation concern.

In the first winter period there was a family group of two adults and two first year birds behind the North Wall (Pagham Hbr) between 6 and 22 Jan, with two there on 7 Mar. Another individual was seen regularly at West Wittering between 5 Jan and 8 Feb, while two more were at Scotney Court GP on 1 Feb. The only migration reports came from Birling Gap (Beachy Head), where singletons passed east on 1 and 3 Apr, and Brighton Marina, where another bird passed east on the 22^{nd} .

Observers at Pagham and Chichester Harbours recorded the first autumn birds on 17 Nov (one and two birds respectively) and all three remained in the area until the year's end. A single bird was seen in Shoreham Hbr on 20 Dec. [AH]

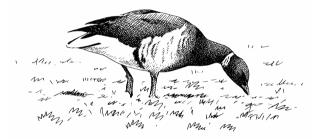
0168.02 BLACK BRANT

Very scarce winter visitor.

The only substantiated record in the first winter period was of the bird present at West Wittering from late 2004 that remained until 27 Jan (DIS *et al*) and was then seen intermittently in Chichester Hbr from 2 Feb to 17 Mar (ACJ *et al*).

In the autumn, there was one individual in the Pagham Hbr/Selsey West Fields area from at least 17 Nov until 20 Dec (BFF, PNP, DIS). Another bird seen at West Wittering from 17 Nov into 2006 may, from the descriptions received, have been a hybrid and was not accepted by the relevant committee. The latter could have been the bird seen in previous years in the East Head/West Wittering area.

Occurrences from 2006 will no longer be considered by *BBRC* although *SOSRC*, to whom the task of assessment will now fall, will endeavour to maintain standards and fully documented records will continue to be required for acceptance. [AH]



0170. EGYPTIAN GOOSE Alopochen aegyptiaca Very scarce visitor from introduced populations elsewhere in Britain; bred for the first time in 2000.

Just 32 records (cf. 42 in 2004 and 62 in 2003) were received from six sites, with no breeding noted for yet another year.

The most notable records were from Petworth Park, with records in all months except September, and a peak of four birds there on both 10 Jul and 4 Dec. Less than four kilometres away, two birds were seen at Shopham Bridge on four dates between 6 Feb and 16 Oct.

There were only ten records from the Arun Valley (cf. 40 in 2004), with the maximum being two birds seen at Pulborough Brooks on 24 Jan and 26 Sept. However, with the Arun Valley sites being less than ten kilometres from Petworth, and with Shopham Bridge almost halfway in between, it is reasonable to assume that the same small group of birds is involved in all the records. It remains to be seen whether this regular presence can be converted into breeding success in the future.

Away from this core area, the lone bird at Chichester GP, present since 2001, was seen on six dates between 16 Jan and 16 Oct, while a single bird at Weir Wood Res on 6 Feb was unusual. [AT]

0173. COMMON SHELDUCK

Tadorna tadorna

Fairly common winter visitor and passage migrant; a scarce but regular breeding species. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	1022	1163	932	452	321	298	101	52	54	60	117	625
Chichester Hbr	729	825	595	208	99	124	25	18	21	35	83	351
Pagham Hbr	168	143	136	152	128	109	43	19	21	3	16	119
Chichester GP	-	6	6	Nc	nc	nc	nc	nc	-	9	-	-
Arundel WWT	27	76	58	25	23	10	6	2	2	-	3	28
Cuckmere Haven	16	7	15	Nc	nc	nc	nc	nc	5	-	-	12
Rye Bay	56	77	47	41	40	49	18	10	5	13	11	98

The monthly WeBS' counts from the principal sites were as follows:

The *WeBS* total for January was relatively poor, due mainly to lower numbers in Pagham Hbr. The February count was the highest of the year, but not since 1999 has the year's peak been this meagre, reflecting the decline of this wintering population in Sussex (see pages 250 - 281). Numbers, however, were somewhat higher in March and April than in the previous couple of years. In addition to the *WeBS*' counts, there was a record of 150 at West Chidham (Chichester Hbr) on 21 Nov and 90 at Thorney Island on 13 Dec.

Passage observed at coastal seawatching sites was predominantly eastwards, although more were seen at western sites, and most peaks were in late March or April. The biggest single day movement was 29 E on the unusually early date of 7 Feb at Worthing. At this site there was more westerly than easterly movement in April, as was the case in 2004. The lack of larger numbers moving west in the second half of the year is puzzling and may be related to the lack of really cold weather.

	Ja	an	Fe	eb	М	ar	Α	pr	M	ay	Ju	ın	0	ct	N	٥v
	Ε	W	Е	W	Е	W	Е	W	Е	W	Ε	W	Е	W	Е	W
Selsey Bill	-	-	-	-	2	1	8	0	21	9	-	-	-	-	-	-
Worthing Beach	-	-	29	7	7	8	21	29	9	11	-	-	-	-	0	2
Telscombe Cliffs	0	2	-	-	9	0	32	7	3	1	6	0	0	8	4	1
Splash Point (Seaford)	4	0	2	7	44	2	79	6	26	10	-	-	-	-	-	-
Birling Gap	-	-	-	-	28	4	24	5	21	0	-	-	-	-	-	-

The monthly totals at the principal seawatching sites were as follows:

One seen flying over the Top Fields at Beachy Head on 12 Mar was thought to be prospecting for nest sites. There were records of confirmed breeding from 16 sites of which 11 were in the west (six in Chichester Hbr) and five in the east of the county. These involved at least 21 and possibly as many as 35 pairs, given the size of the various crèches. The first sign of breeding, however, was a female with seven ducklings seen walking down Ham Lane (Selsey) on 30 May.

There were several sightings of ducklings from Chichester Hbr. Three were seen at Cobnor Fm on 23 Jun, seven at North Stakes Island the same day, 17 were in Thorney Deeps on 25 Jun and, in the Upper Channel, five were seen on 26 Jun and 12 Jul and another nine also on the 12^{th} and, finally, three were in Bosham Channel on 2 Aug.

In Pagham Hbr, the first young seen were five at the Breech Pool on 4 Jun. Sidlesham Ferry once again was the site for the development of the largest crèche, with a maximum of 32 on 7 Jul.

Although at least five pairs were present at Pulborough Brooks in mid-April most did not breed and just two fledged young were seen in July and four on 3 Aug. However, just downstream, a pair with seven young was on Widney Brooks on 2 Jul and 20 juveniles were seen at nearby Greatham Bridge on 15 Jul.

In East Sussex, two broods, each of six young, were in the lower Cuckmere Valley on 31 May and four more small ducklings were seen on 2 Jul. It is not clear if the seven juveniles at Newhaven Tide Mills on 1 Aug had been hatched nearby. At Rye Hbr LNR, just one duckling was seen at Ternery Pool on 13 Jun and six were at Rye Saltings on 22 Jun. On the Union Channel (East Guldeford), three pairs produced nine, three and 12 young.

In the second winter period, numbers were low in October, and November numbers were the lowest in recent years. Numbers rallied a little in December, but as recently as ten years ago, the December *WeBS* count was consistently double that which was recorded this year (see pages 250 - 281)). [AT]

0178. MANDARIN DUCK

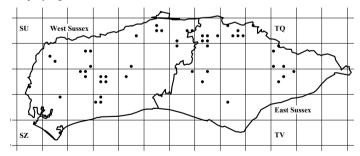
Aix galericulata

Scarce but increasing introduced resident.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	12	6	25	32	6	8	25	49	43	64	20	77
Arundel WWT	10		11	25	4	2	18	43	8	6	14	38
Arun Valley			2	4	2		6					9
Darwell Res	2	3	4	3		6	1	6	29	58	6	25
Powderrmill Res		2	6						3			4
Other sites		1	2						3			1

The monthly WeBS' counts at the principal sites were as follows:

Records were received from 51 sites and counts of 15 or more birds came from seven of these, a typical situation. The peak count in the first winter period was just 16 on the Parham Estate on 16 Jan. There were also 15 at Troutbeck (Eridge) on 4 Feb. A male was displaying to a female Mallard and attacking male Mallards at Burton MP on 18 Feb, and a male was displaying at Powdermill Res on 2 Mar.



Breeding season records came from 51 tetrads, as shown in the above map. Breeding was confirmed at 11 1-km sites by at least 14 pairs and was probable at a further nine sites.

In West Sussex, a pair were mating on 4 Apr at Warnham LNR, breeding was reported in Valdoe Wood (East Lavant) and a female was seen with seven ducklings at Furnace Pond (Ebernoe Common) on 14 Jul. In the Arun Valley, nine young accompanied 12 males and two females at Parham House Lake on 22 May while, at Pulborough Brooks, two flew into a large oak tree in the middle of the brooks on 17 Apr, five young were seen on 1 Jun, four on 2 Jul, two on 15 Jul, and a singleton on 27 Jul. Two flying juveniles were seen at Greatham Bridge on 17 Jul.

In East Sussex, four ducklings were seen at Weir Wood Res on 3 May and six on 3 Jul, where one pair bred in a nestbox. The peak count here was 23 on 16 Jun. A scattering of records from Ashdown Forest included a nest that was destroyed when the bough of a hollow beech fell at Pippingford Park on 9 May. There was then a cluster of records in the Weald. At Saxonbury, an agitated male flew into a tree on 8 May, a pair bred at Cedar Farm (Hurst Green), although their success was not reported, two females flew from nestholes in Eridge Park on 9 Apr and 15 at Bayham Lake on 18 Jun included an unspecified number of young. The best site in the area however was Troutbeck, where there were 11 males and a brood of eight on 11 May, another brood of nine on 12 May and a count there of 32 on 16 Jun which included six large juveniles, all of which fledged.

The most unusual record of the year was of a singleton on East Beach Pond (Selsey) on 6 Aug.

In the second winter period, Darwell Res hosted the year's peak count of 58 on 15 Oct and the 38 at Arundel WWT on 5 Dec was the second highest. [AT]

0179. EURASIAN WIGEON

Anas penelope

Common winter visitor and passage migrant. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	8272	9435	6255	59	9	4	2	17	1694	3251	5539	9089
Chichester Hbr	1801	2235	1124	6	2	2	1	10	480	1353	1100	1913
Pagham Hbr	1863	3286	1261	11	I	I	1	6	833	788	1319	2519
Amberley Wild Brooks	1160	364	690	I	I	I	I	-	•	150	1241	2124
Waltham Brooks	98	318	343	23	-	1	-	-	130	76	69	19
Pulborough Brooks	1387	1193	839	13	4	1	-	-	168	273	817	1232
Cuckmere Haven	550	335	550	nc	Nc	nc	nc	nc	-	•	288	6
Pevensey Levels	493	627	420	nc	Nc	nc	nc	nc	20	160	86	238
Rye Bay	284	520	769	5	2	1	1	-	28	328	424	777

The monthly WeBS' counts from the principal sites were as follows:

Numbers from the *WeBS*' counts were low in January, often the peak month, but rallied in February and many more remained in March than is usually the case. No single site surpassed the 1% national threshold level of 4060.

In addition to the *WeBS*' figures above, notable counts were made at Bewl Water, with 159 on 16 Jan building to 238 on 25 Feb and 289 on 13 Mar, while at Iford Brooks there were 250 on 15 Jan. There were also 200 at Pannel Valley NR on 23 Jan and 500 at Castle Water (Rye Hbr LNR) on 4 Mar.

The little daytime movement that there was offshore was most pronounced early in the year, with 23 E and 39 W at Worthing in January, and 43 E on 23 Feb at Splash Point (Seaford) being the largest counts. Wigeon is one of the duck species that, considering the numbers wintering in the county, is noticeably absent from spring seawatching records; 20 E at Birling Gap (Beachy Head) on 18 Mar was the maximum total out of just 41 E and 5 W between March and May. Two east at Splash Point on 2 May was the latest spring seawatching record.

A count of 42 at Sidlesham Ferry on 2 May was the last sizeable flock of the spring, although ten at Pulborough Brooks on the 17th were notable. As usual, few birds summered. In June, up to two lingered at Pulborough Brooks, two were at Thorney Deeps and singletons were seen at Pagham Hbr, Waltham Brooks and Castle Water. An unusual record was of three birds at Weir Wood Res on 19 Jun. There was no indication of breeding at any site.

Although small numbers were noted in mid-August, 18 at Pagham Hbr and 20 at Thorney Island on the 23^{rd} were the first marked arrivals, slightly earlier than usual. By 2 Sep there were 70 at Pagham Hbr and 108 there the next day.

Some autumn passage offshore included totals of 32 W at Selsey Bill in September, 17 E and 78 W at Worthing in October, with smaller numbers seen moving in November and December at several seawatching sites.

Numbers built quickly in September to reach the highest *WeBS* total for that month since 1996 (cf. Teal). Numbers were then fairly typical through to the end of the year. In November, a count of 2100 at Pulborough Brooks on 20 Nov increased to 3000 by the 22nd. Other good counts additional to the *WeBS* table included 140 at Bewl Water on 6 Nov increasing to 304 on 25 Dec, 750 at Partridge Green SF on 3 Dec, 200 on the East Rother Levels on 28 Dec and 600 at Castle Water on 29 Dec. [AT]

0182. GADWALL

Anas strepera

Scarce breeder and fairly common winter visitor and passage migrant. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	701	473	291	57	73	11	13	36	87	215	312	508
Chichester Hbr	49	40	17	-	-	-	-	-	2	4	6	34
Chichester GP	169	176	74	nc	nc	nc	nc	nc	-	45	51	61
Burton & Chingford Ponds	5	4	8	2	•	I	I	-	12	1	4	5
Swanbourne Lake	8	2	I	I	1	I	1	-	5	1	6	9
Arundel WWT	36	22	-	7	10	6	6	-	7	2	11	13
Amberley Wild Brooks	-	-	-	2	-	-	-	-	-	-	26	-
Eastbourne Lakes	12	6	-	nc	nc	nc	nc	nc	10	16	18	47
Bewl Water	91	102	113	nc	nc	nc	nc	14	7	19	30	36
Darwell Res	191	38	6	2	•	I	I	-	2	29	53	146
Powdermill Res	30	22	39	nc	nc	nc	nc	nc	11	48	14	28
Rye Bay	78	52	22	25	34	2	7	22	29	48	77	91

The monthly WeBS' counts from the principal sites were as follows:

Overall figures for January and February were somewhat down on recent years although the county total held up relatively well in March. The count of 176 at Chichester GP in February again just exceeded the 1% national threshold level (171) at what is usually the county's stronghold. Surprisingly the year's biggest count came from Darwell Res, where the January figure of 191 (which also exceeded the 1% level, but on a one-off basis) was almost ten times the recent average there.

Notable counts in the first winter period, in addition to those from the WeBS included 113 at Bewl Water on 16 Jan, 44 at Pannel Valley NR on 10 Jan, 27 at Offham on 3 Feb, and 40 at Rye Hbr LNR on 17 Feb.

The first birds seen moving offshore were 2 W at Birling Gap (Beachy Head) on 17 Mar. Just small numbers passed through, as is normal, with most in April and a maximum

day count of 6 E past Selsey Bill on 24 Apr. Passage had largely dried up by May, so 3 E past Telscombe Cliffs on 11 Jun was noteworthy.

As usual, a small number of birds was seen during the breeding season from typical locations, but actual confirmation of breeding was once again hard to come by. It was welcome, therefore, that two pairs with ten and four chicks were seen at Waltham Brooks on 22 May. Observers at Pannel Valley NR recorded the biggest concentration of birds during the breeding season, with an impressive 39 on 16 May but there was no record of breeding taking place. Breeding season records of adults in single figures also came from various locations in the Arun Valley, from fields along the west side of Selsey, Pagham Hbr, Henfield Levels, Etchingham and Bewl Water, but all with six or fewer birds seen. At Rye Hbr LNR, small numbers of birds were present on the reserve during summer, though breeding was not suspected

Numbers then remained relatively low through to the year's end. The September WeBS count was the lowest for that month since 1995. December figures were rescued once again by the very good showing from Darwell Res. [AT]

0184. EURASIAN TEAL

Anas crecca

Scarce resident and common winter visitor and passage migrant.	Amber listed
species of medium conservation concern.	

The monthly WeBS	' counts from the principal sites were as follows:
------------------	--

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	4363	2686	2050	473	12	20	77	300	2329	2559	5273	5807
Chichester Hbr	1084	819	811	51	-	1	-	40	280	711	827	1316
Pagham Hbr	991	518	244	65	1	4	1	68	817	915	1421	2122
Chichester GP	60	89	20	nc	nc	nc	nc	nc	120	54	68	69
Amberley Wild Brooks	470	34	102	39	-	-	-	3	-	205	1611	725
Pulborough Brooks	412	354	121	159	10	4	-	17	651	176	555	674
Glynde Brooks	245	110	68	19	-	nc	nc	nc	nc	-	-	-
Pevensey Levels	323	304	227	82	nc	nc	nc	2	82	37	179	245
Rye Bay	186	61	155	20	1	11	71	129	130	169	257	276

The WeBS count for January was the lowest for that month since 2000, and numbers fell away to a poor February count more typical of the late 1990s than of more recent years. However, numbers then held up well in March. For a species that can turn up on even small bodies of water in winter, there were surprisingly few records away from the main WeBS' sites. There was, however, a good count of 120 at Arlington Res on 28 Jan, and the 40 recorded at Constantia Manor (Isfield) on 10 Mar was the highest number ever reported from this site and was achieved by watching the wetlands at dusk.

Movement past seawatching sites did not begin in earnest until late March with 13 E past Birling Gap on 20 Mar and 11 E past Splash Point (Seaford) on 26 Mar. Peak passage was in early April with 54 E during the month at Splash Point (maximum day count 34 E on 2 Apr) and 26 E past Worthing on 3 Apr. No movement was noted at any site in May, and none at all during spring at Selsey Bill.

In May and June, numbers in the county were very low, and there was not a single instance of suspected breeding. In early May, four birds were at Thorney Deeps on the 6th, a pair was seen at the Breech Pool (Pagham Hbr) on the 21st and a singleton on 8 Jun, and there was one bird at Sefter Fm (Pagham) on 30 Jun. In the Arun Valley, up to eight birds were present at Pulborough Brooks in early May, one was at Waltham Brooks on 22 May and two were just upstream at Widney Brooks on 8 Jun. In East Sussex, birds were

present at Pannel Valley NR until 15 May and then two birds were back there on 10 Jun while, at Rye Hbr LNR, just a few birds were present intermittently but breeding was not suspected. It is hard to see how the estimate of 25-30 pairs in Birds of Sussex (1996) remains true today.

A coastal record of 8 W at Selsey Bill over the weekend of 25 - 26 Jun was of note.

In the second winter period, 21 birds were seen passing west at Selsey Bill in August, and numbers in the county built up swiftly in September, with the total for that month the highest in the last decade. There was, however, little further increase in October, but then a second wave of immigration boosted November's figures to, once again, the highest levels in recent years. Numbers stabilised in December, when the WeBS count at Pagham Hbr of 2122 was the only count that surpassed the 1% national threshold level of 1920. In addition to the WeBS' totals, good counts were made at Pannel Valley NR of 167 on 6 Nov and 163 on 4 Dec, while at Rye Hbr LNR 160 were present on 28 Dec, and a good count of 120 was made at Partridge Green SF on 3 Dec. [AT]

0184.01 GREEN-WINGED TEAL

Anas carolinensis

Very rare vagrant.

An adult male was seen at Pulborough Brooks on 16 Feb (RJS et al) but did not linger. It is the tenth county record and the first since 2002. This is the second record for this site, the first being in April 2000. There have also been two in the lower Cuckmere Valley, in March 1975 and February/March 2001, while one returned to Arundel WWT three successive winters during 1989-91. All records fall between 29 December and 2 May and relate to drakes. [RJF]

0186. MALLARD Common resident and winter visitor.

Anas platyrhynchos

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	2930	2322	2157	764	830	973	1221	2335	2888	3038	3266	3430
Chichester Hbr	332	274	223	21	48	85	61	73	95	350	421	472
Pagham Hbr	214	190	219	127	119	167	103	258	458	186	276	372
Chichester GP	164	181	110	nc	nc	nc	nc	nc	137	175	178	175
Wicks Fm Res	33	24	4	nc	nc	nc	nc	nc	310	291	164	98
Arundel WWT	119	80	126	126	95	85	110	106	99	73	138	116
Arlington Res	126	34	46	46	27	72	68	107	170	113	52	36
Eastbourne Lakes	126	31	112	nc	nc	nc	nc	nc	142	111	63	143
Pevensey Levels	72	198	71	61	38	29	12	120	47	61	135	87
Bewl Water	298	175	388	nc	nc	nc	nc	584	272	370	350	262
Alexandra Park	175	154	96	nc	nc	nc	nc	nc	114	123	132	113
Rye Bay	366	257	204	158	170	249	285	564	260	399	306	488

The monthly WeBS' counts from the principal sites were as follows:

This was the first time in the last 10 years (see pages 250 - 281)) that neither the Pulborough Brooks nor Amberley Wild Brooks WeBS' counts exceeded the qualifying level of 5% of the county total for any month required to feature in the above WeBS table; 131 at Amberley Wild Brooks in November was the highest WeBS count at either site (qualifying level 163). However, 175 were recorded in the August WeBS count at Waltham Brooks

Aside from the WeBS' records, 957 other records were received during the year from 256 locations, indicating that Mallard is the most widely distributed duck in Sussex. Sixty of these locations were BBS 1-km squares (where 320 Mallard were recorded), so in time this survey should provide enough coverage to establish summer population trends in Sussex (see pages 238 - 247).

There were fewer reports of breeding than undoubtedly occurred. The earliest record was of a nest with six eggs at Ambersham Common on 21 Mar and the last, on 30 Jun, was from a garden in Warnham, where a pair hatched six of which two fledged. At Barcombe Res 117 birds, including 43 young, were recorded on 5 Jun, whilst at Thorney Deeps 59 young were recorded from nine broods on 16 Jun.

Significant records not included in the WeBS' counts were 200 at Burton Mill Pond on 18 Jan, 244 at Barcombe Res on 11 Dec and 387 at Bewl Water on 25 Dec. [JRC]

0189. PINTAIL

Anas acuta

Fairly common winter visitor and passage migrant; occasionally summers and breeds. Amber listed species of medium conservation concern.

1999: The November *WeBS* count in Pagham Hbr should be 114, not 1144 as published, whence the county total for that month becomes 251.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	722	643	393	19	1	1	I	-	188	326	458	1095
Chichester Hbr	141	297	202	9	-	1	-	-	4	120	9	134
Pagham Hbr	277	268	111	-	-	-	-	-	176	199	219	669
Amberley Wild Brooks	135	4	-	-	-	-	-	-	-	-	163	20
Pulborough Brooks	150	49	28	8	-	-	-	-	6	-	67	269

2005: The monthly *WeBS*' counts from the principal sites were as follows:

The Pagham Hbr WeBS count for December exceeded the 1% international threshold level (600), whilst the Arun Valley total (Pulborough Brooks, Amberley Wild Brooks and Waltham Brooks combined) in January and December exceeded the 1% national threshold level of 279. However, the absence of winter flooding in the Arun Valley meant that peak numbers remained well below the numbers seen there in 2000 - 2002 during flood periods, when internationally important numbers were recorded.

Aside from the WeBS' records, 206 other records were received, of which the most significant was 400 at Pagham Hbr on 17 Sep. As always, this species was concentrated in three main wintering strongholds, the Arun Valley and Pagham and Chichester Harbours. Only 19 non-seawatching records came from East Sussex and they were mostly single figure numbers of birds in the Rye Bay area. In West Sussex only 14 records came from outside the three main wintering locations, again mostly in single figures. A particularly complete coverage of the population is therefore given by the WeBS' data.

Spring coastal movements were at more normal levels after the low numbers recorded in 2004, with the bulk of movements occurring on 20-21 Mar. All were easterly while the few autumn movements were all westerly.

	Mar	Apr	Sep	Oct
Selsey Bill	10	9	2	4
Worthing Beach	14	3	1	-
Telscombe Cliffs	7	11	-	-
Splash Point (Seaford)	96	13	-	-
Birling Gap	75	2	-	-

The totals at the principal seawatching sites were as follows:

As usual records over the summer period were sparse. Three birds at Thorney Deeps on 11 May was the largest number reported whilst a single female was recorded at Arlington Res between 10 Apr and 15 May. There were no records of attempted breeding but a "very young bird (juvenile)" was reported from a site in the east of the county on 16 Jun. [JRC]

0191. GARGANEY

Anas querquedula

Scarce passage migrant and rare summer visitor. Amber listed species of medium conservation concern.

The first record was of a pair at Breech Pool (Pagham Hbr) on 16 Mar. On the 20th, 3 E (a single drake and a pair) were seen at Splash Point (Seaford) between 0745 and 0805 hr, a pair flew east past Brighton Marina late the same morning and two turned up at Pannel Valley NR where they were seen daily to the end of the month. On the 21st, another 3 E (a drake and two ducks) were seen at Splash Point in $3\frac{1}{2}$ hr of seawatching and the next day there were four birds at Weir Wood Res. On the 23rd, another 3 E passed Brighton Marina and there were two pairs at Pannel Valley NR where a maximum count of six was made on the 28th.

On 2 Apr there were 32 E past Splash Point in 6 hr of seawatching, ten of which were seen passing Birling Gap (Beachy Head). At Pulborough Brooks, two drakes were noted on the 2nd and a pair on the 6th. At Thorney Deeps (Chichester Hbr) there was a pair on the 4th. The maximum count for the month at Pannel valley NR was seven on the 10th. Birds were still moving on 24 Apr when a pair, flying up Channel, circled close to the coast in the early morning at Birling Gap. A lone drake first seen at Thorney Deeps on the 24th was seen on several dates until 15 May. On the 10th it was seen being followed by seven Mallard ducklings, behaviour described by the observer as "bizarre".

The only record of confirmed breeding came from Pannel Valley NR where a pair bred successfully. Birds present during the breeding season at several other sites included two pairs at Pulborough Brooks but no ducklings were seen. Records continued into September, principally from Pannel Valley NR where there were usually one or two present. The last record for the year was four at Pagham Hbr on 21 Sep. [DEC]

0194. SHOVELER

Anas clypeata

Very scarce resident and fairly common winter visitor and passage migrant. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	514	508	350	169	20	12	8	101	163	221	265	514
Pagham Hbr	11	27	34	9	-	-	-	41	12	-	2	1
Chichester GP	173	116	56	nc	nc	nc	nc	nc	-	36	18	165
Burton & Chingford Ponds	-	-	2	-	-	-	-	-	-	17	-	-
Petworth Park	•	•	3	2	-	•	•	•	18	18	-	6
Amberley Wild Brooks	52	11	17	ı	-	ı	I	•	ı	5	42	54
Waltham Brooks	18	56	23	16	-	-	1	11	42	7	15	19
Pulborough Brooks	31	108	37	56	2	-	-	-	3	1	27	25
Glynde Brooks	35	28	24	2	-	nc	nc	nc	nc	-	-	-
Eastbourne Lakes	1	24	34	nc	nc	nc	nc	nc	30	20	-	-
Pevensey Levels	19	30	15	13	2	nc	nc	nc	nc	nc	44	52
Rye Bay	158	86	90	71	13	12	7	49	52	104	103	183

The monthly WeBS' counts from the principal sites were as follows:

Significant records additional to the *WeBS*' counts were 172 at Rye Hbr LNR on 26 Jan and 100 at Pulborough Brooks on 20 Mar. Aside from the *WeBS*' data, records were received from 17 other locations, spread across all 12 months of the year.

The 1% national threshold level of 148 was exceeded at Chichester GP in both January and December, in the Arun Valley in February and at Rye Bay in January. These three locations remain the stronghold for this species (see pages 250 - 281)).

The main spring coastal movements were easterly and the majority occurred on 20-21 Mar and 2 Apr. The counts from the principal seawatching sites were as follows:

	Mar	Apr	May
Selsey Bill	12	43	-
Worthing Beach	10	17	-
Telscombe Cliffs	4	32	-
Splash Point (Seaford)	86	112	2
Birling Gap	75	8	3

The sole westerly spring movement was of two at Birling Gap on a date between 17 and 26 Mar. Only one autumn movement was recorded, 7 W at Worthing Beach on 5 Oct.

Breeding was confirmed at three sites; at Pannel Valley NR nine young were seen with an adult female on 6 Jul, at Waltham Brooks a pair was seen with three well grown young on 14 Jul and at Chichester GP a pair was seen with three small young on 16 Jul. [JRC]

0196. RED-CRESTED POCHARD

Netta furina

Possibly a rare winter visitor and passage migrant, although most records probably relate to escaped or feral birds.

One unsexed bird noted during a WeBS count at New Lake (Chichester GP) on 16 Jan was the only record. [DEC]

0198. COMMON POCHARD

Aythya ferina

Very scarce breeder and fairly common winter visitor and passage migrant. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	785	660	375	35	32	51	77	73	92	326	463	713
Chichester GP	112	258	128	nc	nc	nc	nc	nc	45	48	73	207
Forest Mere	22	11	24	nc	nc	nc	nc	nc	-	21	5	6
Swanbourne Lake	35	41	18	8	13	30	30	14	-	-	20	16
Arundel WWT	111	65	65	20	14	5	9	16	28	30	41	78
Bewl Water	9	9	30	nc	nc	nc	nc	3	2	9	5	11
Rye Bay	386	208	49	4	4	8	36	40	15	193	283	315

The monthly *WeBS*' counts from the principal sites were as follows:

Other significant records additional to the *WeBS'* counts were 288 at Scotney Court GP on 6 Jan and, at Rye Hbr SSSI, 179 on 23 Jan and 175 on 6 Feb. At Chichester GP, 280 were recorded on 30 Dec.

The sharp downward trend in wintering numbers, seen in 2004, continued in 2005 (see pages 250 - 281)). Thus whilst the 5-year mean of county maxima was 1300 for the period September 1999 to April 2004, the maximum in 2004 was 1109 and this year only 785. This decline appears to be occurring across all the major sites.

Aside from the *WeBS'* sites, birds were recorded at 22 other locations across the county. The largest numbers were 20 at Thorney Deeps on 20 Dec, 28 at Liphook Forest Mere on 22 Oct, 43 at Offham (Arun Valley) on 3 Feb, 25 at Brooklands (Worthing) on 23 Jan and 33 at Barcombe Res on 27 Nov.

Between April and July single numbers of birds were recorded at 14 sites but there were no reports of confirmed breeding. [JRC]

0203. TUFTED DUCK

Aythya fuligula

Scarce breeding species and fairly common winter visitor.

The monthly WeBS' counts from the principal sites were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	1033	841	745	350	289	322	246	359	388	507	682	1099
Chichester GP	292	359	200	nc	nc	nc	Nc	nc	2	47	116	324
Petworth Park	15	7	3	9	-	3	6	12	23	20	8	5
Swanbourne Lake	65	70	46	47	36	38	18	26	14	-	26	51
Arundel WWT	17	10	22	20	34	32	9	6	9	43	34	87
Barcombe Res	31	28	24	21	14	37	30	37	29	27	43	29
Eastbourne Lakes	72	55	77	nc	nc	nc	Nc	nc	36	52	50	69
Bewl Water	74	36	33	nc	nc	nc	Nc	68	22	10	13	18
Powdermill Res	25	10	14	nc	nc	nc	Nc	nc	41	30	35	14
Rye Bay	268	178	189	180	156	188	158	182	128	167	234	346

In the first winter period the highest counts not included in the above *WeBS* table were 120 at Castle Water (Rye Hbr LNR) on 16 Jan, 93 at Swanbourne Lake on 3 Feb, 74 at Bewl Water on 13 Mar and, at non-*WeBS*' sites, 51 at Offham (Arun Valley) on 3 Feb, 50 at East Guldeford Level on 5 Feb and 51 at Pannel Valley NR on 16 May.

As usual there were very few records of coastal movements. The first of the year was 1 W at Telscombe Cliffs on 5 Feb. There were only ten between 30 Apr and 10 Jul: 3 E at

Splash Point (Seaford) on 30 Apr, 1 E at Selsey Bill on 1 and 15 May, 2 E at Telscombe Cliffs on 27 May and 3 E there on 10 Jul.

With a sizeable resident population breeding was confirmed at seven locations and suspected at another nine. Confirmed breeding records were noted between 30 Jun and 16 Aug with four young (of which three fledged) at Thorney Deeps (Chichester Hbr), five young at Easton Fm (Earnley), 6 young at New Lake (Chichester GP), six families containing 37 young at Sefter Fm (Pagham), six young at Barcombe Res and nine broods at Rye Hbr SSSI.

In the second half of the year, the highest counts not included in the *WeBS* table above were 55 at Barcombe Res on 6 Aug, 57 there on both 20 Oct and 18 Dec, 68 at Bewl Water on 21 Aug and 178 at Long Pit (Rye Hbr SSSI) on 12 Dec. [JRC]

0204. GREATER SCAUP

Aythya marila

Scarce winter and passage migrant; rare in summer. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	Oct	Nov	Dec
Monthly totals	23	25	35	19	-	2	7
Brooklands (Worthing)	2	2	2	-	-	-	-
Rye Hbr	17	21	26	18	-	-	-
Scotney Court GP	2	2	3	-	-	-	-

The monthly maxima at the sites where birds were present all month were as follows:

In addition to the above, in January, a first winter drake was seen at Ivy Lake (Chichester GP) on the 1^{st} and an unsexed bird was at Bewl Water on the 16^{th} . In March, a singleton was seen in Pagham Hbr on the 12^{th} , a female was seen at Waltham Brooks on the 25^{th} , a single drake flew east past Birling Gap on the 20^{th} , a singleton was noted at Widewater (Lancing) on the 30^{th} and another drake flew east past Birling Gap (Beachy Head) on 23 Apr, the last sighting of the spring.

The two birds at Brooklands (Worthing) from 1 Jan were first winter males which had acquired full plumage by the time they were last seen on 12 Mar. The two at Scotney Court GP were a pair. At Rye Hbr LNR the January count included ten drakes, but on 22 Apr 13 birds, previously counted on Castle Water, had moved out onto the sea in Rye Bay. The totals for the first four months were the best this century so far.

In November, two birds were seen offshore at Church Norton on the 20^{th} and there were 7 W in 3 hr past Selsey Bill. [DEC]

0205. LESSER SCAUP

Aythya affinis

Very rare vagrant.

The first-winter male at Scotney Court GP from 17 Nov 2004 (SxBR 57:35) remained on or around the Kent/Sussex border until 14 Mar (MO). It was accepted by BBRC as the first record for both counties but appeared to have no real preference for either, some days being seen more often in Kent and others in Sussex. Towards the end of its stay it had moulted into adult plumage, as is evident from a photograph taken at Bough Beach Res (Kent) where it was seen on 16 Mar (see Birding World 18:191), presumably on its way north. Regrettably it did not return for a second winter. [RJF]

0206. COMMON EIDER

Scarce winter visitor and passage migrant; non-breeding birds summer annually. Amber listed species of medium conservation concern.

		Mar	Apr	May	Oct	Nov	Dec
Selsey Bill	Е	10	19	3			17
	W						7
	0/S						3
Worthing Beach	E	12	5	3			
	0/S	1	2				17
Telscombe Cliffs	Ε	16	5				1
	W						2
Splash Point (Seaford)	E	29	18				
	0/S			3			
Birling Gap	Е	28	2				

The monthly totals at the principal seawatching sites were as follows:

In January and February birds were noted at several offshore sites, mainly in the west of the county, but numbers were small with no more than three at Church Norton on the 5^{th} . In March, 13 E passed Splash Point (Seaford) on the 16^{th} during $2\frac{1}{2}$ hr seawatching and 18 E were noted at Birling Gap (Beachy Head) in $3\frac{3}{4}$ hr on the 21^{st} .

Two birds seen at Selsey Bill on 30 Jun and one off the West Pier at Littlehampton on 9 Jul were the only summer records.

Birds began to appear offshore from 13 Oct when six were seen at Pilsey Sands (Chichester Hbr) and there were eight offshore at Church Norton on the 29^{th} . Thereafter, most sightings were again in the west of the county and regular to the end of the year. The largest number offshore at Church Norton in November was 12 on the 20^{th} and 23^{rd} while in December the highest count was of 28 on the 20^{th} . [DEC]

0212. LONG-TAILED DUCK

Clangula hyemalis

Scarce passage migrant and winter visitor; usually scarcer in summer and autumn. Amber listed species of medium conservation concern.

The approximate monthly totals were as follows:

ſ		Jan	Feb	Mar	Apr	May	Oct	Nov	Dec
ĺ	No. of birds	2	1	3	1	1	4	9	5

In January a singleton flew over Rye Hbr LNR on the 15^{th} and a first winter drake was seen in Emsworth Channel (Chichester Hbr) on the 13^{th} and 15^{th} and, possibly the same bird, again on 8 Feb and 23 Mar. In March, following 1 W at Selsey Bill on the 9^{th} , a singleton was seen offshore in the area from the 13^{th} to 24^{th} . Late spring sightings at Selsey Bill involved 1 E on 28 Apr and 1 E on 22 May.

In the vicinity of Thorney Island, a single female first seen on 23 Oct had been joined by two drakes by 3 Dec and all stayed to at least the 20^{th} . A first winter female was seen on a pond at Easton Fm (Earnley) on 23 and 26 Oct and again on 20 Nov while, in the Selsey Bill/Church Norton area, following 1 E on 30 Oct, three were seen on 5 Nov, one on the 19^{th} , two the following day and another singleton on 18 Dec. At Barcombe Res a single male, first seen on 5 Nov, stayed until 2 Jan 2006 (mimicking the 2003 bird which stayed to 1 Jan 2004). [DEC]

Melanitta nigra

0213. COMMON SCOTER

Common spring passage migrant and winter visitor; scarcer in summer and autumn. Red listed species of high conservation concern.

Numbers similar to those in recent winters were seen offshore during the early part of the year. Typically the largest flocks occurred in the east, with maxima of 450 in Rye Bay on 31 Jan and 100 at Cuckmere Haven on 2 Feb. Smaller numbers elsewhere included 36 off Newhaven on 20 Jan and 20 off Goring on 31 Jan.

Easterly passage during spring from the principal seawatching sites (hours watched are given in the introduction to the Systematic List) is summarised as follows:

	Mar	Apr	May
Selsey Bill	421	2203	1766
Worthing	158	1027	767
Telscombe Cliffs	324	1217	265
Splash Point (Seaford)	1308	5739	1526
Birling Gap	1083	5054	1155

A protracted spring passage was typically heaviest in April with maximum numbers seen off eastern seawatching locations. Peak days, the numbers counted and the hours watched per day (in parentheses) were as follows:

	21 Mar	3 Apr	19 Apr	15 May
Selsey Bill	184 (6)	296 (7)	321 (9)	431 (131/2)
Worthing	119 (21/4)	196 (31/2)	206 (31/2)	172 (1¾)
Telscombe Cliffs	152 (21/4)	422 (21/2)	219 (21/2)	nc
Splash Point	710 (3½)	2222 (6)	1047 (13)	669 (13¼)
Birling Gap	750 (3¾)	2017 (41/2)	1250 (5¼)	353 (4¼)

Small numbers continued to be seen offshore during the summer months, probably relating to birds summering in the English Channel. More notable was the only inland record for the year, a singleton at Weir Wood Res on 1 Aug.

Fewer birds were present during the second winter period than earlier in the year. Numbers built up steadily in Rye Bay as illustrated by counts of 60 on 26 Sep and 7 Oct, 100 on 14 Nov and 200 by 15 Dec, with 45 off Church Norton on 20 Nov. [CAH]

0215. VELVET SCOTER

Melanitta fusca

Scarce passage migrant and winter visitor along the coast; rare inland. Amber listed species of medium conservation concern.

The approximate monthly totals were as follows:

Jan	Feb	Mar	Apr	May	Oct	Nov	Dec
27	26	13	70	17	2	22	9

The majority of records at the start of the year involved a small number of birds in the west of the county, with maxima of eight at Church Norton on 6 Feb and 14 off Selsey West Fields on 29 Jan and 7 Feb. A peak of just three was noted from the Rye Bay area.

An average spring passage took place during mid-April. Monthly totals for the principal seawatching sites were as follows:

	N	lar	A	or	Мау	
	Е	W	Е	W	Ε	W
Selsey Bill	4	6	16	-	1	-
Worthing Beach	-	-	20	-	-	-
Splash Point (Seaford)	-	-	34	-	1	-
Birling Gap	-	-	40	-	-	

The peak day was 19 Apr, with day totals and hours watched as shown below:

	No.	Hr watched
Selsey Bill	10	9
Worthing Beach	12	31/2
Splash Point (Seaford)	9	13
Birling Gap	26	5¼

In complete contrast to the previous year, very few were seen during the autumn with two off Seaford on 22-25 Oct representing the only record for the month and setting the scene for a poor second winter period. Up to six were seen off Selsey Bill during November and December, with lesser numbers reported from Church Norton, Climping and Rye Bay. There were no records away from the coast during the year. [CAH]

0218. COMMON GOLDENEYE

Bucephala clangula

Scarce winter visitor; rare in summer. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	20	27	10	1	-	-	-	-	-	-	3	32
Chichester Hbr	12	13	2	-	-	-	-	-	-	-	2	17
Pagham Hbr	1	10	2	-	-	-	-	-	-	-	-	9
Chichester GP	2	-	-	nc	nc	nc	nc	nc	-	-	-	-
Forest Mere	-	•	-	nc	nc	nc	nc	nc	-	•	1	-
Barcombe Res	1	1	1	1	-	•	-	I	1	1	•	1
Bewl Water	-	1	2	nc	nc	nc	nc	I	1	I	1	-
Darwell Res	1	2	2	•	-	•	-	•	•	•	•	2
Rye Bay	3	1	1	-	-	-	-	-	-	-	-	3

The monthly WeBS' counts at the principal sites were as follows:

The opening winter period was relatively lean with all records restricted to the main sites shown above. A peak count of 26 was recorded in Fishbourne Channel (Chichester Hbr) on 24 Feb. The last sighting of the spring was a singleton east past Telscombe Cliffs on 29 Apr.

The first winter visitor to return was one noted at Arundel WWT on 30 Oct (assuming it was a truly wild bird), followed by two in Chichester Hbr and one at Liphook Forest Mere on 6 Nov. After the next record of one at Castle Water (Rye Hbr LNR) on the 12th there were almost daily reports to the end of the month of birds returning to traditional wintering sites; the highest count was of 11 in Thorney Channel (Chichester Hbr) on the 18th. Away from the principal sites, single birds were noted at Goring on 17 Dec and Arlington Res on 27 Dec. [CAH]

0220. SMEW

Mergellus albellus

Scarce winter visitor mainly to the east of the county.

The approximate monthly totals and the monthly maxima at each site were as follows:

	Jan	Feb	Mar	Dec
County total	15	16	6	8
Rye Hbr LNR	10	7	3	8
Northpoint GP	3	5	-	-
Scotney Court GP	2	4	3	-

Typically, all records originated from the far east of the county with the majority of birds seen at Rye Hbr LNR or the immediate area in both winter periods. Once again, Castle Water was the most favoured of the Rye Hbr LNR pits. During the first winter period, the peak count there was ten on 16 Jan, including four drakes on 3-5 Jan and six on 25-26 Jan. Two birds at Rye Hbr LNR and three at Scotney Court GP on 13 Mar were the final sightings of the winter, the same date as in 2004.

All other sightings in the second half of the year were from Rye Hbr LNR where three had returned by 12 Dec, increasing to a maximum of eight (four drakes) on 28 Dec. [CAH]

0221. RED-BREASTED MERGANSER

Mergus serrator

Fairly common winter visitor and passage migrant to the coast; a few summer.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	159	230	329	19	1	3	1	1	1	15	76	215
Chichester Hbr	147	124	194	12	-	-	-	-	-	15	68	166
Pagham Hbr	7	4	41	7	-	-	-	-	-	-	8	49
Goring Gap	5	102	79	nc								

The monthly WeBS' counts at the principal sites were as follows:

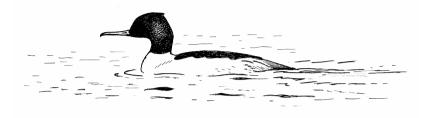
During the opening months of the year, virtually all records were from the west of the county, principally the western harbours and Worthing, where a peak of 309 was counted on 2 Feb, followed by 278 at nearby Goring on 17 Feb. The last passage birds of the spring were noted at Selsey Bill and Splash Point (Seaford) on 15 May.

Monthly totals for the principal seawatching sites were as follows:

		Jan	Feb	Mar	Apr	May	Oct	Nov	Dec
Selsey Bill	Е	37	22	88	119	4	6	23	42
	W	58	5	20	2	0	1	90	65
Worthing Beach	Е	43	13	53	77	0	3	30	1
	W	119	300	0	8	2	4	0	7
Telscombe Cliffs	Е	0	0	24	23	-	-	4	0
	W	6	2	0	0	-	-	1	3
Splash Point (Seaford)	Е	-	3	133	227	5	-	-	-
	W	-	-	2	1	0	-	-	-
Birling Gap	Е	-	-	68	213	-	-	-	-
	W	-	-	0	0	-	-	-	-

Most records in July are of birds summering in the western harbours, so 2 E past Telscombe Cliffs on 15 Jul was unusual. Singletons were noted in Pagham Hbr on 2 Aug and off Cow Gap (Beachy Head) on 7 Aug, the latter remaining until 4 Oct. The species was not widespread in the county until late October, somewhat later than recent years.

Maximum counts at the end of the year were 128 off Goring on 24 Dec and 74 around Thorney Island on 9 Dec. Away from the open sea, one was at Ternery Pool (Rye Hbr LNR) on 8 Dec and a redhead at Weir Wood Res on 30 Oct provided the only inland record of the year. [CAH]



0223. GOOSANDER

Mergus merganser

Scarce winter visitor and passage migrant.

This was an average year with no cold weather influxes observed. The monthly totals were as follows:

	Jan	Feb	Mar	Oct	Nov	Dec
County total	24	13	4	1	12	10
Chichester Hbr	-	3	-	-	-	-
Selsey Bill	1	4	-	•	-	-
Pagham Hbr	8	4	4	•	2	3
Chichester GP	2	-	-	•	-	-
Pulborough Brooks	1	-	-	1	-	-
Warnham LNR	-	-	-	-	-	1
Weir Wood Res	3	-	-	•	4	3
Barcombe Res	-	-	-	-	1	1
Arlington Res	-	-	-	-	-	1
Princes Park (Eastbourne)	-	-	-	-	1	1
Darwell Res	8	-	-	-	-	-
Royal Military Canal (Winchelsea)	-	1	-	-	-	-
Rye Hbr LNR	1	1	-	-	4	-

On New Year's Day eight were present at Pagham Hbr, remaining from December 2004, after which up to four were recorded there until 30 Mar. Elsewhere, records of more than two birds comprised eight at Darwell Res on 16 Jan, three at East Head (Chichester Hbr) on 6 Feb and four offshore at Selsey Bill on 7 Feb. Weir Wood Res hosted a pair on 1-2 Jan and a single bird on 16 Jan. A redhead east past Birling Gap (Beachy Head) on 1 Apr was the final sighting of the first winter period.

Following one at Pulborough Brooks on 22 Oct, this species was again reported from several sites at the end of the year, but none of them held more than four birds. A long-

staying individual was present at Princes Park (Eastbourne) from 24 Nov to 29 Dec (see Plate 1). [CAH]

0225. **RUDDY DUCK**

Oxyura jamaicensis

Scarce resident and winter visitor.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	8	22	23	13	18	24	16	23	12	12	15	25
Chichester GP	2	2									2	
Arundel WWT								10(*)	4	4	4	4
Eastbourne Lakes		4(**)	3						5	6	3	2
Bewl Water	1		3									
Rye Bay	5	16	17	13	18	24	16	13	3	2	6	19

The monthly *WeBS*' counts at the principal sites were as follows:

Note: (*) = includes 6 at Swanbourne Lake, (**) = includes 2 at Shinewater Marsh

Monthly maxima at the principal sites in the Rye Bay area were as follows:

	Jan	Feb	Mar	Apr	Sep	Oct	Nov	Dec
Pett Level	11	9	14	16	-	-	-	-
Rye Hbr LNR	7	17	8	6	13	1	5	5
Scotney Court GP	1	20	20	•	3	7	6	12

Breeding was confirmed at three sites: at Arundel Park, but without details of success; Rye Hbr LNR, where there were five or six pairs at Ternery Pool and similar numbers at Castle Water but success was poor with only a few broods and poor fledging success; and Pett Level, where six well grown young were seen on 6 Jul.

Autumn dispersal records were of two at Sidlesham Ferry on 27 Jul and singletons at Chichester GP on 30 Aug, Pagham Lagoon on 5 Sep, Barcombe Res on 10 and 14 Sep and a duck at Arlington Res on 18 Sep.

Records later in the year were similar in location to the first winter period, but with a lower peak of 12 birds at Scotney Court GP on 5 Dec. Records away from the regular wintering localities involved singletons at Barcombe Res on 13-20 Nov and Brooklands (Worthing) on 27-31 Dec. [CAH]

0358. RED-LEGGED PARTRIDGE

Introduced resident. Population augmented annually by captive bred stock.

Records were received for 79 sites (77 1-km squares), an increase on the totals of 30, 35 and 51 in 2002, 2003 and 2004 respectively. The largest proportion (73%) was from the Downs or near the coast.

The highest counts in the first winter period were 18 from Thorney Island on 12 Jan, 20 from Porthole Fm (Sidlesham) on 3 Feb, 18 from West Dean Woods on 20 Mar and 15 from Sefter Fm (Pagham) on 11 Jan.

Records were received from 47 sites during the breeding season. The first nest reported was from Pett Level where a nest with seven eggs was found on 1 May within a metre of the front door of a house. Later two broods and a deserted nest were seen in the same area. At Sefter Fm (Pagham) five territories were identified and at Constantia Manor (Isfield) three adults with four half grown juveniles were seen on 31 Aug. No other positive evidence of natural breeding was reported.

All the higher counts in the second winter period came from the extreme west of the county. There were 21 at West Marden on 21 Nov, 23 at West Itchenor on 23 Nov, a maximum of 31 in fields along the west side of Pagham Hbr on 12 Nov and 18 at Charlton on 17 Sep. The highest counts of the period were 40 at Lee Fm (Patching) on 28 Nov and 35 at Chantry Hill on 18 Dec.

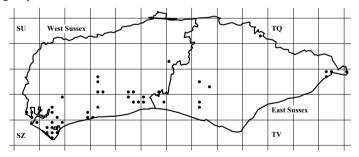
There are undoubtedly hundreds, possibly thousands, released into the wild every year. The release of gamebirds for the shoot was described in *A Survey of Sussex Gamebirds During the 1998/99 Season* in SxBR 51:177-186. [RTP]

0367. GREY PARTRIDGE

Perdix perdix

Scarce and decreasing resident. Red listed species of high conservation concern.

Records were received from 67 sites compared to 28 in 2004 but comparable with 2003 (53) and 2002 (50). All but four of these sites (Haywards Heath, Barcombe, Ringmer and Bewl Water) were in the southern part of the county, as shown in the following map:



In the first winter period there were five double figure counts, all from Harbour Fm (Rye Hbr SSSI) with a maximum of 14 on 8 Jan.

During the breeding season records were received from 38 sites but only at Rye Hbr SSSI was there positive evidence of breeding where six pairs were estimated to have bred (four at Harbour Fm and two at Beach Reserve). Seven chicks were seen at Harbour Fm on 30 Jun. A breeding survey on the 95 ha Sefter Fm (Pagham) found two territories.

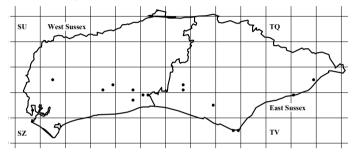
In the second winter period there were 31 double figure counts, the maxima being 24 very tame birds at Thorney Island on 20 Oct, 23 at Climping Gap on 20 Sep, a covey of 47 at Steyning Round Hill on 8 Oct and a maximum of 41 out of 14 records from Harbour Fm. [RTP]

0370. COMMON QUAIL

Coturnix coturnix

Scarce summer visitor, recorded in variable numbers from year to year; formerly occasional in winter. Red listed species of high conservation concern.

Records were received from 17 sites on the Downs and in the coastal regions across the county, involving a possible 28 birds (19 in 2003), as shown on the following map:



The first arrival was heard singing on 10 May at Thorney Island and, two days later, two were flushed from long grass at Blackcap (Plumpton).

Once again, the area of Steep Down (Lancing) was the best place to hear these birds. There were up to six individuals singing there between 29 May and 10 Jul. Further records came from Colworth Down (Chilgrove) on 16 Jul, two at Rectory Lane (Church Norton) on 2 Aug, Burpham on 14 Jun, two at Chantry Hill on 3 Aug, Steyning Round Hill on 29 May, three at Beeding Hill on 22 Jun, at least three in the area of Thundersbarrow Hill (Shoreham) between 20 and 23 Jun, Balmer Down (Lewes) on 17 Jul, Bopeep (Alciston) on the same day and, at Beachy Head, there were singletons at Hodcombe on 20 Jun and at Shooters' Bottom on 3 Aug. Two singletons were seen on 11 Aug, one at Steyning Round Hill and another in Hastings. The latter bird was caught by a cat, but its fate was not recorded. The final record was of one at Pannel Valley NR on 15 Sep. [RTP]

0394. COMMON PHEASANT

Phasianus colchicus

Very common introduced resident. Population augmented annually by captive bred stock.

Records were received from 217 sites across the county (108 in 2004). This large increase is due to the number of records received from the BTO's BirdTrack. Large counts almost certainly result from released birds. In the first winter period there were 35 at Pett Level on 19 Jan and 78 in one field at West Dean Woods on 20 Mar. At Heyshott there were 46 on 1 May. In the second winter period there was a monthly maximum of 50 at Pagham Hbr on 17 Sep, at West Marden there were 45 at Watergate and 35 at Forestside on 13 Oct. The latter were mostly melanistic birds (see the *Sussex Bird Report* 2002, p 64). At West Dean Woods there were 35 on 15 Oct and at Lee Fm (Patching) there were 80 on 28 Nov.

Very little evidence of natural breeding was received. Many pairs bred at Castle Water (Rye Hbr LNR) and at Harbour Fm (Rye Hbr SSSI), two pairs at Brighton Wild Park and a pair at Chuck Fm (Littleworth). Territories were identified at Barns Copse (Binsted), two at Forest Mere (Liphook) and at Pett Level.

On 17 Mar a male was on the beach at Hove and, even more bizarrely, one was seen swimming near the lock gates in Shoreham Hbr on 11 Oct and again on the 12th. [RTP]

0002. **RED-THROATED DIVER** Gavia stellata

Fairly common winter visitor and passage migrant. Amber listed species of medium conservation concern.

For this species and the next, estimates of monthly totals have been made by combining records of birds inland with the totals from coastal sites, having made allowance for duplication. The larger of the counts of birds flying east and west at each site was added to the largest number of birds reported as 'on sea' or 'offshore'. It is probable that most of the birds recorded as 'Diver *spp.*' in the winter months are, in fact, Red-throated, and these accounts should be considered together; indeed, observers at some sites seem to make this assumption.

The approximate monthly county totals were as follows:

[Jan	Feb	Mar	Apr	May	Jun	Sep	Oct	Nov	Dec
	138	131	174	156	34	6	1	9	29	110

The monthly totals of birds moving offshore at the principal seawatching sites, with estimated totals for *all* sites, were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly total (*)	123	117	143	117	24	5	-	-	1	6	20	86
Selsey Bill	27	25	37	43	15	I	-	-	1	2	12	49
Worthing Beach	33	15	7	11	19	5	-	-	-	1	2	3
Telscombe Cliffs	58	29	35	6	2	-	-	-	-	-	15	19
Splash Point (Seaford)	33	67	55	41	4	-	-	-	-	-	-	-
Birling Gap	-	8	92	72	-	-	-	-	-	-	-	-

(*) adjusted to compensate for duplication.

The variation between site counts reflects the differences in time spent seawatching at each site.

It was a very poor year for this species, even allowing for the lack of records from Brighton Marina. No three-figure movements were noted with the peak winter counts all from Rye Bay, comprising 17 on both 19 Jan and 17 Feb and 29 on 26 Feb. The only notable spring passage records were from Birling Gap (Beachy Head) with 27 E on 13 Mar and 60 E on 3 Apr. Observers at Splash Point (Seaford) also recorded 18 plus 37 *diver spp* on 3 Apr. The last spring record involved 5 E past Worthing Beach on the late date of 3 Jun (DIS).

Records away from the open sea comprised single birds on the R Arun near Ford from 9 Feb for a week, Arlington Res on 19 Feb and in flight over Rye Hbr LNR on 3 Mar.

The first returning bird was 1 W at Selsey Bill on 18 Sep. Coastal movements were again small, with the peak count of 7 E and 8 W at this site on 1 Dec. Single birds were noted in Emsworth Channel (Chichester Hbr) on 9 Nov, Lower Chichester Channel on 22 Nov and Pilsey Sands on 4 Dec. [PMB]

Gavia arctica

0003. BLACK-THROATED DIVER

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern.

The approximate monthly county totals were as follows:

Jan	Feb	Mar	Apr	May	Jun	Oct	Nov	Dec
4	5	15	45	26	•	•	5	8

The total of 108 represents a very poor year for this species.

The monthly totals at the principal seawatching sites were as follows:

	Jan	Feb	Mar	Apr	May	Oct	Nov	Dec
Monthly total (*)	3	3	11	45	26	•	•	•
Selsey Bill	-	-	7	24	3	-	3	6
Worthing Beach	1	1	-	6	3	-	1	-
Telscombe Cliffs	1	2	5	4	1	-	1	1
Splash Point (Seaford)	1	-	-	20	20	-	-	-
Birling Gap	-	-	-	19	4	-	-	-

(*) adjusted to compensate for duplication.

Spring passage was poor with peak movements of only 7 E at Brighton Marina on 3 Apr and, on 22 Apr, 11 E at Birling Gap (Beachy Head) and 9 E at Splash Point (Seaford). A total of 7 E at Worthing Beach on 15 May was followed by the last spring sighting on 20 May from Brighton Palace Pier.

The only sightings away from the main seawatching sites came from Chichester Hbr on 5 Jan, offshore at Pett Level on 24 Mar and 15 May, and 2 E in Rye Bay on 19 Apr.

The first autumn record was of 1 W at Selsey Bill on 2 Nov with presumably the same singleton in Chichester Hbr on 17 Nov. The only notable count at the end of the year comprised 1 E and 3 W at Glyne Gap on 4 Dec. [PMB]

0004. **GREAT NORTHERN DIVER**

Gavia immer

Scarce winter visitor and spring passage migrant. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Oct	Nov	Dec
County Total (*)	5	3	5	5	5	-	-	10	9
Max off Selsey Bill	3	3	5	5	3	-	-	6	8

The approximate monthly totals were as follows:

(*) allowing for duplication.

Birds were frequently noted off Selsey Bill during the winter months, with regular sightings in Bracklesham Bay and sites within Chichester Hbr, where a dead and decapitated bird was found at Thorney Deeps on 21 Jan. It is assumed that birds noted in flight at Selsey Bill were on local feeding movements due to the frequency of such sightings and because the movements were not observed at other seawatching sites. The peak monthly counts at Selsey Bill were (all offshore) 3 on 29 Jan, three on 26 Feb, five on 9 Mar and 12 Apr and three on 1 May.

The only other records for the first winter period came from Brighton Marina with first year birds west on 2 and 8 Jan and summer plumaged adults east on 2 and 12 May. The last spring sighting was a singleton offshore at Selsey Bill on 28 May.

The first returning birds were 1 W on 5 Nov at Selsey Bill and 1 E at Ovingdean the same day (ITB) followed by juveniles west at Brighton Marina on the 8th and 11th and a single bird offshore at Ferring Beach on the 19th (DIS). One bird briefly visited Castle Water (Rye Hbr LNR) on 6 Dec. At Selsey Bill the peak counts were six offshore on 20 Nov and 5 W plus three offshore on 31 Dec. [PMB]

DIVER Species

Gavia spp.

The specific identification of divers in flight is difficult, particularly when they are in winter plumage. Those recorded as 'diver spp' can form a significant proportion of those seen. The number of all divers recorded at the main sea-watching locations in January-May and October-December are shown in the table below. The totals for each site have been calculated by adding the monthly totals of birds flying E to those going W and including the numbers of birds seen on the sea. Duplication is likely both between sites and with divers specifically identified. No attempt should be made to add the columns, since many birds will have been seen at more than one site.

	Dive	r spp.	R-t I	Diver	B-t [Diver	Tota	al (*)	No. p	er hr
	J-M	0-D	J-M	0-D	J-M	0-D	J-M	0-D	J-M	0-D
Selsey Bill	70	7	147	63	34	9	340	137	0.8	1.1
Worthing Beach	75	13	85	6	11	1	171	18	0.9	1.0
Telscombe Cliffs	49	17	130	34	11	2	190	-	1.3	2.0
Splash Point (Seaford)	265	-	200	-	41	-	506	-	2.1	-
Birling Gap	26	-	172	-	23	-	221	-	3.6	-

(*) includes Great Northern Diver

The rate of passage was similar to that in 2004, with notably few movements in the early part of the year [PMB]

0007. LITTLE GREBE

Tachybaptus ruficollis

Scarce resident, passage migrant and winter visitor.

The monthly WeBS' counts at the principal sites were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	167	143	101	36	24	28	46	106	158	185	159	232
Chichester Hbr	59	65	24	10	-	6	10	10	24	75	65	79
Pagham Hbr	8	15	7	4	4	3	4	9	10	5	4	33
Bury Brooks	-	-	•	•	•	•	-	-	2	nc	8	nc
Brooklands (Worthing)	1	-	4	3	2	4	5	11	23	20	14	9
Cuckmere Haven	24	15	15	nc	nc	Nc	nc	nc	12	23	25	29
Bewl Water	18	14	18	nc	nc	Nc	nc	39	43	7	6	4
Rye Bay	41	24	17	17	15	10	20	27	26	34	17	53

The only notable count in the first winter period in addition to those in the *WeBS* table was 24 at Bewl Water on 25 Feb. A single bird offshore at Splash Point (Seaford) on 27 Mar provided a rare seawatching record.

Approximately 35 breeding pairs were recorded at 17 sites, but success was generally poor due to low water levels. Five broods totalling 11 young were noted at Bewl Water and five pairs attempted breeding at Rye Hbr LNR. Post breeding dispersal was noted from mid-June.

In the second winter period significant counts in addition to the *WeBS* table were 37 at Thorney Island (Chichester Hbr) on 20 Nov and 30 at Cuckmere Haven the following day. [PMB]

0009. **GREAT CRESTED GREBE**

Podiceps cristatus

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	246	333	449	182	160	121	99	347	392	402	344	411
Chichester Hbr	22	3	37	28	11	4	-	1	-	-	32	34
Pagham Hbr	11	8	11	9	5	14	16	9	26	18	26	49
Chichester GP	43	40	34	nc	nc	nc	nc	nc	31	54	44	40
Climping	•	17	5	nc	nc	-	-	-	-	3	-	1
Weir Wood Res	17	49	121	63	55	32	nc	38	34	52	48	nc
Arlington Res	11	8	45	14	17	9	23	21	33	27	10	17
Eastbourne Lakes	14	10	12	nc	nc	nc	nc	nc	15	21	14	9
Bewl Water	82	104	73	nc	nc	nc	nc	204	156	134	105	126
Darwell Res	10	15	19	22	30	36	31	32	37	31	20	51
Rye Bay	14	34	36	30	28	13	15	24	18	23	12	41

The monthly WeBS' counts at the principal sites were as follows:

Fairly common resident, passage migrant and winter visitor.

The only notable inland counts that were in addition to the *WeBS*' totals came from Weir Wood Res with 57 on 15 Jan, 98 on 20 Mar and 66 on 13 Nov. Elsewhere, observers at Bewl Water recorded 114 on 25 Feb and there were 30 birds at Ardingly Res on 27 Mar.

The peak coastal counts were again from Rye Bay in January with 95 on the 1st increasing to a peak of 376 off Pett Level on the 30th. Elsewhere, maximum counts were noted later, with 97 at Worthing Beach on 2 Feb, 68 at Goring on 17 Feb, 98 at Shoreham Hbr and 50 at Hove on 6 Mar and, on 14 Mar, 91 off Southwick Beach and 65 at Brighton Marina. Despite the large offshore numbers no notable movements were observed.

Breeding was noted from 11 Mar and was confirmed from 13 sites, but the first young were not noted until 18 Jun at Bayham Lake. Breeding success was particularly poor at Bewl Water where only one brood was noted due to low water levels.

Coastal numbers increased from mid-September with 17 at Church Norton on the 17th before an influx in November produced peak counts of 45 at Climping on the 15th, 88 off Worthing Beach on the 19th and 180 off Pett Level on the 21st. In December there were 44 W and 1 E at Selsey Bill on the 4th and 36 at Church Norton on the 7th. At Goring on the 24th there were no less than 301, which is the largest number recorded at any West Sussex site. [PMB]

0010. RED-NECKED GREBE

Podiceps grisegena

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern.

The approximate monthly totals were:

Jan	Feb	Mar	Apr	Sep	Oct	Nov	Dec
3	3	2	-	2	2	5	5

The year started with single birds at Darwell Res and Michelham Priory on 2 Jan. Further singletons were then noted passing west at Telscombe Cliffs on 26 Jan and east at Selsey Bill on 6 Feb, whilst two birds were noted offshore at Worthing Beach on the 2nd and a singleton there on the 16th. Spring birds were noted only at Selsey Bill, where a single bird was seen intermittently from 13-26 Mar, with two on the latter date.

The first returning birds were noted at Selsey Bill on 14 and 17 Sep, followed by single birds at Sovereign Hbr Marina (Eastbourne) on 8 and 16 Oct and passing west at Selsey Bill on the 25^{th} . Further singletons passed west at the latter site on 2 Nov and were noted at Pilsey Island on the 5^{th} , Darwell Res on the 7^{th} , with up to two noted offshore at Church Norton at the end of the month, one remaining to 6 Dec. Elsewhere in December single birds were noted at Glyne Gap on the 4^{th} , Telscombe Cliffs on the 5^{th} , Southwick Beach on the 26^{th} and Selsey Bill on the 31^{st} . [PMB]

0011. SLAVONIAN GREBE

Podiceps auritus

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern.

The approximate monthly totals were:

	Jan	Feb	Mar	Apr	May	Oct	Nov	Dec
County total	22	29	30	13	-	9	16	78
Max in Church Norton area	20	25	7	1	•	6	16	68

As usual, most winter records were from the west of the county with a peak count of 25 offshore at Church Norton in early February. With the exception of a singleton at Chichester GP on 16 Jan all other records came from the coast between Ferring and Widewater (Lancing) with sightings on six dates between 31 Jan and 19 Feb and a peak of three on the 17th. A singleton was noted at Pett Level from 19 Feb to 1 Mar, with possibly the same individual noted at Rye Hbr LNR on the 4th and Cliff End (Pett) on the 6th.

Spring passage was noted from 8 Mar with most sightings from the main seawatching sites where peak counts included seven at Goring on the 12^{th} and 4 E at both Splash Point (Seaford) and Beachy Head on the 21^{st} . Smaller numbers were noted along the coast in April, with a peak of 3 E at Beachy Head on the 1^{st} and the last a singleton passing east at Brighton Marina on the 30^{th} .

The first returning bird was noted offshore at Pett Level on the typical date of 11 Oct and six in Chichester Hbr on the 15^{th} was the most notable count in the month. Birds became more widespread in December with one at Princes Park (Eastbourne) from the 1^{st} to the 5^{th} , two at Glyne Gap on the 4^{th} , a singleton at Darwell Res on the 7^{th} , three offshore at Telscombe Cliffs on the 10^{th} , up to two at Rye Hbr and one at Goring on the 28^{th} . Numbers offshore at Church Norton increased during the month from 10 on the 7^{th} to 24 on the 18^{th} , 36 on the 20^{th} and then a massive 68 between the 28^{th} and 31^{st} . The latter number is not only a new county record but also exceeds the 1% international threshold level of 35. [PMB]

0012. BLACK-NECKED GREBE

Podiceps nigricollis

Very scarce winter visitor and passage migrant. Amber listed species of medium conservation concern.

The approximate monthly totals were:

Jan	Feb	Mar	Apr	May	Oct	Nov	Dec
1	2	15	11	1	1	•	6

A total of approximately 39 was recorded, with a good passage in late March and early April. The first winter period records all came from Scotney Court GP, with singletons on 3 and 16 Jan, two on 1 Feb and a singleton on 5 Feb.

Coastal passage was good and peaked between 20 and 23 Mar. Site maxima included counts of two offshore at Splash Point (Seaford) on the 14th, 3 E at Beachy Head on the 20th, two offshore at both Newhaven Tide Mills and Worthing Beach the following day, and three offshore at Brighton Marina on the 23rd. A single bird noted at Church Norton from 22-25 Mar might have been that subsequently noted at Sidlesham Long Pool from the 26th to 4 Apr. Early April also produced 4 E at Beachy Head on the 1st and four offshore at Brighton Marina on the 3rd, before single birds east at Seaford on the 23rd, offshore at Worthing Beach on the 30th and finally at Barcombe Res on 29 May.

Returning birds were not noted until 5 Oct when a singleton was seen at Scotney Court GP. There were then sightings from four sites in December: at Pulborough Brooks on the $2^{nd}-3^{rd}$; Glyne Gap on the 4^{th} ; Thorney Channel on the $4^{th}-13^{th}$, 18^{th} and 21^{st} , with two on the 13^{th} ; and offshore at Selsey Bill where there was one on the 2^{nd} and two on the 29^{th} . [PMB]

0022. FULMAR Fulmarus glacialis Fairly common breeding species and passage migrant, resident on coastal cliffs from November to September. Amber listed species of medium conservation concern.

	Jan	-Feb	Mar-	May	Jun	-Jul	Aug	Sep	Oct	Dec
Direction:	Е	w	E	W	Е	W	Е	w	E	w
Selsey Bill	1	1	74	143	20	87	3	45	1	7
Worthing	-	-	141	54	5	6	2	12	-	-
Telscombe Cliffs	-	312	-	-	-	-	-	-	1	3
Splash Point (Seaford)	34	32	32	-	-	-	-	•	-	-

Movements at the principal seawatching sites were as follows:

The only significant counts at the start of the year came from Telscombe Cliffs with westerly movements of 97, 44 and 171 on 4, 7 and 8 Jan respectively. Similarly, the only notable spring counts were from nearby Brighton Marina where the peaks were 165 E on 17 Apr, 370 E on 23 Apr and a huge count of 670 E on 12 May, the latter a Sussex record. As with previous years, the lack of significant numbers noted from other seawatching sites on these dates suggests that this apparent movement may have been related to the local breeding population.

Birds noted away from the open sea were at Thorney Island on 20 May and over Hollingdean (Brighton) on 12 Jun.

The only breeding records received related to ten pairs at both Newhaven Fort and between Crowlink and Birling Gap (Beachy Head). Birds were also noted breeding on the cliffs at Telscombe.

The seawatching counts for August and September occurred principally in August. In September, none were seen at Worthing and only 2 E and 8 W were recorded at Selsey Bill during $30\frac{1}{2}$ hr watching.

Numbers decreased during the late summer with the last birds noted on the cliffs at Telscombe on 8 Sep and the only October sighting comprised three in Rye Bay on 19 Oct. No notable counts were made to the end of the year. [PMB]

0043. SOOTY SHEARWATER

Puffinus griseus

Very scarce autumn visitor.

One flew W at Fairlight, atypically in a light NE wind, on 4 Oct (ADW, IJW). All subsequent records were during the first half of November, and in the more usual strong W or SW winds associated with this species. Two flew west at Brighton Marina on the 3^{rd} (IJW). On the 6^{th} there were 6 W at Birling Gap (Beachy Head) (DC, RJF, RKH *et al*), 3 W at Ovingdean (ITB, CWM) and 7 W at Selsey Bill (JA, TJE, DIS *et al*). On the 8^{th} 2 W were seen at Brighton Marina (IJW) and 1 W at Climping (OM) and on the 11^{th} there was 1 W at Brighton Marina (IJW). The timing of observations on 6 Nov suggests that only one individual was likely to have been seen at both Birling Gap and Ovingdean and that all those at Selsey Bill were different again. Assuming that those on the 8^{th} were also different, then a total of 22 was recorded making it the best year for the species since 2000, when 28 were seen. Sixty-seven have been recorded since the start of 2000, the records having fallen in January (2), July, August (2), September (9), October (29), November (23) and December. [RJF]

0046. MANX SHEARWATER Puffinus puffinus

Fairly common spring to autumn passage migrant. Amber listed species of medium conservation concern.

The minimum total of 116 birds continued the recent trend for low numbers of this species. The monthly totals at the principal seawatching sites were as follows:

	Α	pr	Μ	May		Jun		ul	A	ıg	Se	ep	0	ct
	Е	W	Е	W	Е	W	Е	W	Е	W	Е	W	Е	W
County total	2	1	3	8	2	4	2	8		1		1		1
Selsey Bill	3	5	1	20	1	14	1	27	1	-	-	-	-	-
Worthing	-	1	-	6	-	-	-	-	-	-	-	-	-	-
Brighton Marina	-	11	-	4	-	-	-	-	-	-	-	-	-	-
Splash Point (Seaford)	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Birling Gap	-	-	5	3	9	-	1	-	-	-	-	-	-	-
Other Sites	-	-	1	3	-	-	-	-	-	-	1	-	1	-

Excluded from the table were two winter sightings, both of single birds flying east at Splash Point (Seaford) on 7 Jan (DL) and 12 Jan (BRG). The first spring record was of 11 W at Brighton Marina on 9 Apr but thereafter few records were received for this site which may account for at least some of the significant reduction in monthly totals. The rest of the spring was uneventful with the highest count being just 7 W at Selsey Bill on 4 May.

Summer records were dominated by two double figure counts of 10 W at Selsey Bill on 16 Jun and 1 E and 27 W at the same site on 5 Jul. Thereafter, there were just four records; 1 E at Selsey Bill on 13 Aug, 1 E at Telscombe Cliffs on 4 Sep, one picked up (alive) by the RSPCA on Hastings beach on 1 Oct and, the last record of the year, 1 E at Telscombe Cliffs on 30 Oct. [TJW]

0046.01 BALEARIC SHEARWATER

Puffinus mauretanicus

Very scarce spring to autumn visitor.

This was a good year for this species with 12-13 seen after an average of less than three in the last three years.

A small influx at the end of July produced two birds which lingered briefly at Telscombe Cliffs on the 20^{th} (DHH), 1 W at Saltdean on the 23^{rd} (IJW), 2 W at Brighton Marina on the 25^{th} (IJW) and 1 W at Saltdean on the 26^{th} (ADW, IJW). On the 30^{th} there was 1 W at Brighton Marina (IJW) and another west at Southwick (ADW, IJW), with perhaps the same bird passing Shoreham Hbr the next day (IJW).

In August, one flew west at Birling Gap (Beachy Head) on the 13th (DC, JFC), one was off Selsey Bill on the 14th (RAI, DRM, DIS) and there was 1 W at Brighton Marina on 23 Aug. Finally, a late bird flew east at Birling Gap on 30 Oct (RHC). [TJW]

0052. **EUROPEAN STORM-PETREL** Hydrobates pelagicus Very scarce visitor, mainly in mid-summer and after autumn gales. Amber listed species of medium conservation concern.

All records were from Selsey Bill with at least two offshore on 29 May (JA *et al*), two offshore on 5 Jun (JA *et al*) and 1 W on 30 Jun (TJE, BFF, DIS). Twenty-four have been reported since 2000, when eight were recorded in late October/early November gales. Since then all sightings have been from Selsey Bill in spring or summer (two in August 2001, seven during mid-May/mid-June 2002 and 2 in late June 2004), a pattern to which these records conform. [RJF]

0055. LEACH'S STORM-PETREL

Oceanodroma leucorhoa

Rare vagrant.

One past Brighton Marina on 30 Oct was followed by 8 W there on 3 Nov, 6 W on the 8th and 1 W on the 11th (all IJW). Elsewhere in early November one picked up exhausted in Peacehaven on the 3rd died in care on the 5th (RM) while there were 4 W at Ovingdean on the 6th (ITB, CWM) and 2 W at Climping on the 8th (BFF, OM, DIS et al).

These were the first records in the county since 2002 and even if those at Climping on the 8th had been seen earlier at Brighton Marina (where times were not reported) the total of at least 21 has only been surpassed in 1989, when nearly 40 were recorded at Christmas. That all records were from between Ovingdean and Climping was a disappointment to observers watching from elsewhere during this period but demonstrates that one does not have to be at a prominent headland to have a successful seawatch. Like these, most records have been during October to December, following west or southwest gales. [RJF]

0071. GANNET

Morus bassanus

Common passage migrant and non-breeding summer visitor; once scarce but now increasingly numerous in winter. Amber listed species of medium conservation concern.

	Jan -	- Feb	Mar -	May	Jun	- Jul	Aug	- Sep	Oct	- Nov
	Е	W	E	W	Е	W	Е	W	Е	W
Selsey Bill	332	334	599	270	443	637	165	2606	15	1372
Worthing	266	382	601	209	19	34	55	880	22	462
Telscombe Cliffs	723	494	992	155	353	182	715	1126	55	112
Splash Point (Seaford)	946	494	2027	152	-	-	-	-	-	-
Birling Gap	335	0	2417	9	77	28	60	-	-	-

Movements at the principal seawatching sites were as follows:

Sightings at Brighton Marina were, unfortunately, less regularly reported and detailed than usual but the highest count in the first winter period of 1150 W was made there on 2 Jan. Other notable counts were 250 W at Selsey Bill on 28 Jan, 335 E at Birling Gap (Beachy Head) on 5 Feb and 550 E at Brighton Marina on 22 Feb. The regular rooftop bird returned to spend its eighth year, albeit intermittently, in Kemp Town (Brighton).

In the spring, there were 23 days when counts of 100 or more were made. The best of these were 500 E at Birling Gap on 18 Apr, 360 E at Brighton Marina on 12 May and 450 E at Birling Gap on 19 May.

June and July were quiet; the only notable event was a count of 500 feeding in Rye Bay on 30 Jul, which had increased to c.1000 by 20 Aug, but similar counts were not recorded elsewhere. Numbers remained low until the end of October when 1830 were counted flying west at Selsey Bill with 576 W on the same day at Worthing. In November, 1000 W passed Selsey Bill on the 8th but there were no other counts of over 100. Impressive numbers built up off Worthing at the end of the year with 2500 counted, fishing just offshore, on both 26 and 27 Dec to the bemusement and fascination of the general public. This number is probably a county record.

During the year the RSPCA recorded four birds found in fishing nets or lines in East Sussex. [TJW]

0072. GREAT CORMORANT

Phalacrocorax carbo

Fairly common but localised resident and common winter visitor. Amber listed species of medium conservation concern.

	Jan	Feb	May	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	689	778	687	385	312	450	605	780	629	789	583	607
Chichester Hbr	27	29	11	10	16	17	59	29	67	46	82	59
Pagham Hbr	171	207	185	172	98	114	146	197	183	271	58	49
Chichester GP	50	54	25	nc	nc	nc	nc	nc	50	59	76	163
Climping	3	39	17	nc	nc	4	2	4	4	13	2	5
Ardingly Res	34	75	45	nc	nc	nc	nc	nc	28	60	nc	85
Weir Wood Res	44	70	3	1	•	2	nc	9	6	47	54	nc
Barcombe Res	10	8	18	1	5	2	2	9	8	15	22	48
Glynde Brooks	69	3	7	1	1	nc	nc	nc	nc	-	1	-
Bewl Water	20	30	16	nc	nc	nc	nc	21	34	12	32	25
Rye Bay	86	91	209	151	182	301	381	486	169	165	47	33

The monthly WeBS' counts at the principal sites were as follows:

The rapid increase in breeding numbers has resulted in more uniform totals throughout the seasons than ten years ago when there was a pronounced autumn/ winter maximum. At Rye Hbr, numbers exceeded the 1% national threshold level of 230 from June to August, and probably from March to May as well because nest counts indicated the presence of a record 140 pairs. Numbers at Pagham Hbr exceeded the 1% national threshold level in October and were not far short in six other months from January to April and August to September.

At the Castle Water (Rye Hbr LNR) colony, the volume of nutrients discharged has caused serious ecological problems so, to limit the numbers breeding, some of the nesting trees were cut down in November.

The breeding colony in dead trees on a small island in a lake in Iford Brooks (Lewes) also grew to record numbers. The first four nests were noted on 18 Mar and by May there were between 14 and 18, some with up to three young. On 7 Jun, 42 full grown birds of various ages were present on the crowded island with four still sitting on eggs.

The two dominant daytime loafing roosts were, as usual, at Rye Hbr LNR and Pagham Hbr. At both locations a number of different roost sites were used. Other loafing roosts near the coast with sizeable numbers were Thorney Island, with a maximum of 50 on 18 Sep, and Pett Level, with 66 on 4 Jun.

Inland numbers reached a peak in early winter. The three large northern reservoirs (Weir Wood, Ardingly and Bewl) totalled in excess of 200 birds in December. There were also considerable numbers at many smaller water bodies, including the increasing number of farm reservoirs, and also 18 at Forest Mere (Liphook) on 22 Oct and 22 at Warnham LNR on 4 Dec.

In East Sussex the major nocturnal roosts were predictably within Rye Hbr LNR. However, there was also expansion elsewhere in roosts utilising electricity transmission lines crossing river floodplains, e.g. 75 at Rodmell Brooks (near the Iford breeding colony) on 14 Sep and 40 at Shinewater Lake (Eastbourne) on 15 Dec.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chichester GP	173	128	111	47	45	62	nc	Nc	81	162	132	147
South Stoke	136	165	113	3	15	nc						
Steyning Levels	nc	nc	Nc	nc	18	nc	60	Nc	106	120	143	123

Counts for the traditional nocturnal roosts in West Sussex were:

The Chichester GP roost became firmly established in trees and bushes surrounding New Lake and spilled over to Runcton Lake. In the second half of the year there were no counts at the South Stoke roost in trees overhanging the R Arun because of closure of an access bridge but reports of large flocks en route to and from this roost confirmed the normal autumn build up. The Steyning Levels roost by the R Adur utilised electricity lines as usual but there was also a single report of 56 birds roosting 2 km away at Wiston Pond at dusk on 23 Dec. Nearly all the movements into these nocturnal roosts seemed to originate from coastal areas, which suggests there are probably some unreported nocturnal roosts further inland serving water bodies to the north, including the major reservoirs.

At 7.00 am on 19 Aug at least 140 birds were feeding on whitebait just offshore in Rye Bay and this increased to 230 the next day. Apart from this, the only other notable offshore activities reported were of 50 birds seen resting offshore at Climping on 3 Jan, a highest daily count off Worthing of 30 in a feeding frenzy on 26 Jan, whilst 42 was the top daily count off Selsey Bill on 29 Dec. [RK]

0080. SHAG

Phalacrocorax aristotelis

Fairly common winter visitor and passage migrant. Amber listed species of medium conservation concern.

It was an excellent year for this species with nearly double the number of observations from last year's high. The increase in annual totals is apparent from the following table:

Year	1998	1999	2000	2001	2002	2003	2004	2005
Total	55	79	151	161	194	102	251	482

The approximate monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	54	28	60	49	17	-	5	121	88	100	18	42
Selsey Bill	19	4	13	11	10	-	4	116	74	96	11	30

Most (292) of the 482 reports were of single birds seen whilst seawatching at Selsey Bill. Some larger numbers were seen there in August, including 35 E on the 24th (in 6 hr), 15 E on the 27th (in $3\frac{3}{4}$ hr) and 65 E (in $3\frac{1}{2}$ hr) on the 28th. However, as these birds were not seen further east it is possible they were merely moving to feeding grounds and that the number for the month should be a maximum of 65. Relatively high numbers were also seen in September; in October 54 were seen in 3 hr on the 20th and in December 22 in $5\frac{1}{2}$ hr on the 3^{rd} .

Observers at Splash Point (Seaford) reported 86 birds between January and May with a highest count of five on 31 Jan and 20 Mar. Elsewhere there were occasional reports from Pagham Hbr, Goring and Worthing beaches, Brighton Marina, Telscombe Cliffs, Newhaven Hbr, Cuckmere Haven, Beachy Head and Eastbourne. The only reports from east of Eastbourne came from Rye Hbr where two birds were seen on 1 May and a singleton on 19 Aug. The only inland record was at Ivy Lake (Chichester GP) on 2 Dec. [JPP]

0095. EURASIAN BITTERN

Botaurus stellaris

Scarce winter visitor; rare outside winter months. Red listed species of high conservation concern.

2004: Due to an unfortunate electronic problem which affected the transmission and conversion of records between systems, some records of birds seen in Rye Hbr were incorrectly assigned to the Brede Valley. All references to birds seen in the Brede Valley should, therefore, be changed to Rye Hbr.

	Jan	Feb	Mar	Jul	Aug	Sep	Oct	Nov	Dec
County total	11	10	7	1	1	-	3	2	4
Burton MP	-	5	3	-	-	-	-	-	-
Pett Level	2	1	-	-	1	-	1	-	1
Rye Hbr	6	3	3	1	-	-	1	2	3
Other	3	1	1	-	-	-	1	-	-

The corrected approximate monthly totals are as follows:

2005: This was not quite such a good year as 2004 with 105 records representing as few as 13 birds, allowing for probable duplication.

The approximate monthly totals were as follows:

Bitterns were seen at Rye Hbr LNR on 19 days in January and intermittently until 12 Mar, usually as one or two birds except on 13 Jan when four were seen in the early morning, three were seen on 1 and 15 Feb and five on the 5th. One or two birds were also seen at nearby Pett Level on several dates between 13 Jan and 16 Mar. In the west, single birds were noted at Burton MP on several dates between 3 Jan and 22 Mar.

The next sighting was of a single bird at the Rye Hbr LNR on 4 Jul. In October there were reports of single birds at Pett Level on the 9th, Warnham LNR on the 11th (the third record for this site), Pannel Valley NR on the 13th, Chichester GP on the 16th and at Rye Hbr LNR from 19 Oct with two there on 5 Nov. A single bird spent the day at Pulborough Brooks on 4 Dec and one was seen in the Brede Valley on 27 Dec. [JPP]

0108. SQUACCO HERON

Very rare vagrant.

1951: One seen in trees adjoining Manor Road (Brighton) from 1300 hr until dusk on 29 Apr (*British Birds* 45:293) has been re-examined by *BBRC* as part of a review of 1950-57 records and is considered to be inadequately documented (Wallace, Bradshaw & Rogers 2006, *British Birds* 99:460-464). In particular the described behaviour is most unlikely and more consistent with a Night Heron. There are now just five acceptable county records, the first was shot between Henfield and Steyning in September 1934 and the remainder were all in mid-June: at Mannings Heath in 1982, Pagham Hbr in 1995, Bodle Street (Pevensey) in 1997 and Pett Level in 2000. The last of these, on the 10th, becomes the county's earliest record. [RJF]

0111. CATTLE EGRET

Rare vagrant.

One was present at Southease (R Ouse) from 22-25 May (LB *et al*) while another near Chalder Fm (Pagham Hbr) from 16 Dec remained into 2006 (RC, IML, OM *et al*). Both were widely seen and have been accepted by *BBRC*. They take the county total to 13 and are the first since 2001, when one was seen near Greatham during January-March. The Pagham individual is the first for December, although two presumed escapes have been recorded in that month - an Asian race *B. i. coromandus* individual near Eartham in 1995 and, perhaps more controversially, one at Ford in 1964 that was picked up in a weak condition. Previous records have been in every month from January to May. [RJF]

0119. LITTLE EGRET

Formerly rare, but now breeds and is a fairly common autumn and winter visitor. Amber listed species of medium conservation concern.

The monthly *WeBS*' counts at the principal sites were as follows:

Jan Feb Mar Oct Nov Dec County total 6 8 5 4 3 2 Burton MP 1 1 1 ---Pett Level 1 1 1 1 1 -2 Rve Hbr 4 5 3 1 1 2 Other 1 1 _ --

Ardeola ralloides

Bulbulcus ibis

Egretta garzetta

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	62	94	59	46	47	49	135	132	341	309	256	81
Chichester Hbr	22	51	29	33	32	29	72	66	163	206	174	24
Pagham Hbr	2	8	4	9	12	17	51	61	94	71	29	10
Chichester GP	1	1	4	nc	nc	nc	nc	nc	2	2	1	5
Waltham Brooks	9	1	-	-	-	-	-	-	-	-	-	-
Pulborough Brooks	-	-	2	-	-	-	-	-	-	-	-	2
Widewater (Lancing)	2	1	2	3	1	2	1	1	1	1	1	5
Upper Adue Levels	2	2	3	nc	nc	nc	nc	nc	-	1	-	3
Ifoprd Brooks	3	9	•	nc	nc	nc	nc	nc	3	2	2	2
Cuckmere Haven	6	5	3	nc	nc	nc	nc	nc	30	5	19	10
Pevensey Levels	4	7	4	1	2	1	3	1	•	-	-	1
Rye Hbr	6	5	3	-	-		2	-	31	3	23	14

The number of birds in the county has increased from a minimum of 236 in 1995 to 341, based on the *WeBS*' counts for September.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chichester Hbr	23	51	29	33	32	29	72	87	163	206	174	24
Pagham Hbr	3	8	10	9	12	28	51	115	94	71	29	25
Cuckmere Valley	6	5	3	11	2	4	16	24	30	3	19	10
Rve Hbr	36	28	18	15	9	6	26	51	56	44	44	30

The monthly maxima at the four main sites were as follows:

In most months numbers were similar to last year's with the usual large increase in the autumn but with peak numbers in September to November higher than in 2004. Small numbers of birds were seen in other suitable wetlands throughout the county but were rarely in double figures except at the R Adur at Shoreham where the maximum count was 16 on 4 Sep. The only other numbers of interest were nine at Waltham Brooks on 17 Jan and eight seen at Beachy Head on 22 Oct.

Breeding records were received from six sites. Four of these were from West Sussex. At site A there were at least eight nests but there were no details of breeding success. At site B there were three nests and downy young were seen in two on 6 Jun. At site C there were three nests with two very young chicks in one nest and one in another on 3 Jun. At site D there were four, possibly six, occupied nests on 13 Jun. In East Sussex breeding was considered probable at site E and at site F there was one occupied nest at a new site on 15 May.

Despite the peaking of numbers in the autumn the build up was barely noticeable in the field; most records of autumn movements were of only 1-3 birds with a maximum of 8 W at Telscombe Cliffs on 20 Aug.

Roosting was recorded at three locations: Chichester, Pagham and Rye Harbours. The maximum monthly numbers were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chichester Hbr	18	-	21	9	-	10	5	45	87	-	134	40
Pagham Hbr	-	-	-	-	-	-	-	115	26	66	-	25
Rye Hbr	36	23	18	15	-	-	32	51	47	44	44	30

The obvious disparity between the roost numbers in the autumn and the monthly maxima in the previous table suggests that not all roosts were recorded. [JPP]

0121. **GREAT WHITE EGRET**

Rare vagrant.

One seen at Pett Level on 14 Oct (ADW, IJW) has been accepted by *BBRC* and takes the county total to 19. All but two of these have been since 1996 making it seem a long time ago that this species was a real rarity. It is therefore no surprise that occurrences from 2006 will no longer be considered by *BBRC*, although *SOSRC*, to whom the task of assessment will now fall, will endeavour to maintain standards and fully documented records will continue to be required for acceptance. May and December remain the only months in which it has not been recorded in the county. [RJF]

0122. GREY HERON

Ardea cinerea

Fairly common resident.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	95	123	113	41	40	56	67	72	133	128	121	96
Chichester Hbr	13	26	16	2	4	7	11	9	17	25	31	10
Pagham Hbr	5	11	6	3	3	20	16	12	13	16	7	12
Chichester GP	3	9	4	nc	nc	nc	nc	nc	3	7	4	8
Amberley Wild Brooks	4	2	2	7	3	4	6	4	6	-	9	8
Pulborough Brooks	1	2	4	6	2	9	9	8	10	2	7	1
Warnham LNR	2	5	6	nc	nc	nc	nc	nc	6	2	-	1
Lower Adur Estuary	8	-	2	nc	nc	nc	nc	nc	6	2	9	6
Henfield Brooks	2	7	3	nc	nc	nc	nc	nc	-	2	2	2
Ardingly Res	5	6	6	nc	nc	nc	nc	nc	6	8	nc	7
Weir Wood Res	1	10	21	6	12	2	nc	7	4	4	6	nc
Glynde Brooks	5	-	4	2	2	nc	nc	nc	nc	3	3	1
Cuckmere Haven	6	-	2	nc	nc	nc	nc	nc	4	4	7	2
Pevensey Levels	3	3	3	2	3	3	3	6	9	5	3	5
Bewl Water	4	6	4	nc	nc	nc	nc	11	7	12	10	3
Rye Bay	14	20	6	9	4	5	7	5	6	13	4	11

The monthly WeBS' counts at the principal sites were as follows:

During the breeding season 263 nests were counted at 25 heronries (246 nests in 21 heronries in 2004). Counts for individual heronries, listed from west to east, were as follows:

Westbourne (last counted 1999) 2; Forest Mere 1; Fishbourne 10; Pagham owl copse 6; Church Norton 3; Flansham 11; Warningcamp 2; Parham 29; Knepp 13; Warnham 8; Henfield 21; Ardingly 14; Weir Wood Res 10; Rodmell 3; Firle 17; Charleston 17; Hadlow Down 11; Eridge 15; Hampden Park (Eastbourne) 1; Glynleigh 14; Wartling, 6; Burwash 6; Pebsham 4; Winchelsea 9; Leasam 30.

The single nest at Forest Mere is a new site, as is the nest at Hampden Park. The small heronry at Iford has moved south to Rodmell. Leasam Wood is difficult to count accurately due to the vegetation.

During the rest of the year single birds and small groups were seen feeding or loafing in suitable habitat throughout the county. From ten to 13 were counted at Castle Water (Rye Hbr LNR) at both ends of the year. Twenty were at Hope Gap on 15 Jan and 11 at Bewl Water on 21 Aug. [ABW]

0134. WHITE STORK

Rare vagrant, mainly in spring.

An adult drifted northeast over Hailsham on 28 Apr (CWG) with it or another adult flew northeast over Bodiam on 5 May (NH) and presumably the same over Pett Level on 6 May (KH). On 9 May an adult flew slowly southeast over Stanley Common at 0830 hr (KB-T) with the same, or more likely another, high northwest over lower Cuckmere Valley at 1215 hr (MS-H). One drifted south over South Bersted on 6 Jun (JS), one was seen in a field at Wartling on 20 Jun (RS) and one (presumably the same) was roosting on a telegraph pole near Ringmer on 22 Jun (PE), while it or another west over Donnington (Chichester) on 24 Jun (SA). Finally, an adult with evenly moulting primaries seen flying first south then, two hours later, north over Hampden Park (Eastbourne) on 21 Jul and southeast over Lower Willingdon on 3 Aug (both RKH) was most likely the individual photographed at Downash (Pevensey Levels) where it was reported to have been present for six weeks to late Aug (JLu).

It is impossible to be sure how many individuals were involved with these records but as they are prone to wander they are certain to involve some duplication. It is also often impossible to be certain of the provenance of records of this species. However, all of these conform to established patterns of natural occurrence and none appeared to exhibit behaviour or plumage features suggesting captive origin. Assuming that those at Hailsham-Bodiam-Pett and Wartling-Ringmer-Donnington were the same then the total for the year is six. This is the highest number recorded in the county in a year, although a flock of five was recorded in 1972 (over Polegate on 25 April), and takes to 60 the total recorded in the county since 1960. Of these, 32 have been in the second half of April or in May. [RJF]

0144. SPOONBILL

Platalea leucorodia

Very scarce visitor, most frequent in spring and autumn. Amber listed species of medium conservation concern.

This was a relatively good year for Spoonbill sightings, even though the total of at least 17, possibly 22, birds was down on last year's 27.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	•	1	1	2	1	•	3	4	•	4	8	1

The minimum monthly totals were as follows:

Spring sightings were of single birds in Pagham Hbr on 28 Feb, 5 Mar, 30 to 31 Mar and an immature bird on 14 May. A single bird was seen flying east at Selsey Bill on 21 Mar. An observer at Widewater (Lancing) was watching an immature bird on 8 Apr while another flew over other people watching the Great Spotted Cuckoo at nearby Brooklands (Worthing).

In the second half of the year two birds were seen arriving at Ternery Pool (Rye Hbr LNR) on 7 Jul and a single bird was seen at Cuckmere Haven on the 19th. In August, there was an adult at Pagham Hbr on the 3rd and a juvenile on the 6th, one flew east over Seven Sisters Country Park on the 17th and an adult flew past Seaford Head on the 22nd. Later in the year, one flew over Rye Hbr LNR on 24 Oct and three juveniles roosted on South Stakes Island (Chichester Hbr) on the 31st. There were two immature birds in Pagham Hbr from 31 Oct until 14 Nov but six on 5 Nov and seven on the 9th. [JPP]

59

0231. HONEY-BUZZARD

Very scarce breeding summer visitor and passage migrant. Amber listed species of medium conservation concern.

Records of all known breeding pairs have again been provided by the group who monitor Honey Buzzards in the southeast, which comprises both SOS members and nonmembers working under licence. There were four successful pairs, raising a total of seven young. A fifth pair, which had bred successfully the previous two years, failed at the egg stage and the nest was abandoned. Failure at the egg stage may involve egg collectors and it is for this on-going threat that it remains sensible to withhold details regarding nesting localities. At a sixth location, where previously breeding had been regular, there was a number of sightings but no evidence of a nesting pair.

There were two different males seen at Hollingdean (Brighton) on 30 April (IJW). The date is exceptionally early and sets a new record for the county. The behaviour of the second male was very intriguing. It was first sighted coming from the north and was clearly heading south, apparently out to sea and back across the English Channel! If this was so, then perhaps it was on overshoot returning whence it came. Another male, heading north, was recorded at Cuckmere Haven on 1 May (ITB). Yet another male was seen at very close quarters at Thorney Island on 27 May, the first-ever spring record for the warden (CBC). There was a male coming off the sea at Brighton Marina on 6 Jun (IJW) and a female at Hollingdean on the rather unusual date of 24 Jun (IJW).

At one well-watched locality (involving the aforementioned fifth pair) there were at least five birds present on 31 May with a minimum of three different birds present in the area throughout the summer (BFF, DIS *et al*).

During the autumn, 12 passage birds were recorded between 31 Jul and 19 Sep. An adult female was a nice garden tick at Edburton on 31 Jul (TJW). A few weeks later other migrants were seen with a distant view of a bird at West Fields (Selsey) on 30 Aug (BFF, DIS) and another at Pannel Valley NR on 31 Aug. There was a good passage at Beachy Head with two dark-phase juveniles seen at close range on 31 Aug and on 1 Sep there were excellent views of a pale-phase juvenile in company with an intermediate phase juvenile (JFC). On the latter date there was also a more distant bird, which could neither be sexed nor aged (JFC). There were dark phase juveniles at Hollingdean (Brighton) on 3 Sep and Saltdean (Brighton) on 9 Sep (IJW). On 11 Sep there was a dark phase juvenile at Littlehampton GC (RJLK) and finally another dark morph juvenile at Sheepcote Valley (Brighton) on 19 Sep (IJW). [MEK]

0238. BLACK KITE

Rare vagrant.

One was seen at Glynleigh (Hailsham) on 27 Apr (CJH, RKH) and presumably the same bird at Boreham Bridge (Pevensey Levels) on 1 May (RES, SS *et al*). These records have been accepted by *BBRC* and, assuming the same bird was involved, it was the 11^{th} to be seen in the county since 1990 and the 24^{th} in total. Six individuals have arrived in April (one on the 12^{th} and the rest from the 26^{th}), 12 in May, two in June, two in July, one in August (on the 3^{rd}) and, exceptionally, one in November making these sightings typical.

Occurrences from 2006 will no longer be considered by *BBRC*, although *SOSRC*, to whom the task of assessment will now fall, will endeavour to maintain their high standards for this species, which has one of the lowest *BBRC* acceptance rates of all, and fully documented records will continue to be required. [RJF]

Milvus migrans

Pernis apivorus

0239. **RED KITE**

Milvus milvus

Very scarce breeding resident and scarce visitor. Amber listed species of medium conservation concern.

Last year's breeding pair used the same nest and had another successful season, raising three young. The juveniles were fitted with labelled wing tags (B1, B2 and B3) and the 2005 Chilterns' colour scheme adopted, with yellow on the right wing and two-tone orange/yellow on the left. All three juveniles were fitted with radio tags.

There was a probable annual total of 22 different birds within the home range of the resident pair (MEK, CBC, CL). In addition to the pair and their five offspring, there were 11 adults and four second-year birds. Just three of the visiting birds were tagged, two with yellow tags on both wings (Chilterns, 2004) with the third undetermined. A second pair of adult kites visited the area on 19 and 20 March but showed no signs of laying claim to a territory and were not seen again. On 10 July there were eight kites present at the breeding site, including the adult pair, another adult, all three 2005 juveniles and interestingly both 2004 offspring, Sussex 'Y' and 'Z' (the former on radio contact only).

Sussex 'Z' had remained faithful to the same night roost in the home range until mid-March but then for the first time was detected in the Chilterns on 19 Mar. It was back in the county on 28 Mar and on 10 Jul but on no other known dates. It was, however, recorded in the Chilterns on many occasions throughout the summer until 19 Jul and then on 12 Nov. There had been no contact with Sussex 'Y' since 30 Oct 2004 and so it was a joyous moment when there was both visual and radio contact on 23 Jan. There were then several sightings over the following two months but nothing after 25 Mar until the isolated date of 10 Jul. In the Chilterns, it was detected on many occasions in July and early August but then nothing more until an isolated record on 13 Nov. Since Red Kites are capable of breeding in their 3rd calendar year it is hoped that both 'Y' and 'Z' will settle in their natal area next year.

Away from the West Sussex downland it was yet another record-breaking year with reports from well over 40 different localities, involving as many as 60-70 different birds. As in 2004, the numbers were very evenly split between the two halves of the county.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Home range	6	5	10	2	2	2	8	2	3	8	4	5
Elsewhere	3	1	6	5	30	18	3	2	3	2	3	0

The monthly totals were as follows;

The table shows the huge increase that has occurred within the last few years. Recent evidence suggests that, as their home range becomes saturated, the Chilterns breeding population is dispersing in ever increasing numbers and prospecting other areas. With so many adults amongst these prospecting birds it surely cannot be too long before Sussex has more than a solitary breeding pair.

During the first four months of the year there were 15 records of singletons from a variety of sites across the whole of the county. There was then a big influx in May and June with 48 birds recorded outside the home range. These were all singletons except for two at Arlington Res on 15 May, two low over the beach at Eastbourne and two at Pagham Hbr on 30 May, two at Woods Mill (Henfield) on 31 May and three following a harvester (cutting a silage crop) at Steyning on 8 Jun, with probably the same three birds being seen the next day at Hampden Park (Eastbourne).

Numbers dropped in the remaining six months of the year with only another 13 birds being seen. Again these were all singletons apart from two at Broadford Bridge in late July and two at Weir Wood Res on 1 Nov. The final record was a singleton at Pett Level on 25 Nov. [MEK]

Circus aeruginosus

0260. MARSH HARRIER

Scarce spring and autumn passage migrant and very scarce winter visitor; bred for the first time in 2004. Amber listed species of medium conservation concern.

There were perhaps 88 individuals seen during the year, a similar number to the previous year. Of these, only ten definite males were reported.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	6	3	5	13	9	3	4	16	44	9	4	3
Chichester Hbr	-	-	1	1	1	-	-	-	1	1	-	-
Pagham Hbr	-	•	1	2	1	-	2	3	3	1	-	-
Pulborough Brooks	•	I	I	1	-	1	-	1	1	1	•	1
Brighton	-	-	-	1	-	-	-	3*	12*	-	-	-
Seaford	-	-	-	1	-	-	-	-	1	1	-	-
Beachy Head	-	-	-	3	-	-	-	2	18	-	-	-
Pannel Valley	2	1	1	3	2	1	1	1	4	2	1	2
Rye Hbr	2	1	2	1	1	•	1	1	2	1	1	1
Scotney Court GP	2	1	-	-	-	-	-	-	1	2	-	-
Other sites	-	-	-	-	4	1	-	5	1	-	2	-

The approximate monthly totals were as follows:

* There was an autumn total of 15 at this site but at least 3 were recorded in August.

The table shows the usual migration peaks in April - May and again in August – October. The September total was high but not exceptional.

More birds than usual were recorded in January with an absolute minimum of three. On the coast in spring, one flew west at Brighton on 17 Apr, one was seen to fly in off the sea at Splash Point (Seaford) at 1020 hr on 24 Apr and one flew north at Worthing Beach on 7 May.

It is encouraging that a female was recorded throughout May and June at one reed-bed site. However, there was no confirmed breeding in the county this year. A male flying over Chilgrove on 17 Jun was an interesting summer record.

In autumn, there was a notable passage at Beachy Head on 2 Sep when there were eight individuals seen including a juvenile flying south out to sea at 0610 hr followed by another at 0800 hr, and five circling together over the Head at 1600 hr. The following day, at the same site, there were seven including four going south out to sea at 0625 hr and one south at 0655 hr. [SHL]

0261. HEN HARRIER

Circus cyaneus

Scarce winter visitor and passage migrant. Red listed species of high conservation concern.

It was a good year again for this species. More than 200 records were received but, as usual, they referred to a small number of localities. The table below shows the principal areas involved and now includes Lewes Brooks, as birds are being seen regularly and may be roosting there. The probable monthly minima for each area are summarised as follows:

	Jan	Feb	Mar	Apr	Aug	Sep	Oct	Nov	Dec
County total	18	10	10	7	1	4	7	13	15
NW Sussex Commons	1	1	1	1	-	-	1	3	2
Chichester & Pagham Hbrs	1	•	•	1	-	•	1	1	1
Arun Valley	4	2	2	1	-	1	1	1	2
W Sussex Downland	3	3	1	1	-	-	2	2	3
Lewes Brooks	1	•	2	1	-	•	1	2	1
E Sussex Downland	3	-	1	-	1	-	-	-	1
Ashdown Forest	2	2	•	•	-	-	1	1	-
Pevensey Levels	-	-	1	-	-	2	-	1	2
Rye Bay	3	2	1	1	-	-	2	1	1
Other sites	-	-	1	1	-	1	-	1	2

A large number of records was received for the Arun Valley for January and February but, because of the size of the area, it was difficult to deduce exactly how many birds were present in that period but at least one male and one female were involved. At another site in West Sussex, at least one male and two ringtails were present during January and February. During the first quarter of the year, numbers in the Rye Bay area were significantly down compared with what may have been exceptional numbers in the same period last year. However, it may simply be that less observation took place in the area. At a site in this area, a male and a female were seen on 6 Jan, with a ringtail present on 22 Jan and a male on 16 Feb. A ringtail was seen at another location in the east on four days in January, four days in February and almost daily in March until the 18th.

There were seven records of single birds in April. On the 2^{nd} a bird was observed from a garden in Goring, on the 3^{rd} a female was hunting over fields on Bignor Hill, on the 5^{th} there was one at Amberley and on the 7^{th} another at Lewes Brooks. An adult male was at Rye Hbr LNR on the 13^{th} , there was a ringtail at Linchmere Common on the 20^{th} and the final bird for the spring period was a ringtail hunting over fields for 25 minutes on Pilsey Island on the 22^{nd} .

The earliest autumn record was of a ringtail hunting over fields near Beachy Head on 31 Aug, which may have been the same bird that was seen near Alfriston on 4 Sep. There were two other September records, one at Pevensey on the 18^{th} and a ringtail at Pulborough Brooks on the 20^{th} .

There were 18 records for October. Six of these referred to a female with wing tags that was seen regularly in the Findon/Cissbury Ring/Steyning area from 16 Oct to at least 21 Nov. The tags showed that she was hatched in 2002 on the RSPB reserve at Geltsdale, which covers a vast area of the North Pennines and is one of only two regular nesting sites of Hen Harriers in England.

In the final two months of the year, birds continued to arrive and occupy the usual winter roosts. In Ashdown Forest, members of the Ashdown Forest Bird Group, with other observers, have been monitoring the roost there on a regular basis for several years. In each year, from 2000–2003, the size of the roost gradually increased during the autumn, usually reaching a peak in December/January when at least four birds would be present. However, the number of birds using the Ashdown Forest winter roost has continued the decline first noted in the autumn of 2003, as shown in the following table:

Year	Jan	Feb	Mar	Apr	Aug	Sep	Oct	Nov	Dec
2000	4	2	-	1	-	-	-	-	3
2001	3	4	-	-	-	-	2	3	3
2002	4	3	2	-	-	-	2	3	6-8
2003	4	3	2	2	-	-	1	2	3
2004	2	2	1	-	-	-	2	-	-
2005	2	2	-	-	-	-	1	1	-

[PJE]

0263. MONTAGU'S HARRIER Circus pygargus Very scarce spring and autumn visitor; last bred successfully in 1962. Amber listed species of medium conservation concern.

There were, again, only three records for the year and all occurred in May. On the 9^{th} a first summer female was discovered quartering Thorney Deeps (Chichester Hbr). The bird remained in the area for a week until, on 15 May, it spiralled up gaining great height and headed off northwest. It was seen each day during its stay and was watched for many hours with views, from a hide, down to 20 yards (CBC).

On 21 May a female flew from the sea into Pagham Hbr and was eventually lost to sight, gliding north (ARK). On 31 May two observers at North Marden located a ringtail and watched it for a prolonged period as, passing overhead, it flew northwest whilst being mobbed by a pair of Common Buzzard (BFF, DIS). [PJE]

0267. GOSHAWK

Accipiter gentilis

Rare visitor, mainly in winter; has bred and now appears to be resident in the county.

It is likely that a good number of observers were privileged to see this species in a location in the west of the county where birds have now been showing for several years. However, only a small number of records, relating to what was possibly a pair of birds, were received. The first was of daily sightings between 26-29 Feb (which included views of a bird chasing a 'ringtail' harrier) and, on two occasions, a bird perched in the same tree (JAW). The other two records from this area were both in March; on the 12th a probable male seen passing over the treetops in slow gliding flight 'seemed to dwarf the Wood Pigeons as they scattered in terror' (OM) and, on the 24th, a probable female was watched as it patrolled back and forth over woodland (BFF, DIS).

This case illustrates the need for as many observers as possible, who see birds such as this, to submit detailed records. Had more authenticated evidence been available for this location, definitive confirmation of whether there was one or more single birds, or a pair, may have been possible.

On 8 Jun, at a site in the east of the county, an observer, who was undertaking bird survey work, watched for more than ten minutes as a male was joined in flight by a female and occasional calling was heard (THS). [PJE]

0269. SPARROWHAWK

Common resident and passage migrant

From the 665 records received, of which nearly 80% were of single birds, approximately 65 territories were identified (see Plate 2). The only evidence of possible spring passage was of a single bird seen flying north 'from a long way out at sea' at Widewater (Lancing) on 26 Feb and three birds seen flying north over central Brighton on 28 Mar.

The earliest evidence of breeding was a pair displaying at Luth Fields (Wisborough Green) on 20 Feb, approximately one month ahead of two pairs seen displaying at Philliswood (North Marden) on 25 Mar. The last pair seen displaying was on 16 Apr at West Worthing. Breeding was confirmed for nine pairs. The earliest records of breeding were of a pair in an old pine tree at Hesworth Common on 7 Apr and two pairs at Findon Valley (Worthing) on 20 Apr.

The variety of different prey species taken included Blue Tit, House Sparrow, Goldfinch, Starling, Blackbird, Collared Dove and Lapwing. Prey species chased unsuccessfully included Corn Bunting, Green Woodpecker and Magpie.

In the autumn, there were a few sightings at coastal locations suggestive of passage. At Worthing Beach there was 1 E along the beach on 21 Aug. At Beachy Head eight were counted on 29 Aug and on 2 Sep three out of a total of five birds seen were observed soaring over the sea suggestive of passage. On 2 Oct a total of nine was seen flying high and west during the morning over central Brighton.

On 18 Sep near Birling Gap (Beachy Head) an observer in a car followed a bird flying only two feet off the ground for a distance of c.100 yards at an observed speed of 32 mph. [GK]

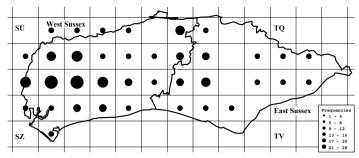
0287. COMMON BUZZARD

Buteo buteo

Fairly common resident, passage migrant and regular visitor.

With an annual total of more than 900 records it is abundantly clear that this species is continuing to do well. A review of all the available data suggests a county population of 213 pairs, with 170 pairs in the west of the county and 43 in the east. These figures are much higher than previous rough estimates but in all probability still under-estimate the true situation. In 1995 there were just ten known pairs.

It is clear that the breeding density in the core areas has increased with 25-30 pairs in the most highly populated 10-km squares. It is also apparent that there has been a very definite expansion in the breeding range with several isolated pairs located in the far east of the county. The map below illustrates both of these points.



Multiple sightings have become commonplace and there are many viewing points on West Sussex downland where a daily total of 10-25 different birds may be seen on a suitable late winter/early spring day. Sizeable numbers were reported at West Dean Woods, with a maximum of 20 on 2 Jan, and at Cocking, where there were ten on 10 Apr and 12 on 4 Aug. In the east of the county there were eight at Chailey Common on 18 Feb, nine at Barcombe Res on 5 Mar and eight at Ashdown Forest on 29 May. In the autumn the most notable records came from Pagham Hbr, with significant gatherings on several dates with a maximum of 18 on 13 Sep. Such a large number probably involves a combination of local family parties coming together and probably prompted by the passage of a migrant flock.

As the population continues to expand it becomes increasingly difficult to discriminate migrants. However, at Brighton there was a passage of five on 17 Feb and a peak spring count of nine flying northeast on 9 Mar. At Pannel Valley NR, there were singletons on 26 Jan, 4 Aug, 3 Sep, two flying south on 18 Sep, a maximum count of three on 9 Oct and finally one on 5 Dec. [MEK]

0301. **OSPREY**

Pandion haliaetus

Scarce passage migrant. Amber listed species of medium conservation concern.

The first spring sightings were of single birds that flew north over Brighton and northeast over Pett on 24 Mar, the same date as 10-year average. Next day, there was one at Bewl Water followed by singletons over Sidlesham Tramway, High Salvington (Worthing) and Beeding Hill on 26 Mar. Individuals stayed in the Chichester Hbr area for six days from 31 Mar and at Arlington Res for 14 days from 21 Apr. One was see flying in off the sea at Holywell (Eastbourne) on 17 Apr. There was a total of 23 single individuals during the period to 10 Jun.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
County total	7	10	5	3	3	12	28	5	2
Chichester Hbr	1	2	2	1	-	2	5	1	1
Pagham Hbr / Selsey Bill	1	2	-	-	1	4	3	-	-
Arun Valley	-	•	-	-	-	2	4	-	-
Adur Valley	-	-	-	-	-	-	3	2	-
Brighton	1	1	1	1	-	-	1	-	-
Arlington Res	-	1	1	-	2	-	1	-	-
Weir Wood Res / Ashdown Forest	-	2	-	-	-	1	5	-	-
Other	4	2	1	1	-	3	6	2	1

The minimum monthly totals were as follows:

There were two records outside the main passage periods. One was at Darwell Res on 25 Jun and one at Arlington Res on 8 Jul.

Autumn passage then got underway with single birds at Pagham Hbr on 21 Jul and at Arlington Res from 25-29 Jul. A total of 45 were seen on return passage, including several records of two. Three were seen at Pagham Hbr on 29 Aug, at Weir Wood Res on 13 Sep and at Thorney Island (Chichester Hbr) on 21 Sep. Long-staying birds were at Chichester Hbr from 20-31 Aug, 18-29 Sep and 5 Oct – 1 Nov, and at Weir Wood Res from 5-17 Sep.

Birds departing out to sea were seen at Selsey Bill on 23 Aug, Birling Gap (Beachy Head) on 28 Aug, and Ovingdean on both 20 Oct and 4 Nov. The latter was the last of the year. There have been November records in two out of the five previous years, but the 10-year average for the last recorded bird is 19 Oct. [SHL]



0304. COMMON KESTREL Falco tinnunculus Fairly common resident and passage migrant. Amber listed species of medium conservation concern.

The 849 records received covered at least 300 1-km squares, indicating that this species is still fairly common and widespread. Birds were present in 28 (27%) of the 105 *BBS* 1-km squares surveyed (see pages 238 - 247).

There were six records of birds on passage during the spring. A single bird came in off the sea at Beachy Head on 19 Mar, singles flew east at Selsey Bill on the 20^{th} and 26^{th} and on 2 Apr, there was 1 E past Splash Point (Seaford) on 3 Apr and 1 W there on the 24^{th} .

Breeding was confirmed for 36 pairs in 34 1-km sites, was probable by 17 pairs at 16 sites and territorial behaviour was exhibited by a further 70 pairs at 71 sites giving an estimated total of 120 potential pairs. Breeding success was reported for 13 pairs which fledged 51 youngsters at an average of 3.9 per successful pair. From 20 recorded nest locations 14 were in old owl boxes, two in nest boxes and single pairs used a pole box, a barn, a tree hole (the only natural nesting site) and a grain drier. Prey items recorded

included a mouse and a vole and the attempt by one bird to rob a Barn Owl of its prey! [JAH]

0309. MERLIN

Falco columbarius

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern.

A total of 20 was estimated to be present during the first half of the year, 75% of which were in West Sussex. During the second half of the year there were perhaps 32 individuals, about 60 % of which were in East Sussex.

	Jan	Feb	Mar	Apr	May	Aug	Sep	Oct	Nov	Dec
County total	12	7	10	4	1	2	11	12	17	10
Chichester Hbr	1	1	1	1	-	1	-	1	2	2
Selsey Peninsular	2	1	1	2	1	-	2	2	2	1
Pulborough area	2	1	1	-	-	-	1	1	-	2
Rye Hbr	2	1	1	-	-	-	1	1	1	1
Other sites	5	3	6	1	-	1	7	7	12	4

Monthly totals were as follows:

A bird thought to have newly arrived was seen perched on rocks at Widewater (Lancing) on 10 Apr. The last spring bird was one at Pagham Hbr on 7 May.

The first returning bird was one at Thorney Island (Chichester Hbr) on 22 Aug. Extreme dates for departure and arrival over the previous ten years (where available) have been 26 Apr - 6 Jun and 5 - 26 Aug, respectively. A record of particular interest included one flying in off the sea at Church Norton on 23 Oct at 1700 hr. Lewes Brooks held up to four individuals in November.

A variety of prey was recorded which included Sky Lark, Corn Bunting, Pied Wagtail and Linnet. [SHL]

0310. HOBBY

Scarce breeding summer visitor and regular passage migrant.

The numbers of sites from which the species was recorded is shown below:

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
No. of sites	16	44	38	21	41	34	10	1

The first two birds for the year were individuals seen at Ambersham Common and at Brooklands (Worthing) on 10 April, the same date as the 10-year average. The main arrival started in late April and peaked during the first half of May as shown below:

Week	15-22 Apr	23-30 Apr	1-8 May	9-15 May
Sites	3	16	26	16
Dates	2	8	8	7
Daily max	2	5	18	16

Birds were seen from several coastal sites. At Selsey Bill, a total of 12 was logged: one on 24 Apr; four on 5 May; two on 12 May; one on 13 May; three on 22 May; and one on 29 May. At Beachy Head, one came in at Belle Tout on 4 May and another arrived at Birling Gap on 16 May. Two late migrants were seen flying in off the sea at Pilsey Island (Chichester Hbr) on 6 Jun. One individual was picked up injured at Rye GC on 11 May.

Falco subbuteo

Spring gatherings of this species over favoured locations have become increasingly common in recent years. There were ten over Manxey Levels (Pevensey) on 8 May and 15 over Amberley SWT Reserve the following day.

During the *BBS*, birds were recorded in four of the 105 1-km squares surveyed and the *Wealden Heaths Breeding Bird Survey* (see page 199) located three territories. Pairs were noted at 11 other locations in the breeding season, including one that raised three young and another with two juveniles on 30 Aug. A recently fledged juvenile was found at yet another site on 5 Sep illustrating the rather late breeding of this species. Groups suspected of being family parties were noted at two other locations in late August. Although the presence of this species is well reported during the breeding season (e.g. from 38 sites in June), establishing the presence of nesting pairs is more difficult and many probably go undetected.

Autumn reports were widespread and mainly involved single birds although up to five were noted on some dates at a few locations. Departing birds flying out to sea were noted at Birling Gap at 0620 hr on 25 Aug and at Shooters' Bottom (Beachy Head) on 10 Oct. A juvenile was picked up by wildlife rescue at Newhaven on 5 Oct and was released there on 8 Nov. Perhaps coincidentally, the last of the year was one carrying prey at Pannel Valley NR the following day. This is the latest ever county record, some 19 days later than the 10-year average of 21 Oct.

Items of prey, in addition to the more usual dragonflies and House Martins, included Common Swift (caught through the actions of two Hobbies at Iping Common on 2 May), Sand Martin and Yellow Wagtail (caught at Rye Hbr on 2 and 26 Aug respectively). At Chichester Hbr, individuals were observed harassing waders on six dates. Perhaps the most interesting observation involved this species unsuccessfully cutting in ahead of a Sparrowhawk that had flushed and was pursuing a Blue Tit between hedges at Constantia Manor (Isfield) on 4 Sep. [SHL]

0320. PEREGRINE FALCON

Falco peregrinus

Scarce breeding resident. Amber listed species of medium conservation concern.

This was another good year for this species with 543 records received, just two less than the previous best of 545 in 2003. Comprehensive data on all known breeding pairs has again been provided by Sussex Peregrine Study, a group of SOS members and non-members who monitor this species under licence. There were 18 breeding attempts, of which 16 were successful, producing a total of at least 42 fledged chicks, yet again an increase on previous years. Two breeding attempts failed and two other pairs were observed in March, on territories that have succeeded in the past, but they did not go on to breed.

At the seven successful coastal eyries two pairs fledged one young, one pair fledged two young, three pairs fledged at least three young and one pair fledged four young, making a total of at least 17 chicks fledged. One other nest with at least two chicks in it failed when, after several nights of heavy rain and gales, the eyrie was lost on the night of 24 May in one of a number of cliff falls that occurred that month. Neither of the adults has been seen since and it is assumed that they perished along with their chicks. The female of this pair had a 'darvic' ring, green with a white C, indicating that she was hatched in 1999 at the Sussex Heights nest box. Interestingly, just three days after the cliff fall a new pair

was observed on the territory with the male displaying to a female who was sitting and 'scraping' on a ledge created by the fall. This, together with the small size of some of the inland cliffs that Peregrines have begun to use, suggests that suitable nest sites are now very much at a premium and there are birds 'in waiting' ready to take over as soon as any site becomes available.

At the six successful inland sites, one pair fledged at least two young and five pairs fledged three young making a total of at least 17. At one of the eyries three male chicks were fledged successfully but within 24 hours foxes killed two of them (CW). One nest failed when the single egg that was laid did not hatch, although the pair continued to brood it for more than 12 weeks.

The three nest box sites produced a total of eight fledged young. At Sussex Heights (Brighton), four eggs were laid between 24 Mar and 1 Apr and three hatched around 4 May. However one of the chicks died on 7 May and was removed from the nest by an adult. The remaining two young fledged in June and the addled egg was removed from the nest for analysis (GCMR). The Chichester Cathedral pair also laid four eggs between 28 Mar and 4 Apr, all of them hatched around 5 to 6 May and the four chicks successfully fledged in June (GCMR). Monitoring of the box on the chimney at Shoreham Power Station, undertaken from the ground, indicated that two young were raised and fledged in July.

A record of a pair nesting in a tree was received but has not, as yet, been confirmed.

In addition to the usual prey items of Wood Pigeons and Feral Rock Doves, adults were reported to have taken a young Kestrel, a Lapwing chick from the ground taken to a pylon to be eaten, migrant thrushes and a Linnet, whilst juveniles were seen to take Dunlin and Starling.

It is very exciting how rapidly the breeding population is expanding in the county and how new types of nest location might begin to be sought, e.g. trees and pylons. Sussex Peregrine Study are acutely aware that because of this it will become ever more difficult to track the increase and they would be very grateful to know of any new sites that observers believe they may have found so that the re-colonisation can continue to be recorded accurately. All records of such suspected new nesting sites and/or of suspected breeding should be reported <u>immediately</u> to the Sussex Peregrine Study by email at <u>info@susexperegrines.co.uk</u> so that they can be inspected under licence before the record is passed to the Hon. Recorder. [PJE]

0407. WATER RAIL

Rallus aquaticus

Scarce resident, winter visitor and passage migrant. Amber listed species of medium conservation concern.

The approximate monthly totals from all sites were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	38	44	45	7	1	19	6	17	24	32	67	48
No. of sites	16	17	24	5	-	10	5	7	9	10	24	20

These numbers are lower than those from recent years. There were no reports from Filsham, the site which normally holds the highest concentration in the county, and only a few 'occasional' observations from Arundel WWT which had comprehensive counts of

reasonable numbers in some previous winters. Summing the maximum counts from each site between October 2004 and March 2005 inclusive gives a rough estimate of the winter population. In 2004/05 this was 127, by far the lowest figure recorded since this method of calculating winter numbers was started in 2000. The only double figure count in the first winter period was of 13 from Thorney Deeps.

Birds were reported from 12 sites during the breeding season. These were mostly single birds except for two at Burton MP and ten pairs at Pett Level where at least three broods were seen in July and where there was a maximum monthly count of eight in August. At least one pair bred at Ternery Pool (Rye Hbr LNR) where an adult was seen with two chicks on 10 Jun. A juvenile bird was seen at Sidlesham on 16 and 25 Aug.

The first evidence of returning birds came from Thorney Deeps where three were seen on 17 Aug and Warnham LNR with five on 28 Sep. Double figure counts to the end of the year came from Thorney Deeps with monthly maxima of 13 in October, 15 in November and 14 in December and from Warnham LNR where the yearly maximum was 12 on 17 and 19 Nov. Other notable counts during this period were six at Pett Level on 16 Oct and the same number at Waltham Brooks on 29 Nov. A bird that regularly winters at Whitbread Hollow (Beachy Head) was first seen on 26 Oct. [RTP]

0408. SPOTTED CRAKE

Very scarce spring and autumn passage migrant and rare winter visitor. Amber listed species of medium conservation concern.

Juveniles were ringed at a location in East Sussex on 22 Aug and 8 Sep (RBRG): the latter found to be a male based on wing length. Nine of the 12 recorded since 2000 were ringed at this site with all but one of them being in August or September (the other was in October). Away from this site during this period two others were reported, one at another eastern location and the second being the sole record from the west of the county. As the last widely seen individual was at Pagham Hbr from 12-16 Aug 1997 another would seem overdue. [RJF]

0421. CORN CRAKE

Crex crex

Porzana porzana

Very scarce passage migrant; formerly bred. Considered vulnerable by IUCN. Red listed species of high conservation concern.

One was flushed from the 'old trapping area' at Beachy Head on 2 Sep (JFC) but unsurprisingly could not be relocated. Recent records continue to average just one a year, with most of the post-1980 records falling between late August and late October. This is the second to be seen at Beachy Head since 2000 and the fourth there since 1980, a pattern of records matched by the Filsham area. This species, perhaps above all others of a similar status in the county, is the one that requires a great deal of good fortune to see. One has to be in precisely the right place at exactly the right time, and looking in the right direction. [RJF]

Gallinula chloropus

0424. MOORHEN

Very com	mon r	esident	and	winter	visitor.
very com	mon i	esiuent	anu	winter	visitor.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	733	742	770	305	197	204	264	433	681	685	661	911
Chichester Hbr	91	93	81	23	12	9	22	32	22	53	67	69
Pagham Hbr	35	28	39	38	19	31	29	52	52	22	29	65
Chichester GP	132	167	119	nc	nc	nc	nc	nc	74	95	140	191
Arundel WWT	38	54	52	40	30	52	40	65	64	76	76	84
Brooklands (Worthing)	26	38	37	11	10	6	12	19	34	48	33	46
Bewl Water	73	104	60	nc	nc	nc	nc	61	61	25	21	34
Powdermill Res	11	10	11	nc	nc	nc	nc	nc	36	18	6	10
Rye Bay	118	87	108	78	67	52	86	96	78	134	106	151

The monthly WeBS' counts at the principal sites were as follows:

Records were received from 170 sites across the county, but the main concentrations are shown in the *WeBS* table above. Other notable counts in the first winter period were 25 at Walberton (Arundel) on 19 Feb, 77 between Arundel and South Stoke on 3 Feb and 39 there on 5 Mar, 20 at Pulborough Brooks on 4 Mar, 23 at Upper Beeding Fish Fm on 2 Jan, monthly maxima at Falmer of 26, 28 and 27 on 7 Jan, 25 Feb and 3 Mar respectively, 22 at Iford on 16 Jan and 20 at East Guldeford level on 5 Feb.

Records during the breeding season were received from 111 sites but evidence of breeding came from only 17 of these. The first sign was a female carrying nesting material at Chelwood Common (Danehill) on 9 Apr and the first young (6) were seen at Falmer on 1 May. Forty nine nests were located at Rye Hbr LNR. The precarious nature of Moorhen breeding is illustrated by the records from Thorney Deeps (Chichester) where ten pairs produced only three broods and between them raised eight young. Counts of common breeding birds can be found on pages 196 - 198.

In the second winter period there was a notable count of 30 at Pulborough Brooks on 9 Dec. Forty one at Brooklands (Worthing) on 27 Nov exceeded the *WeBS* count for that month. [RTP]

0429. COOT

Fulica atra

Common resident with numbers much increased by visitors outside the breeding season.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	3379	3138	2308	488	390	920	1164	1716	2864	2734	2930	3498
Chichester Hbr	165	116	118	18	18	16	38	46	47	70	101	96
Chichester GP	999	699	397	Nc	nc	nc	nc	nc	770	566	739	1266
Brooklands (Worthing)	80	60	40	29	25	64	113	96	154	243	239	146
Barcombe Res	73	44	24	5	8	37	76	156	250	242	246	136
Eastbourne Lakes	127	173	84	Nc	nc	nc	nc	nc	213	174	187	295
Bewl Water	521	604	618	Nc	nc	nc	nc	647	505	289	259	289
Rye Bay	1070	1113	675	201	158	620	758	586	563	799	790	928

The monthly WeBS' counts at the principal sites were as follows:

Records were received from 93 sites. The main concentrations were found at the *WeBS*' sites above. Other notable numbers were recorded in the Arun Valley from

Arundel to South Stoke on 5 Mar when 56 were counted and, on the same date, at Cliff End (Pett) there were 69.

During the breeding season, records came from 69 sites, including 13 BBS squares, but there was confirmation of breeding at only 17 of them. A bird was on a nest at Brooklands (Worthing) on the very early date of 5 Mar. It was not until the 13 Apr that the next nesting bird was reported at Pett Level Pools followed by another at New Salts Fm (Lancing) on the 17th. The first young were noted on 30 Apr at Shinewater (Eastbourne). At Thorney Deeps (Chichester Hbr) 12 pairs had eight broods and produced 19 young and at Sefter Fm (Pagham) 12 birds holding territories were identified. A female was sitting on a nest at Polling (Arundel) on 20 Jun. At least 43 pairs were at Rye Hbr LNR. At Bewl Water no breeding was noted for the first time.

The autumn influx was slightly smaller than in recent years. There were few major congregations reported, apart from those in the table above. At Wiston Pond (Steyning) there were 70 on 6 Aug and at Brooklands (Worthing) 50 on 13 Oct had risen to 100 by 10 Nov. A count of 252 at Barcombe Res on 16 Oct exceeded the number reported in the *WeBS* table for that month. [RTP]

0450. **OYSTERCATCHER**

Haematopus ostralegus

Scarce breeder, fairly common passage migrant and winter visitor. Amber listed species of medium conservation concern

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	1551	1531	1234	647	569	497	1057	1423	1659	967	1652	2351
Chichester Hbr	964	864	664	291	345	282	765	1221	1465	698	1013	1572
Pagham Hbr	239	178	197	164	41	64	86	42	79	86	117	132
Cuckmere Haven	1	100	2	nc	nc	nc	nc	nc	-	-	-	2
Rye Bay	309	366	365	192	183	140	206	160	110	158	515	627

The monthly WeBS' counts at the main sites were as follows:

The only counts at the usual large roosts, at Pilsey Island (Chichester Hbr) and Ternery Pool (Rye Hbr LNR), which exceeded the above *WeBS'* counts were at Ternery Pool with 390 on 14 Jan, 123 on 5 Sep and 422 on 20 Oct.

Away from the main wintering areas, the largest counts were 150 at Telscombe Cliffs on 13 Feb and 80 at Cuckmere Haven on 9 Jan (with 140 there on 25 Oct). Smaller numbers were found along the western coastline, the highest counts being 30 at Goring Beach on 9 Oct and 40 at Climping on 3 Jan. Inland, there was one at Weir Wood Res on 5 and 15 May and again on 18 and 31 July.

There were at least 39 breeding pairs at five sites. At Rye Hbr LNR, a total of 26 pairs was comparable to recent years, but in the Chichester Hbr area success was poor; three pairs at South Stakes Island and two pairs at North Stakes failed to breed, and a pair at Thorney Deeps lost a clutch through cattle trampling. The only success was a pair at Pilsey Island which fledged two. Elsewhere, a pair was successful at Arundel WWT, and a well-monitored pair on the Adur Estuary fledged a very creditable four young from a nest on a derelict houseboat.

Small offshore movements were recorded throughout the year, especially at Splash Point (Seaford), the largest of these being 55 W there on 20 Mar and 58 E on 2 May. [CJRB]

0455. BLACK-WINGED STILT

Rare vagrant.

A first-summer male was present at Pulborough Brooks from 23-25 Apr (CWM *et al*) with a presumed first-summer female in the lower Cuckmere Valley on 1 May (PJWi *et al*) (see Plate 3). The former was usually performing in front of the West Mead hide where it was a popular attraction while the latter frequented a small scrape to the east of the river just south of the A259 and the first oxbow. Photographs of both were published in *Birding World* (18:137 and 182 respectively). Both records have been accepted by *BBRC* and take the county total to about 26. Of these just six have been recorded since 1990, the others being one at Bewl Water in May 1992, two together at Sidlesham Ferry in April 2000 and one near Bognor Regis in September 2004. [RJF]

0456. AVOCET

Recurvirostra avosetta

Scarce winter visitor and passage migrant; very scarce and localised breeder. Amber listed species of medium conservation concern.

The minimum monthly totals were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
36	18	42	64	63	25	50	3	2	19	38	39

There were the usual wintering groups in Chichester and Pagham Harbours. At Chichester Hbr the highest counts in the first period were 20 on 1 and 3 Jan and, in the second period 32 on 20 Nov (a site record) with 29 still there on 23 Dec. At Pagham Hbr however, numbers were the lowest for eight years, with maxima of 14 on 14 and 16 Jan and 10 on 18 Dec. The only other winter records were of two at Scotney Court GP throughout January.

Easterly passage peaked with ten off Brighton Marina on 21 Apr (with the same number at Splash Point (Seaford) on the 30th) and 12 off Selsey Bill on 31 May. In March and April single birds were seen at Widney Brooks, Pulborough Brooks, Weir Wood Res and Newhaven Tide Mills and there were two at Langney on 14 Mar, seven at Cuckmere Haven on the 27th, and 19 at Rye Hbr LNR on the 24th.

A total of 11 pairs fledged 24 young at the only site where breeding was successful, slightly less than last year. A pair attempted to breed at another site, but the nest was flooded out; at a different site a single bird was resident from March to August, joined by another in July, but there was no evidence of nesting.

A singleton at Barcombe Res on 20 Jun was notable. There were three at Scotney Court GP on 5 Oct and singletons at Newhaven Tide Mills on 2 Sep and 7 Oct. [CJRB]

0459. **STONE-CURLEW**

Burhinus oedicnemus

Rare passage migrant; formerly a scarce breeding summer visitor. Red listed species of high conservation concern.

One flew east over Roedean on 18 Mar (ITB) and another flew east over Beachy Head on 30 Apr (CFB, RJF *et al*). These two were picked up from their calls, the Roedean bird disappearing into a fog bank, while that at Beachy Head was seen independently at Belle Tout and soon after at Shooters Bottom. A pair were present on a private downland site in

the west of the county from late June to early August and one was seen in a set-aside field at Birling Gap on 17 Aug (JFC *et al*).

The summering pair is the first in the county since 1981, but unfortunately there was no evidence of breeding, nor has there been since 1980. Four records involving five individuals is the best showing in the county since 1980 and, following a period when records were averaging just under one per year, hopefully reflects a resurgence in the species' fortunes. [RJF]

0469. LITTLE RINGED PLOVER Scarce breeding summer visitor and passage migrant.

The first arrivals were single birds at Chichester GP on 20 Mar and Pulborough Brooks the next day. These dates compare with a 10-year average of 18 Mar. On 10 Apr there were nine at Weir Wood Res. The minimum monthly totals were as follows:

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
No. of birds	6	26	24	35	48	31	15	1
No. of sites	5	9	9	10	10	8	7	1

Breeding was confirmed at three sites. At one of them there were six adults and four chicks on 26 Jun and a total of 15 birds on 3 Jul, suggesting that more than one pair may have been successful. At least three young were raised at the other two sites. Birds present at a further seven sites were considered also to have bred, whilst those seen at two additional locations may have attempted to do so.

There were 11 at Weir Wood Res on 29 Aug and up to three in the Chichester GP area in late September. There was one October record for the second year running, at Sidlesham Ferry on the 4^{th} , nearly two weeks later than the 10-year average. [CJRB]

0470. **RINGED PLOVER**

Charadrius hiaticula

Charadrius dubius

Fairly common breeder, passage migrant and winter visitor. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	445	243	160	125	207	53	91	510	207	408	259	215
Chichester Hbr	119	117	9	44	118	13	26	400	38	213	149	122
Pagham Hbr	124	8	69	46	37	20	19	75	116	113	77	43
Climping	74	52	7	nc	nc	5	26	8	-	-	-	1
Goring Gap	2	20	-	nc								
Lower Adur Estuary	66	-	15	nc	nc	nc	nc	nc	3	13	-	3
Rye Hbr	44	35	48	28	45	14	20	26	45	53	25	37

The monthly WeBS' counts at the main sites were as follows:

Several monthly maxima at Pilsey Island exceeded the *WeBS'* counts for Chichester Hbr: there were 35 on 26 Mar, 53 on 29 Apr, 350 on 1 Sep and 168 on 1 Nov. The August and September counts at Pilsey Island exceeded the 1% national threshold level of 330. In addition to the *WeBS'* counts, there were 305 at the Adur Estuary on 17 Nov, 300 at Pagham Hbr on 30 Aug and 200 there on 6 Sep, 80 at Goring Beach on 23 Oct and 65 at Climping Beach on 4 Aug. At other regular sites there were high counts of 100 at Shoreham Beach on 10 Jan, 60 at Worthing Beach on 2 Oct and 90 at Widewater

(Lancing) on 13 Nov. The 73 counted at Brighton Marina on 28 Aug were mostly juveniles.

Forty two pairs attempted to breed, only 34 of which were successful, the lowest total since 1980. At Rye Hbr LNR at least 34 pairs nested along the Beach Reserve. Hatching success appeared to be good, especially on Flat Beach, although very few were thought to have fledged. There were six pairs at Pilsey Island, but only one pair was successful, raising two young. A pair at Brighton Marina finally raised three on 3 Aug after several attempts and at Cuckmere Haven a pair raised two. A pair bred at Pett Level fledging three young. A pair at Newhaven probably bred, but pairs at North Stakes Island and Ella Nore (Chichester Hbr) did not breed.

Inland, there were birds at Weir Wood Res from May to September, with a maximum of ten on 30 Aug. There were also six at Pulborough Brooks on 25 Apr, five at Widney Brooks on 15 May, and one at Bewl Water on 18 Sep. [CJRB]

0477. **KENTISH PLOVER**

Charadrius alexandrinus

Very scarce spring and autumn passage migrant; formerly bred.

An adult male was seen on Pilsey Sands on 15 May (CBC, MAC). The first named observer has found a very impressive 41 Kentish Plovers at Pilsey since 1986, just over two-thirds of the 60 recorded in the county during this period. Of these 24 arrived in April and 18 in May. [RJF]

0485. EUROPEAN GOLDEN PLOVER

Pluvialis apricaria

Common winter	visitor	and pass	sage migr	ant; rare	in summer.	
The monthly	WeBS' c	counts at	the main	sites were a	as follows:	

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	1497	3354	1383	-	1	-	53	631	181	1933	2350	4012
Chichester Hbr	1073	3048	1310	-	-	-	1	11	18	623	1273	3586
Pagham Hbr	423	63	1	-	-	-	-	3	3	33	27	130
Pevensey Levels	1	-	70	nc	-	-						
Rye Bay	-	243	2	-	1	-	52	617	160	1275	1050	280

Included in the *WeBS* count for Chichester Hbr was a monthly maximum count of 3000 at Thorney Island, which exceeded the 1% national threshold level of 2500. The maximum at Pagham Hbr was 800 on 3 Jan. In the east of the county 500 at East Guldeford on 3 Jan was the highest count. Inland there were up to 25 at Pulborough Brooks and 25 at Barcombe Res on 2 Jan. Offshore movements were occasionally recorded from Selsey Bill, the largest being 45 W on 8 Jan. The last wintering birds recorded at Thorney Island were 40 on 31 Mar.

In April there were up to 11 at Rye Hbr LNR and 20 at Pagham Hbr, single birds remaining at both sites until 8 and 15 May respectively. An interesting and unusual record was one at Sheepcote Valley (Brighton) on 6 Jun.

The first returning birds were two at Pett Level on 18 Jul and five were back at Thorney Island on 4 Aug. Several parties were noted on the Downs in the autumn, the largest being a flock of 48 at Steyning Round Hill from 9-15 Oct. Further inland, two were at Weir Wood Res on 11 Sep and there were up to four at Pulborough Brooks from 23 Sep until the end of the year.

In the second winter period, there were again high numbers at Thorney Island. Three counts in December exceeded the 1% national threshold level, and one of 5000 on the 14th was a site record and the highest in the county since 1977. In the east the maximum was 1200 at Rye Hbr LNR on 3 Nov. Away from the main concentrations, there were 40 at Rodmell Brooks on 29 Nov. [CJRB]

0486. **GREY PLOVER** Common winter visitor and passage migrant.

Pluvialis squatarola

ommon winter	visitor and passa	ige migi ant.	
The WeBS' co	ounts at the princip	oal sites were as	s follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	2130	2060	2080	161	186	25	79	451	449	1623	1648	2597
Chichester Hbr	1265	1286	1420	68	21	11	67	261	381	854	1168	2017
Pagham Hbr	671	650	491	86	165	14	11	189	59	755	455	560
Goring Gap	115	12	-	nc	nc	nc						

In the first half of the year, the only counts which exceeded *WeBS'* numbers were 200 at Pagham Hbr on 21 Apr and 115 there on 18 Jun. All counts at Chichester Hbr and Pagham Hbr from January to March and October to December (except for March at the latter site) exceeded the 1% national threshold level of 530. The highest counts at other traditional wintering sites in January were 100 at Worthing Beach on the 23^{rd} , 50 at Climping Beach on the 26^{th} and 26 on the Adur Estuary on the 1^{st} .

It was an exceptionally poor year for this species at all seawatching sites despite many hours of effort. The approximate monthly totals at the principal seawatching sites were as follows:

		Mar	Apr	May	Total	Hr watched
Total	Ε	4	119	85	208	
	W		12	20	32	
Selsey Bill	Е	-	113	63	176	316¾
	W	-	-	20	20	
Worthing Beach	т	-	1	15	16	124½
	w	-	12	-	12	
Splash Point (Seaford)	Ε	4	3	5	12	157
Birling Gap	Ε	-	2	2	4	831/2

Two records from Selsey Bill of 100 E on 24 Apr (in 7 hr) and 56 E on 12 May (in 13 hr) were, therefore, exceptional. The only inland record was one at Weir Wood Res on 15 May. A partly leucistic bird was at Pagham Hbr on 11 Jun.

In the second winter period, 190 at Goring Beach on 24 Dec and 94 at Worthing Beach on the 21st were the highest numbers outside the *WeBS*' counts. [CJRB]

0493. NORTHERN LAPWING

Vanellus vanellus

Scarce breeder and very common winter visitor. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	14814	12757	2475	280	218	789	1592	2715	3083	7453	5381	12064
Chichester Hbr	2837	3474	1271	30	31	177	303	172	230	927	738	2512
Pagham Hbr	3589	3583	89	49	44	74	3	247	146	2306	286	2349
Bury Brooks	-	767	14	7	-	77	-	-	-	nc	-	nc
Amberley Wild Brooks	1141	130	117	13	13	11	-	-	-	7	530	626
Pulborough Brooks	430	804	82	24	26	8	59	134	307	350	1067	447
Lower Adur Estuary	1039	240	-	nc	nc	nc	nc	nc	-	309	254	364
Newhaven	615	nc	-	nc	nc	nc	nc	nc	-	82	340	605
Iford Brooks	800	-	4	nc	nc	nc	nc	nc	50	3	65	1200
Pevensey Levels	410	491	127	36	47	5	7	nc	nc	139	24	311
Bewl Water	42	326	400	nc	nc	nc	nc	135	130	194	259	256
Rye Bay	2686	2000	170	103	61	420	1227	1985	2116	2400	1456	2870

The WeBS' counts for the principal sites were as follows:

There were another 22 counts of over a thousand individuals during the first winter period in addition to those in the above *WeBS* table. These larger counts included 2000 at Pagham Hbr on 3 Jan, 3000 at Pagham Hbr on 29 Jan, 2000 at Rye Hbr Flat Beach Level on 11 Feb and 1500 at Rye Hbr LNR on 24 Feb.

Breeding activity was first noted on 16 Mar with a pair seen displaying at Stonehill (Ashdown Forest). Breeding was confirmed at just 12 sites and consisted of around 84 pairs. Breeding was reported as probable at a further 12 sites, the largest concentration being at Rye Hbr LNR with 31 pairs. At Pulborough Brooks a maximum of 14 pairs were noted with 10 pairs on North Brooks, 2 pairs on South Brooks and 2 pairs on arable fields. Other notable breeding counts were of 8 pairs on Horse Eye Level (Pevensey) and 8 pairs at Amberley Wild Brooks.

Returning birds were first noted in low numbers from early June and the first large gathering of 1500 was noted at Castle Water (Rye Hbr LNR) on 26 Aug. Other notable counts in the second winter period were 1000 at Pagham Hbr on 20 Oct with 2000 there on 19 Nov and 2500 at East Guldeford Level on 13 Dec. [ITB]

0496. **RED KNOT** Calidris canutus Fairly common winter visitor and passage migrant. Amber listed species of medium conservation concern.

			•	•								
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	664	978	962	-	25	18	5	23	13	50	113	71
Chichester Hbr	344	421	833	-	22	-	5	8	4	47	98	1
Pagham Hbr	320	556	129	-	2	18	-	5	-	1	15	67
Rye Bay	-	-	-	-	1	-	-	10	9	2	-	-

The WeBS' counts for the principal sites were as follows:

All records were coastal apart from two records at Arlington Res where a juvenile was noted on 19 Aug and another on the 27^{th} .

Birds were noted in every month of the year with good numbers being recorded from January to March; notable counts were 540 at Pagham Hbr on 13 Feb and 500 at Pilsey Sands on 11 Mar. From then on numbers were low until November when numbers again increased; the first notable count was 300 at Pilsey Sands on 4 Dec increasing to 400 there on 20 Dec.

The first offshore movement was recorded at Birling Gap (Beachy Head) on 21 Mar when 5 E were noted in $3\frac{3}{4}$ hr of observation. Passage was easterly in the spring.

The approximate monthl	v totala at the	mmin aimal	l againstahing aitag	ware as fallows:
The approximate month	v totals at the	DIIIICIDAI	i seawatching sites	were as follows.

	Mar	Apr	May	Total	Hr watched
Total	5	94	48	147	
Selsey Bill	-	12	11	23	160½
Worthing Beach	-	-	9	9	521/2
Telscombe Cliffs	-	80	3	83	78¾
Splash Point (Seaford)	-	2	14	16	157
Birling Gap	5	-	-	5	3¾

Small numbers were present in Pagham Hbr during June with 12 there on the 4th, only one noted on the 21st but 18 on the 26th. Possible returning migrants were recorded in Rye Bay when up to four were present on 8 and 9 Jul. The first returning birds noted in Chichester Hbr were five at Pilsey Sands on the 18th. Thereafter numbers gradually built up through August with peak counts of 73 at Pilsey Sands on the 19th and 50 in Pagham Hbr on the 25th. Visible autumn passage was noted at only two sites; 38 E past Telscombe Cliffs on 31 Aug and 25 E past Worthing Beach on 16 Sep. [ITB]

0497. SANDERLING

Calidris alba

Fairly common	winter	visitor	and	passage	migrant.
				passage	

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	157	191	119	33	4	5	162	102	-	68	76	51
Chichester Hbr	28	54	77	32	4	4	29	100	-	48	65	15
Climping	20	13	5	nc	nc	-	131	2	-	-	-	-
Goring Gap	27	33	22	nc								
Lower Adur Estuary	11	I	15	nc	nc	nc	nc	nc	I	-	•	-
Rye Bay	71	89	1	•	•	1	1	-	1	20	11	34

The *WeBS*' counts for the principal sites were as follows:

All records were at or near the coast with birds being noted in every month of the year. A count of 100 on Goring Beach on 19 Jan was the only notable one in the first winter period.

The first spring movement was recorded at Selsey Bill on 21 Mar when 16 birds flew east but significant movement, predominantly easterly, lasted from 21 Apr until 6 Jun. Peak movement was in May with the largest numbers being seen at Selsey Bill, as shown below:

	Apr	May	Jun	Total
Total	349	807	39	1195
Selsey Bill	63	404	-	467
Worthing Beach	277	288	39	604
Splash Point (Seaford)	9	110	-	119
Beachy Head	-	5	-	5

Numbers during the late summer/autumn period were generally low with the exception of counts at Pilsey Sands (Chichester Hbr) of 370 on 28 Jul, 200 on 1 Aug and 100 on 19 Aug. [ITB]

0501. LITTLE STINT

Scarce passage migrant; a few winter in most years.

Calidris minuta

The approximate monthly totals were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8	3	3	1	1	3	2	9	21	5	3	3

All the records for the first three months were from Chichester Hbr, including a peak count of eight at East Head (Chichester Hbr) on 30 Jan. Spring birds were recorded from just two sites with a single bird in summer plumage at Pilsey Island on 29 Apr and another singleton at Pagham Hbr on 17 May.

The first autumn migrants were at Barcombe Res with three present on 11 Jun. The next record was on 19 Jun when two birds were seen at Sidlesham Ferry. Thereafter, birds were noted in ones and twos at traditional coastal sites, particularly Sidlesham Ferry, Breech Pool (Pagham Hbr) (where the peak count was five on 5 Sep) and Rye Hbr LNR. The only inland records were at Pulborough Brooks, with three on 1 Sep and one from 23 to 25 Sep, and Weir Wood Res, with two from 20 to 22 Sep.

Overall numbers in the last five months of the year were comparable with the average for the previous three years but lower than the average for the previous five years when numbers in September 2000 and 2001 were exceptional.

In the second winter period, 19 of the 22 records received were from East Head and included peak counts of three there on 27 Nov and, the last birds of the year, on 15-17 Dec. [ITB]

0507. **PECTORAL SANDPIPER** Rare vagrant, mainly in autumn.

Juveniles were seen at Pulborough Brooks on 1-5 Sep (PH *et al*), Drayton House GP (Chichester) on 6-11 Sep (OM *et al*) and 22-25 Sep (BFF, DIS *et al*) and Weir Wood Res from 5-12 Oct (MO). Twenty-five have been recorded in the county since 1990, all but one (in May 2004) falling between 23 July and 30 October. The Pulborough Brooks individual was the third record for the reserve, following two in 2000, but as it favoured the North Brooks, like the others, it was often rather distant. Drayton hosted one in 2002 while there were two at Weir Wood Res in 1999. [RJF]

0509. CURLEW SANDPIPER

Calidris ferruginea

Calidris melanotos

Passage migrant, scarce in autumn and very scarce in spring; rare in winter.

The approximate monthly totals were as follows:

May	Jun	Jul	Aug	Sep	Oct
2	1	28	48	42	1

The first record of the year was of a single bird at Pagham Hbr on 5 May which possibly accounted for the further records at this site up to 15 May. Another individual was noted at Rye Hbr LNR on 7 and 8 May. A singleton at Sidlesham Ferry on various dates towards the end of June fell between spring and autumn passage and mirrors a record for the last two years of a summering bird.

Autumn passage started with one at Sidlesham Ferry on 20 Jul. An impressive count of 22 on the Bittern Excavations (Rye Hbr LNR) on 27 Jul was made at dawn after overnight rain. Other good counts were of 11 at Pannel Valley NR on 20 Aug, ten at Pagham Hbr on 10 Sep and 15 at Sidlesham Ferry on 6 Sep with seven still present along with 11 on the Long Pool on 7 Sep and 13 on Sidlesham Ferry on 25 Sep. The last record of the year was of an adult in winter plumage at Chichester GP on 23 Oct.

The only inland records came from Weir Wood Res with two there on 26 Aug and from Chichester GP where, between 21 Aug and 23 Oct, there were 14 records of from one to three birds. [ITB]

0510. PURPLE SANDPIPER

Calidris maritima

Scarce winter visitor and passage migrant; very rare in summer. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	27	34	27	19	7	-	1	2	8	12	24	25
Shoreham	-	2	-	2	-	-	-	-	-	-	2	2
Brighton Marina	18	17	17	17	6	-	1	2	8	10	15	15
Newhaven	8	7	8	-	1	-	-	-	-	2	3	4
Bexhill	-	7	1	-	-	-	-	-	-	-	2	2
Other	1	1	1	-	-	-	-	-	-	-	2	2

The minimum monthly totals for the main sites were as follows:

The highest counts came from the traditional sites and included 18 at Brighton Marina in January and eight at Newhaven on 29 Jan. A comparison between the monthly county totals for 2005 with the averages for the period 2000-2004 shows that, while there is some fluctuation between months, the county population is reasonably stable overall, as shown below:

		Jan	Feb	Mar	Apr	May	Jul	Aug	Sep	Oct	Nov	Dec
County	Avg. 2000-2004	28	24	24	19	10	2	3	5	10	29	31
Total	2005	27	34	27	19	7	1	2	8	12	24	25

The last spring sighting was of five at Brighton Marina on 13 May. The first returning bird was noted at Brighton Marina on 19 Jul. The peak count in the second winter period was of 15 at Brighton Marina in November and on 5 Dec. Again a single bird was seen regularly in the Pagham Hbr and Selsey Bill area in both periods and was joined by a second bird on a few dates during the second winter period. [ITB]

0512. **DUNLIN**

Calidris alpina

Very common winter visitor and common passage migrant; small numbers summer. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	10946	13455	8154	370	2316	28	452	649	607	2869	4733	5670
Chichester Hbr	8808	11404	7215	304	2038	2	150	506	447	2473	4296	5084
Pagham Hbr	1966	1129	687	47	229	24	119	28	35	316	360	382
Rye Bay	103	692	93	19	47	2	119	92	117	76	77	174

The WeBS' counts for the principal sites were as follows:

The numbers in Chichester Hbr exceeded the 1% national threshold level of 5600 during January, February and March. A notable count in the first winter period was 400 on Worthing Beach on 23 Jan.

Easterly spring passage from the main seawatching sites was as follows:

	Mar	Apr	May
Total	376	257	275
Selsey Bill	-	35	187
Worthing Beach	310	176	81
Birling Gap	22	-	-
Telscombe Cliffs	-	17	-
Splash Point (Seaford)	44	29	7

No significant movements were noted during the autumn period this year. The only high counts noted in the second winter period were of 1000 at Pilsey Island on 13 Oct and 1753 there on 3 Dec.

Small numbers, mainly ones and twos, were noted throughout the year at various inland sites, with a peak count of 16 at Weir Wood Res on 9 May and 15 there on 26 Aug. [ITB]

0517. **RUFF**

Philomachus pugnax

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	33	15	6	2	1	-	3	12	2	-	2	3
Pagham Hbr	-	-	1	-	-	-	-	1	2	-	-	-
Arun (Offham to Houghton)	-	-	1	-	-	nc	-	-	-	nc	nc	-
Amberley Wild Brooks	16	6	-	-	-	-	-	-	-	-	-	-
Waltham Brooks	8	-	1	-	-	-	-	-	-	-	-	-
Pulborough Brooks	-	-	-	-	-	-	-	-	-	-	2	3
Pevensey Levels	-	-	2	nc	-	-						
Rye Bay	9	9	1	-	-	-	2	10	-	-	-	-

The WeBS' counts for the principal sites were as follows:

Peak counts in the first winter period included 15 at Amberley Wild Brooks on 14 Jan, 12 at Pulborough Brooks on 18 Jan with 16 noted there on 30 Jan and 13 at Castle Fm (Rye Hbr LNR) on 6 Mar.

The first returning birds were two at Pannel Valley NR on 9 Jul. Numbers remained very low for the autumn period with passage birds peaking at just six at Sidlesham Ferry on 2 Sep. The peak count for the second winter period was six at Widney Brooks (just north of Greatham Bridge) on 31 Dec. [ITB]

0518. JACK SNIPE Scarce winter visitor and passage mid

Lymnocryptes minimus

Scarce winter visitor and passage migrant.

	Jan	Feb	Mar	Apr	Sep	Oct	Nov	Dec
County total	3	6	11	2	-	14	13	10
Chichester Hbr	3	6	4	2	-	9	12	9
Amberley Wild Brooks	-	-	-	-	-	-	-	1
Pulborough Brooks	-	-	1	-	-	3	-	-
Henfield Brooks		-	5	nc	-	-	-	-
Newhaven	-	nc	-	nc	-	-	1	-
Glynde Brooks	-	-	1	-	nc	-	-	-
Rye Bay	-	•	-	-	-	2	-	•

The monthly WeBS' counts at the principal sites were as follows:

The minimum monthly totals were as follows:

	Jan	Feb	Mar	Apr	Sep	Oct	Nov	Dec
Monthly total	7	11	12	3	1	19	31	12
No of sites	3	5	9	2	1	6	14	5

In the first winter period, numbers were much lower than usual for the second year running. The maximum at Thorney Deeps was six on 1 Feb and the only other regular reports were from Ferring Rife, with a maximum of three on 6 Jan. All other records were of single birds from 11 coastal and inland sites, including Ashdown Forest, Eastbourne, Isfield and Bewl Water. The last wintering bird was one at Ferring Rife on 12 Apr.

The first returning bird was at Pett Level on 19 Sep. In the second winter period, numbers returned to more usual levels, with a maximum at Thorney Deeps of 12 on 4 Nov. Elsewhere there were up to four at both Waltham Brooks and Pulborough Brooks, three in the Pagham and Rye Harbour areas, two at Pett Level and Ferring Rife, and single birds at six other coastal and inland sites, including Bewl Water and a pond near Ditchling. [CJRB]

0519. COMMON SNIPE

Gallinago gallinago

Very scarce breeder and fairly common winter visitor. Amber listed species of medium conservation concern

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	369	544	258	33	1	-	-	65	106	266	214	311
Chichester Hbr	27	100	57	5	-	-	-	-	9	38	72	67
Pagham Hbr	6	1	9	-	-	-	-	2	-	-	3	16
Burton & Chingford Ponds	25	-	-	-	-	-	-	-	-	-	-	-
Arun (Offham to Houghton)	22	-	-	-	-	nc	-	-	-	nc	nc	-
Amberley Wild Brooks	25	36	24	9	-	-	-	-	10	76	40	36
Waltham Brooks	6	15	2	-	-	-	-	40	6	4	21	-
Pulborough Brooks	-	28	23	3	1	-	-	5	43	40	19	59
Lower Adur Estuary	146	273	22	nc	nc	nc	nc	nc	1	39	-	52
Henfield Brooks	31	35	24	nc	nc	nc	nc	nc	-	-	3	12
Newhaven	-	nc	-	nc	nc	nc	nc	nc	1	-	17	2
Eastbourne Lakes	7	5	13	nc	nc	nc	nc	nc	9	8	-	8
Pevensey Levels	53	48	39	6	nc	nc	nc	nc	nc	12	7	27
Rye Bay	18	-	28	2	-	-	-	17	24	45	22	31

The monthly WeBS' counts at the main sites were as follows:

In the first winter period there were no other significant counts at any of the above sites, but small numbers at other regular sites included 40 at Isfield on 14 Mar, 37 at Holmbush Tip (Faygate) on 27 Feb and 25 at Shopham Bridge (Byworth) on 29 Jan. The February *WeBS* count from the Lower Adur Estuary was the largest at any individual site in recent years.

There were once again only a handful of breeding records in the county. Amberley Wild Brooks was again the main site, with three drumming and chipping males in May and June. A single bird drumming at Steyning Levels was thought to have probably bred, and two near Greatham Bridge may also have done so. One at Sefter Fm (Pagham) was not thought to be holding territory and there were no territorial birds at Pulborough Brooks this year.

The first returning bird was one at Thorney Deeps on 14 Jul, followed by one or two at Pett Level and Rye Hbr LNR during the rest of the month. Several passed through Chichester GP in August and September and there were 40 at Widney Brooks on 20 Aug. Late October brought a noticeable influx, with 60 at Pulborough Brooks, 52 at Pett Level and 54 at Ternery Pool (Rye Hbr LNR). In the second winter period, there were no significant counts other than those in the *WeBS* table, though twelve were put up by a Hen Harrier at Iford Brooks on 11 Dec. [CJRB]

0529. **WOODCOCK**

Scolopax rusticola

Fairly common resident and winter visitor. Amber listed species of medium conservation concern.

In the first winter period, a minimum of 42 birds were reported from 30 sites, nearly all inland. Most were of single birds, though there were four at Hoth Wood (Rotherfield) on 25 Feb and a maximum of seven at Pett Level on 6 Jan, with three there on 7 Feb. One at Brighton seafront on 3 Feb was notable.

Roding was first reported at Hurst Green on 31 Mar but not again until 17 April. There were then many records from the Ashdown Forest area, none of more than three at any one site, but there were five at Ambersham Common and four at Stanley Common. The *Wealden Heaths Breeding Birds Survey* (see page 199) recorded three pairs on Stedham Common, four on Iping and Linchmere Commons, and single pairs at Blackdown and Weavers Down.

There were no records in August or September, but single birds at Sheepcote Valley (Brighton) on 17 Oct and Whitbread Hollow (Beachy Head) on the 22^{nd} indicated movement. In the second winter period there were only nine inland records, all of single birds except for four at Isfield and Stansted Forest. Eight coastal records in November and December probably resulted from cold weather movements, and included two birds which were taken into care. [CJRB]

0532. BLACK-TAILED GODWIT

Limosa limosa

Fairly common winter visitor and passage migrant; very scarce summering species. Red listed species of high conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	803	576	779	485	182	196	197	94	292	1044	855	766
Chichester Hbr	137	309	435	376	173	150	167	78	217	995	672	425
Pagham Hbr	664	267	344	109	9	46	27	10	43	47	183	340
Chichester GP	-	-	-	nc	nc	nc	nc	nc	32	-	-	-

The WeBS' counts from the principal sites were as follows:

The totals at Chichester Hbr met or passed the 1% national threshold level of 150 in 10 months and at Pagham Hbr in five months and one or other site surpassed the international threshold level of 350 on six occasions, underlining the importance of these two areas for the species.

In the first winter period, significant counts additional to the *WeBS*' counts were 740 in the North Fields (Pagham Hbr) on 17 and 19 Jan. Elsewhere there were occasional single birds in the Rye Hbr and Pett Level areas, one on the Adur Estuary on 8 and 21 Jan, and up to four throughout January at Pulborough Brooks.

Numbers declined in February, followed by a passage peak in March. The only offshore movement noted was 18 E at Worthing on 1 May. Single birds visited Weir Wood Res on 16 Mar and 17 Apr (with two there on 10 May) and 17 called in at Pulborough Brooks on 24 Mar, with one there on 3 Apr.

Numbers summering at Thorney Deeps were noticeably higher than in recent years, with a minimum of 150 between May and July, and were noted as being mostly first-summer birds. The usual summering group at Sidlesham Ferry peaked at 57 at the end of June. Inland, one was in the Waltham Brooks area from 13-15 Jul, up to two at Weir Wood Res and up to four at Pulborough Brooks during the month. Four at Horse Eye Level (Pevensey) on 27 Jul and one at Barcombe Res on 1 Aug were also notable records.

Offshore passage consisted of only 1 W and 4 E at Selsey Bill on 6 and 7 Jul.

From mid-August to late October groups of up to 57 frequented the Chichester GP complex, mainly in the Drayton Pit area. At least some of these were identified as of the UK wintering race *islandica* and, therefore, were probably on route to local wintering

areas. A juvenile at the Ouse Estuary Project (Newhaven) from 27 Aug to 6 Sep was also interesting.

The minimum monthly totals of inland records were as follows:

Jan I	⊦eb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4	0	18	2	3	0	11	2	6	2	4	1

In the second winter period, the *WeBS* count of 995 in Chichester Hbr on 16 Oct was one of the highest in recent years. The maximum at Pagham Hbr was 340 on 4 Dec. [CJRB]

0534. **BAR-TAILED GODWIT** Limosa lapponica Fairly common winter visitor and passage migrant. Amber listed species of medium conservation concern.

			1	1								
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	645	863	477	2	41	3	7	116	220	74	509	675
Chichester Hbr	614	863	472	1	23	3	7	109	206	70	500	652
Rye Bay	-	-	-	1	13	-	-	7	8	4	3	2

The WeBS' counts for the principal sites were as follows:

Winter numbers were broadly similar to those of recent years. The 1% national threshold level of 620 was passed only twice, at Chichester Hbr in February and December. In the first winter period there were no high numbers outside the *WeBS*' counts but, as usual, there were consistently high numbers at Pilsey Island (included in the Chichester Hbr totals) which often held almost the entire county population (the maximum there was 550 on 15 Jan). There were only six records from Pagham Hbr with peak counts of 30 on 16 Jan and 21 on 4 Dec. Elsewhere, one was often seen on the Adur Estuary in January and February, and one passed through Pulborough Brooks on 14 Apr. At Rye Hbr LNR, there were up to four between February and April, though 14 there on 21 Apr would have been pausing migrants.

Like all the wading species, poor numbers were recorded offshore. Passage began abruptly on 22 Apr and by the 24^{th} about two-thirds of the year's total had already passed through. The movement ended just as suddenly on 3 May, but there was another much smaller wave in the middle of the month, and a group of 40 stragglers past Worthing on 2 Jun. Two east past Selsey Bill on 28 Jun were very late if they were spring migrants. The figures are analysed in the table below.

	Apr	May	Jun	Peak movement	Hr watched
Selsey Bill	301	56	2	113 on 23 Apr	10
Worthing Beach	331	338	40	157 on 2 May	7¼
Brighton Marina	2474	968	-	515 on 2 May	-
Splash Point (Seaford)	1259	225	-	510 on 24 Apr	11
Birling Gap	262	3	-	120 on 24 Apr	21/2

Summering was indicated by up to eight in Pagham Hbr and up to three in Chichester Hbr throughout June. The first returning birds were 17 at Pilsey Island on 11 Jul. A few were then regularly reported from the Rye area until the end of the year, all in single figures except for 13 on the Flat Beach (Rye Hbr LNR) on 5 Sep. The only evidence of autumn passage offshore was 7 W at Selsey Bill on 24 Oct.

In the second winter period, no gatherings exceeded those in the *WeBS* table. Numbers at Pilsey Island built up from 76 on 31 Oct to a maximum of 600 on 12 Dec. At Pagham Hbr, counts were all in single figures except for 21 on 4 Dec. Away from the main sites, there were two at Pulborough Brooks on 6 Nov, one was resident on the Adur Estuary throughout December and there was one in the Lower Cuckmere Valley from 20 to 29 Dec. [CJRB]

0538. WHIMBREL

Numenius phaeopus

Common passage migrant; very scarce summering and wintering species. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	1	1	3	2	175	8	60	85	10	4	1	5
Chichester Hbr	1	-	1	-	105	5	41	76	5	1	-	2
Pagham Hbr	•	1	2	1	18	2	11	8	3	3	1	3
Lower Adur Estuary	1	-	-	nc	nc	nc	nc	nc	1	-	-	-
Rye Bay	-	-	-	-	52	1	8	1	1	-	-	-

The monthly *WeBS*' counts at the principal locations were as follows:

From 1 Jan to 3 Mar a single bird was seen either at Chichester Hbr or Pagham Hbr. One flew west past Splash Point (Seaford) on 3 Mar and presumably landed in Pagham Hbr, as there were two there from at least the 13th. They were joined on the 18th by three more birds which were either very early migrants or had been over wintering somewhere in Britain.

The first real sign of spring passage was of 4 E at Splash Point on 2 Apr, but passage was light and occasional until the 19th when 27 E were seen at Selsey Bill, 18 E at Telscombe Cliffs and 68 E at Splash Point. The main passage period lasted until 3 May with peak counts at Splash Point of 141 E on 22 Apr and 110 on the 24^{th} , followed by 42 E at Selsey Bill on the 10^{th} , 28 E at Splash Point on the 15^{th} and 91 E at Brighton Marina on the 22^{nd} .

		Mar	Apr	May	Jun	Jul	Aug	Total
Selsey Bill	Е		189	110				299
	W		5	2		1		8
Worthing Beach	Е		249	135	18		1	403
	W		28	18	4	4	4	58
Brighton Marina	Е		85	432				517
	W		-	-				-
Telscombe Cliffs	Е		68	41		2	1	112
	W		-	-		20		20
Splash Point (Seaford)	Е		399	171				570
	W	1	-	-				1
Birling Gap	Е		169	51		1		221
	W		-	-				-

Counts during the migration season at the principal seawatching sites were as follows:

Numbers recorded during spring were significantly lower than in 2004, but this may be due, at least in part, to reduced coverage or reporting, e.g. the 85 E at Brighton Marina on 23 Apr was the only record received from there that month. Spring passage continued into early June, the last birds being one in Chichester Hbr on the 6th and one at Castle Water (Rye Hbr LNR) on the 9th.

Numbers at the Rye Hbr LNR nocturnal roost started with 22 on 19 Apr, 61 on the 23^{rd} and then increased from 338 on the 29^{th} through a peak count of 373 on the 30^{th} to 243 on 5 May. In the autumn, there were two there on 9 Jul and three on 13 Aug.

Autumn passage was first noted on 19 Jun when two were seen in Pagham Hbr followed by one at Rye Hbr LNR on the 22^{nd} and 33 S at Cuckmere Haven on the 23^{rd} . Thereafter, small numbers were noted during the first half of July, the largest count being ten in Thorney Channel on the 8^{th} . From the 22^{nd} numbers began to increase in Chichester Hbr in particular, from 16 on the 22^{nd} to 41 on the 24^{th} and 22 on the 25^{th} . The only records of actual passage in July were of 1 W past Telscombe Cliffs on 19 Jul and 3 W at Worthing Beach on the 20^{th} .

In August small numbers were reported from several coastal locations with notable counts of 20 in Pagham Hbr on 7 and 11 Aug, 24 which flew high southwards from Pilsey Island on the 12^{th} and the highest count of 76 in Chichester Hbr on the 21^{st} .

Birds were seen inland at several reservoirs and major river valleys in both the spring and autumn. At Iping Common one bird was seen flying north on 6 May and 3 S were seen over Ashdown Forest on 12 Aug.

In the second winter period up to three birds were to be seen in both Chichester and Pagham Harbours to the end of the year. [JAH]

0541. EURASIAN CURLEW

Numenius arquata

Common passage migrant and winter visitor; formerly a very scarce breeder. Åmber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	2358	1476	1178	548	73	1204	1651	1081	2093	2341	1850	1365
Chichester Hbr	1255	869	724	370	45	768	1381	443	1296	1683	1498	777
Pagham Hbr	707	392	202	174	25	331	238	489	637	511	231	298
Rye Bay	373	208	216	3	2	105	31	141	124	92	84	235

The monthly WeBS' counts at the principal locations were as follows:

The county total for January represents 1.6% of the estimated British wintering coastal population of 147,100. Chichester Hbr held numbers above the 1% national threshold level of 1500 in only October this year, compared with January and September in 2004. Counts at Pagham Hbr in January, although less than the 1% level, were nevertheless notable, as was the number in Rye Bay that month.

Notable counts in the first winter period, additional to the *WeBS*' numbers, included 500 at Pett Level on 22 Jan and 5 Feb, 214 at Harbour Fm (Rye Hbr SSSI) on 6 Feb and 71 at Newhaven Tide Mills on 1 Feb.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Selsey Bill	Ε	-	-	-	9	-	-	5	-	-	-	-
	W	-	-	-	2	-	11	32	-	-	-	4
Worthing Beach	Ε	-	-	3	5	3	-	-	-	-	4	-
-	W	-	-	-	2	-	8	-	2	-	-	3
Telscombe Cliffs	Ε	-	-	-	-	-	-	-	-	-	-	-
	W	-	-	-	-	-	-	-	-	-	5	-
Splash Point (Seaford)	Ε	-	2	5	15	4	-	-	-	-	-	-
	W	4	-	8	-	1	-	-	-	-	-	-
Birling Gap	Ε	-	-	3	8	2	-	-	-	-	-	-
	W	-	-	2	-	-	-	-	-	-	-	-

Coastal movements at the principal seawatching sites were as follows:

Coastal movements were generally light, the highest count having been 22 W at Selsey Bill on 19 Jul, but the above table demonstrates the possible early return of this species to the estuaries. Small numbers were present at coastal sites throughout the summer. Notable counts during June were of 282 at South Stakes Island (Chichester Hbr) on the 23rd and 89 at Rye Hbr LNR on the 26th; in July up to 350 were noted at South Stake Island on the 8th and 133 at Rye Hbr on the 3rd. In August it became more obvious that birds were returning when 600 were noted in Pagham Hbr on the 29th and 115 were at Rye Hbr on the 27th.

Nineteen of the 30 records from inland sites involved singletons. The highest counts were of eight at Pulborough Brooks on 7 Feb, five at Bewl Water on 21 Aug and a flock of eight flying west over Cissbury Ring on 17 Sep.

Notable counts in the last four months, additional to the *WeBS*' numbers, included 210 at Rye Hbr on 3 Oct and 194 at Thorney Deeps (Chichester Hbr) on 4 Nov (a monthly maximum), but there were generally fewer large counts in this period than earlier in the year. [JAH]

0545. SPOTTED REDSHANK

Tringa erythropus

Scarce passage migrant and winter visitor. Amber listed species of medium conservation concern

The approximate minimum monthly totals, including WeBS' counts, were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6	6	6	4	6	4	5	4	3	3	7	7

Wintering birds were more or less equally divided between Pagham and Chichester Harbours, although in the first winter period the total numbers were lower than last year. In this period there were up to four at Pagham Hbr and two at Thorney Deeps, with ones and twos at various sites in Chichester Hbr, and a single bird was seen regularly in the Rye Hbr area.

The presence of wintering birds makes the start of spring passage difficult to ascertain. There was a trickle, mostly involving single birds, at Pagham and Chichester Harbours on various dates through the spring, with a maximum of three at Sidlesham Ferry on 22 May. Away from these two sites, there was one in the Pannel Valley NR from 30 Apr to 3 May and a presumed different bird at Pett Level on 10-11 May. The last spring sightings were

on 8 Jun and involved two at the Breech Pool (Pagham Hbr) and either one of these or possibly a different bird at Sidlesham Ferry.

There was a gap of only seventeen days between the presumed last spring birds at Pagham Hbr and the first presumed returning bird, at Thorney Deeps on 25 Jun. There was then a trickle of birds at the usual coastal areas of Pagham, Chichester and Rye Harbours throughout the autumn but numbers were relatively low, the only counts of more than two being three at Sidlesham Ferry on 7 Sep and three in Pagham Hbr on 17 Sep.

The winter flock at Pagham Hbr peaked at three by 29 Nov and at Thorney Deeps there was also a maximum of three on 4 Nov and 5 Dec. Elsewhere, there were singletons on odd dates through the late winter period at West Wittering and Fishbourne Channel (Chichester Hbr) in what was another rather poor year for this species. [JC]

0546. COMMON REDSHANK Tringa totanus Scarce resident and fairly common winter visitor and passage migrant. Amber listed species of medium conservation concern

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	1597	1805	2002	621	97	333	1120	1349	1670	2051	2169	2185
Chichester Hbr	953	1260	1506	249	38	207	879	1073	1409	1596	1754	1590
Pagham Hbr	357	222	171	188	18	66	219	154	147	174	162	333
Lower Adur Estuary	105	119	71	nc	nc	nc	nc	nc	61	103	72	95
Rye Bay	111	176	194	139	18	53	21	122	51	170	139	121

The monthly WeBS' counts at the principal locations were as follows:

As usual, the highest counts by far were in Chichester Hbr, where numbers exceeded the 1% national threshold level of 1200 during most of the autumn and winter months, confirming the importance of this area as a wintering site for this species.

In the first winter period, significant counts not included in the *WeBS* table included 574 at Thorney Deeps on 9 Feb (and 508 there on 10 Mar), 148 at Sidlesham Ferry on 5 Jan, 28 at Pannel Valley NR on 13 Jan, 70 on the Adur Saltings on 8 Feb and 49 at Newhaven Tide Mills on 2 Jan.

Spring passage was, as usual, not particularly marked. Numbers at Thorney Deeps decreased from 508 on 10 Mar to 198 on 11 Apr, 70 on 22 Apr and 30 on 25 Apr, giving an indication of the departure of wintering birds during this period.

Breeding, or attempted breeding, was recorded at eight sites, four less than last year. At Rye Hbr, the first chick was noted on 8 May (but did not survive) and, although 12 pairs bred (a similar number to last year) breeding success was probably nil. In Chichester Hbr there were 12 pairs at Thorney Deeps, two pairs in the Pilsey area and a pair, which apparently did not breed, on North Stakes Island. In the Arun Valley there were at least six pairs at both Amberley Wild Brooks and Pulborough Brooks, but nesting success was very low, with no young seen at all at the latter site, and four pairs at Widney Brooks where two broods were seen. Elsewhere, there were two pairs on Horse Eye Level (Pevensey) and one pair on Steyning Levels, but breeding success was not reported. No nesting reports were received from Pett Level or Glynde Levels but the records received indicated a worse nesting season than last year for a species that has already declined seriously in the county.

The first non-breeding birds started returning at the end of June. Numbers at Thorney Deeps built to 200 on 22 Jun, 574 on 21 July and an autumn/late-winter peak of 1000 on 6 Aug. The first returning birds noted on the Adur Estuary were 42 on 22 Jul. Other notable autumn counts included 119 at Rye Saltings on 21 Aug and 200 in Pagham Hbr on 29 Aug. Notable counts during the second winter period away from Thorney Deeps included 250 at Pagham Hbr on 17 Oct, 112 at Pilsey Island on 5 Nov, 185 on the Adur Estuary on 17 Nov and 51 at Newhaven Tide Mills on 19 Nov. [JC]

0547. MARSH SANDPIPER Rare vagrant.

1951: One at Thorney Great Deep on 22 April (*British Birds* 45:223-4, SxBR 4:19) has been re-examined by *BBRC* as part of a review of 1950-57 records and is considered to be inadequately documented (Wallace, Bradshaw & Rogers 2006, *British Birds* 99:460-464). Its apparent large size and the published description's failure to mention the back pattern were the main concerns. Another record in April 1951, in the lower Cuckmere Valley on 29th (*British Birds* 45:224), remains, although suggestions that it might have been the same bird would no longer seem appropriate. There are now ten acceptable county records involving 11 individuals. The others are two at the Wicks in September 1937 and singletons at Waltham Brooks in July 1984, Pett Level in May 1989, Sidlesham Ferry in June/July 1990, Pett Level/Rye Hbr in July 1992, Pett Pools in July 1995, Pevensey Level in August 1996, Pett Level in August 1997 and Pagham Hbr in April 2000. The last of these, on 23rd, becomes the county's earliest record. [RJF]

0548. GREENSHANK

Tringa nebularia

Fairly common passage migrant; a few winter.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	11	11	12	7	13	3	59	113	51	34	41	21
Chichester Hbr	11	11	12	7	13	3	54	91	49	34	41	20

The monthly WeBS' counts at the principal locations were as follows:

During the first winter period all records were from Chichester Hbr, where there were up to 11 at Thorney Deeps (including three colour-ringed birds on 14 Jan), one at Nutbourne on 8 Feb and ones or twos in the West Wittering/East Head area throughout.

The first spring migrant was probably one at Rye Hbr on 2 Apr followed by one at Ella Nore (Chichester Hbr) on 5 Apr and singletons at Pagham and Rye Harbours on 15 Apr. Birds were then recorded virtually daily throughout the spring at the usual coastal sites with regular inland records from Pulborough Brooks and four at Weir Wood Res on 15 May. The highest numbers were from Thorney Deeps, as usual, with double figures recorded on several dates in April and early May and with peak counts of 18 on 26 Apr, 13 on 7 May and the last record of one on the 11th.

Birds were seen regularly through late May and June at, in particular, inland sites. At Pulborough Brooks there were three on 14 May, at Weir Wood Res four on the 15, and singles at both sites into June. The first recorded returning birds were probably the singletons at Thorney Island on 14 Jun and Pannel Valley NR on 5 Jul. Numbers at Thorney Deeps built typically, with high counts of 80 on 6 Aug and 89 on 20 Aug.

Tringa stagnatilis

However, the 150 on Flat Beach Level (Rye Hbr LNR) on 27 Jul was the highest ever count outside Chichester Hbr. Apart from this record and Thorney Island, numbers were relatively low and nowhere in double figures. The best counts were of six at Fishbourne Channel on 22 Sep, four at both Pagham Hbr and Westhampnett (Chichester GP) on 6 Sep and four in the lower Adur Estuary on 14 Sep. Inland there were five at Weir Wood Res on 1 Sep.

During the second winter period, numbers at Thorney Deeps decreased from 48 on 19 Oct to 42 on 1 Nov, 29 on 7 Nov, 22 on 18 Nov and 13 on 4 Dec. Elsewhere, birds were recorded at Pagham Hbr (two), Pulborough Brooks (five on 2 Nov) and West Wittering/East Head (up to six), with singletons at Pilsey Island, Fishbourne Channel and finally at Newhaven Tide Mills on 18 Dec. (JC)

0553. **GREEN SANDPIPER**

Tringa ochropus

Scarce spring and fairly common autumn passage migrant; small numbers winter.

The minimum monthly totals were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
14	12	27	16	2	26	88	124	67	30	30	15

During the first three months, of 55 records from 34 sites 40 were of single birds and ten were of twos. Three were seen at Shopham Bridge (Byworth) on 29 Jan, there were four at Chichester GP on 10 Mar and three there on the 13^{th} and 24^{th} . There was a similar experience in April when of 20 records during the main passage period to the 17^{th} , all bar two were singletons. Rye Hbr LNR hosted four on the 2^{nd} and two on the 11^{th} . An interesting record was of one bird seen at Gatwick Airport on 10 Apr (a departure lounge was not mentioned).

Spring passage was virtually over by 17 Apr although single stragglers were noted at Rye Hbr LNR on 22 Apr and at Sidlesham Ferry and Pevensey Levels on 8 May.

There was an unusual record for the summer of a singleton at Constantia Manor (Isfield) on 1 Jun. Otherwise, the first record of return passage at Castle Water (Rye Hbr LNR) was a singleton on 16 Jun followed by another at Pulborough Brooks on the 18th and two at Thorney Deeps on the 22nd.

Numbers during the typical July, August and September peak passage showed an increase over those of the last three years and were comparable with those of 2001. Although Chichester GP and Rye Hbr LNR continued to provide the greater numbers of records there were regular reports also from the Sidlesham/Pagham area, Pulborough Brooks, Barcombe Res, Newhaven Tide Mills and Pevensey Levels. The highest counts in July were 14 at Drayton GP (Chichester) on the 16th, nine at Rye Hbr LNR on the 24th and ten at Weir Wood Res on the 30th. During August, numbers at Drayton GP peaked at 21 on the 12th, the highest count at Pannel Valley NR was 13 on the 4th while at Rye Hbr LNR it was ten on the 21st. Peak numbers were, as usual, lower in September with highest counts of 11 at Pannel Valley NR on the 4th and Drayton GP on the 19th.

In October 30 records were of ones and twos at ten sites. There were three at the Newhaven Ouse Estuary Project on the 16^{th} and at Pannel Valley NR on the 29^{th} but the highest count was eight at Drayton GP on the 27^{th} . Numbers in November were similar at seven sites but there were threes at Guestling Thorn on the 11^{th} and at Pannel valley NR on the 27^{th} and fours at Barcombe Res on the 20^{th} and Court Lodge Fm (Udimore) on the 22^{nd} .

There were fewer records for December with ones or twos at Wivelsfield St. George, Barcombe Res, Newhaven Ouse Estuary Project, Glynde Reach and Bewl Water (until the 31st) but there were three at Pannel Valley NR on the 9th. [PLS]

0554. WOOD SANDPIPER Tringa glareola Very scarce spring and scarce autumn migrant; recorded once in winter. Amber listed species of medium conservation concern.

The minimum monthly totals were as follows:

Jul	Aug	Sep	Oct
6	10	12	1

Unlike the last four years when birds were been recorded in April, May and June, the first record this year was not until 1 Jul at Castle Water (Rye Hbr LNR). This was followed by singletons at Widney Brooks from 11 to 15 Jul, at Rye Hbr LNR on the 12^{th} , at Newhaven Tide Mills and at Rye Hbr LNR on the 26^{th} and at Weir Wood Res on the 30^{th} .

In August there were fewer birds than the 30 of last year and most records were of single birds of which only three were in the west of the county. At Chichester GP there was one from the 5^{th} to the 7^{th} and another from the 27^{th} to 1 Sep and at Sidlesham Ferry one stayed from the 20^{th} to the 29^{th} . In the east, at Pannel Valley NR, after a one-day bird on the 4^{th} there was a minor influx from the 15^{th} peaking at five on the 19^{th} which reduced gradually to one on the 28^{th} . At Rye Hbr LNR there were 1-2 birds from the 16^{th} to the 20^{th} . At the Ouse Estuary Project (Newhaven) a singleton stayed from the 22^{nd} to the 29^{th} and at Cuckmere Haven another was seen from the 25^{th} to the 31^{st} .

Numbers in September were higher than usual but the east-west roles were reversed with only four birds in the east and eight in the west. At Pannel Valley NR/Pett Level there were up to three between the 2^{nd} and 8^{th} and one at Rye Hbr LNR on the 8^{th} . At Pulborough Brooks there was one on the 3^{rd} , at Chichester GP there were up to two between the 4^{th} and 9^{th} and again between the 17^{th} and 26^{th} , and at Sidlesham Ferry one on the 5^{th} was followed by two on the 22^{nd} .

The latest bird was seen at Sidlesham Ferry on 8 Oct, compared to the 10-year average of 29 Sep. [PLS]

0566. **COMMON SANDPIPER** Actitis hypoleucos Fairly common passage migrant; a few regularly winter; has bred at least once.

5												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	-	-	-	3	14	-	59	33	26	3	-	5
Pagham Hbr	-	-	-	-	2	-	3	3	-	-	-	2
Arundel WWT	-	-	-	1	-	-	-	-	5	-	-	-
Henfield Brooks	-	-	-	nc	nc	nc	nc	Nc	3	-	-	-
Arlington Res	-	-	-	-	1	-	3	1	3	-	-	-
Bewl Water	-	-	-	nc	nc	nc	nc	7	5	3	-	1
Darwell Res	-	-	-	-	1	-	-	1	2	-	-	-
Alexandra Park	-	-	-	nc	nc	nc	nc	Nc	-	-	-	1
Rye Bay	-	-	-	1	6	-	39	17	4	-	-	1

The monthly WeBS' counts at principal sites were as follows:

Birds were recorded in every month. The approximate minimum monthly totals were as follows:

۰,	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	6	5	4	30	51	4	135	101	72	13	7	14

During the first winter period three were in the lower Arun Valley in the first half of January, another three were regularly reported from near Ford (Adur Valley) until 5 Mar, and singletons were at Widewater (Lancing) on the 2 Mar, East Chiltington SP on 6 Mar and Rye Hbr SSSI on the 7th.

The spring migration figures were comparable with those of recent years. The majority of sightings were of singletons with reports coming from 25 coastal and inland waterway sites.

Only four birds were reported in June, on four separate dates, but migration began in earnest in July, with sightings on every day of the month, except the 20^{th} . The highest counts were 11 in Chichester Hbr on the 21^{st} and 24^{th} , ten at the Union Canal (E Guldeford) on the 24^{th} and 26 at Weir Wood Res on the 28^{th} . In August there were sightings on 29 days with counts of 17 at Weir Wood Res on the 1^{st} , ten at Thorney Island (Chichester Hbr) on the 5^{th} and ten at Cuckmere Haven on the 26^{th} . Thereafter numbers tailed off markedly in September and October.

In the second winter period there were two in Pagham Hbr on 4 Dec, a maximum of eight in the Lower Adur Valley on 3 Oct with at least two remaining on 27 Dec, at least one on Lewes Brooks from 16 Nov with two on 31 Dec, a singleton at Weir Wood Res on 2 Oct, three at Bewl Water from 16 Oct with one remaining on 31 Dec, one at Alexandra Park (Hastings) on 4 Dec and a singleton at Rye Hbr LNR on 3 Oct and 4 Dec. [PLS]

0561. TURNSTONE

Arenaria interpres

Fairly common winter visitor and passage migrant; scarce in summer. Amber listed species of medium conservation concern.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	724	509	893	301	75	77	157	262	455	699	685	943
Chichester Hbr	153	142	228	83	72	-	12	6	41	197	93	288
Pagham Hbr	225	179	333	207	2	66	40	108	170	229	338	371
Climping	3	43	39	nc	nc	-	85	94	104	16	14	22
Lower Adur Estuary	42	17	26	nc	nc	nc	nc	nc	•	39	28	101
Glyne Gap	244	61	223	nc	nc	nc	nc	nc	121	156	140	148
Rye Bay	41	47	28	11	1	11	20	54	19	62	72	9

The monthly WeBS' counts at the principal sites were as follows:

The *WeBS*' counts in both winter periods have shown a steady increase over the last five years as shown below:

	2001	2002	2003	2004	2005
Jan - Apr	1290	2128	1569	1734	2427
Oct - Dec	1389	1913	2256	2392	2782
Total	2679	4041	3825	4126	5209

Notable counts in addition to those in the *WeBS* table included 180 at Hastings on 1 Jan, 114 at Glyne Gap (Bexhill) on 20 Jan, 140 at Climping Beach on 26 Jan, 100 at Selsey

Bill on 28 Jan, 195 in Pagham Hbr on 26 March and 110 on the foreshore at Church Norton on 31 Mar.

The monthly totals of eastbound birds at the principal seawatching sites were as follows:

	Mar	Apr	May	Total
Selsey Bill	29	158	147	334
Worthing Beach	19	10	44	73
Splash point (Seaford)	-	-	6	6
Birling Gap	-	-	4	4

An interesting and unusual record was of a bird in summer plumage at Arlington Res on 13 May, the only inland record.

Significant counts on return passage, not included in *WeBS'* counts, included 100 at Pagham Hbr on 27 Jul, 250 on the beach at Selsey Bill on 3 Aug and, in Pagham Hbr, 120 on 6 Sep, 105 on 17 Oct, 122 on 12 Nov and 206 on 10 Dec. [PLS]

0565. **GREY PHALAROPE**

Phalaropus fulicarius

Very scarce autumn and rare winter visitor; usually occurs after gales.

One off Climping on 21 Oct (OM) was the first of nine recorded in late autumn. It was followed by one off Climping and Littlehampton West Beaches on 31 Oct (OM et al). A singleton at Pulborough Brooks from 1-11 Nov (PH et al) was presumably the same on a small pool north of Greatham Bridge on the 18th (PH). Other singletons were at Brighton Marina on 2-3 Nov (PFM, ADW, IJW), Brooklands (Worthing) from the 7th-14th (BFF et al) (see Plate 4), Brighton Marina (IJW, PJWh) and off Climping Beach on the 8th (BFF, OM, DIS) and at Widewater (Lancing) (RJF et al) and then with the Brooklands individual on 12 Nov (PJ et al). Finally there was one at Brighton Marina on 14 Nov (IJW). All were considered to be first-winters.

1987, when 16 were recorded, was the last time more were seen in a year although there were also seven in 1996 and 1988. Forty-five have been recorded in the county since 1990 (and 18 since 2000). All these records have been between September and January with nine being found in October and 15 in November. Records any distance from the coast are unusual and the Pulborough bird was the first since one on Chichester GP in January 1998, although an unidentified phalarope, most likely this species, was seen at Coleman's Hatch in September 1999. [RJF]



0566. POMARINE SKUA

Stercorarius pomarinus

Passage migrant in varying numbers in spring but very scarce in autumn; rare visitor in winter.

2004: The year's sightings were finally completed by single juvenile birds flying west past Selsey Bill on 29 Aug and 30 Sep.

The minimum number of 186 birds seen on spring passage compared well with 2005: the average of 176 for 1988-2004. Totals for the principal seawatching sites were as follows:

	Apr	May	Oct	Total	Hours / bird
Monthly minima	27	159	7	193	
Selsey Bill	8	36	4	48	2.13
Worthing	2	20	-	22	1.57
Brighton Marina	12	159	3	174	n/a
Telscombe Cliffs	3	5	-	8	1.44
Splash Point (Seaford)	19	49	-	68	0.77
Birling Gap	-	28	-	28	0.61
Other sites	1	-	-	1	-

The first sighting of the year was of 1 E at Selsey Bill on 14 Apr, over a week earlier than the 10-year average of 22 Apr. The highest count that month was of 12 at Splash Point (Seaford) on the 30th. Peak passage occurred during the first two weeks of May; there were counts of 20 at both Brighton Marina and Splash Point on the 1st, 31 and 29 at the Marina on the 2^{nd} and 3^{rd} and then a peak count of 54 there on the 12^{th} following which numbers dropped off dramatically. The last spring bird was seen at Telscombe Cliffs on the 26th.

There were several sightings in October. At Brighton Marina, a juvenile bird was seen flying east on the 21st followed by a further 2 E on the 30^{th} . At Selsey Bill, three singletons flew west on the 24^{th} followed by a juvenile on the 30^{th} . [JAH]

0567. ARCTIC SKUA

Stercorarius parasiticus

Fairly common spring and scarce autumn passage migrant; very scarce in summer and rare in winter.

The annual total of 426, which is rather less than the 5-year average of 530, is computed on the assumption that the maximum number seen at any one coastal site was the minimum number seen in the county that day and that birds seen on consecutive days were different.

The approximate monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Monthly total	1	2	3	227	67	4	18	49	31	20	3	1	426
No. of days	1	2	2	20	16	4	10	20	16	9	2	1	

The first bird of the year was a rare sighting of one seen flying west on 2 Jan at Worthing Beach. This was followed in February by 1 W off Pagham Spit on the 14th and 1 E at Splash Point (Seaford) on the 25th. In March, singletons flew east past Splash Point on the 21st (and, presumably the same bird, also at Birling Gap (Beachy Head)) and the 30th. During the first eight days of April only 16 birds were seen but then, on the 19th, a count of 25 at Splash Point heralded the main passage period which lasted until 3 May. During this period 244 birds were recorded but only 34 were seen during the next 27 days

	Jan	Feb	Mar	Apr	May	Total	Peak mo	ovement	Hr watched
Selsey Bill	-	1	-	121	44	165	19	24 Apr	7
Worthing Beach	1	-	-	43	28	71	14	23 Apr	7¾
Brighton Marina	-	-	-	125	93	218	32	23 Apr	-
Telscombe Cliffs	-	-	-	32	11	43	11	23 Apr	3
Splash Point (Seaford)	-	1	2	139	42	181	33	24 Apr	11
Birling Gap	-	-	1	127	28	155	59	23 Apr	6

to the month's end. Monthly totals at the principal seawatching sites, with the hours watched on the peak days, were as follows:

During the summer, there were 11 records between 2 Jun and 25 Jul of singletons seen offshore, seven of which were flying east. The first westerly flying bird was noted on 26 Jul and thereafter there was a steady stream of mainly ones or twos until 6 Nov. The highest counts during this period were of seven and eight in Rye Bay on 19 and 20 Aug, seven there on 3 Sep and six at Selsey Bill on 24 Oct. The last bird of the year was 1 E at Selsey Bill on 1 Dec. [JAH]

0568. LONG-TAILED SKUA

Stercorarius longicaudus

Rare vagrant.

A pale juvenile flew east past Brighton Marina on 30 Oct (IJW). This is the 8th record since 2000, and the 23rd since 1990, but it remains a difficult species to see in the county. A well-watched autumn bird on an inland reservoir would seem to be long overdue but, failing that, with five of the most recent records falling between 29 April and 17 May, a spring seawatch offers the best chance. The others since 2000 were in September and, exceptionally, December. This is the fifth record for Brighton Marina, a total shared by Beachy Head and Selsey Bill, while Splash Point (Seaford) has six. [RJF]

0569. GREAT SKUA

Stercorarius skua

Scarce spring and autumn passage migrant; very scarce but increasing in winter. Amber listed species of medium conservation concern.

The annual total of 185 virtually equals the 5-year average of 187 but is considerably more than the 10-year average of 136. This is, however, a further reflection of the increasing numbers which have been recorded over the past ten years, as shown in the following table:

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Annual totals	57	76	78	116	97	157	227	147	211	192

The approximate monthly totals (computed as described above for Arctic Skua) were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
Monthly total	4	1	2	107	49	10		5	1	4	1	1	185
No. of days	4	1	2	16	22	5		5	1	2	1	1	61

The first bird of the year was seen on, appropriately, 1 Jan at Telscombe Cliffs flying west and was followed by another the next day. These were followed by 1 W at Brighton Marina on the 7th, another on the 21st and 1 W at Birling Gap (Beachy Head) on 5 Feb. The next bird to be found was, unfortunately, picked up dead on Rye GC on 26 Feb. No more were then seen until 5 Apr when the usual spring passage up Channel commenced with 1 E at Splash Point (Seaford) followed by nine more sightings to the 17th. The peak

period of spring passage then occurred over the next 14 days. In all, 115 birds passed through but usually in single figure numbers. Peak counts were of 21 at Birling Gap on the 18^{th} (in 4 hr), 22 at Selsey Bill on the 26^{th} (in $11\frac{1}{2}$ hr), 18 at Birling Gap on the 27^{th} (in $2\frac{1}{4}$ hr) and ten at Selsey Bill on 2 May (in $11\frac{1}{2}$ hr). Numbers thereafter were mainly in ones and twos to 12 June.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
Selsey Bill				57	46	5		2		4	1	1	116
Worthing Beach				18	24	3							44
Brighton Marina	2		1	40	28								71
Telscombe Cliffs	2			2									4
Splash Point (Seaford)				22	8								30
Birling Gap		1		46	8								55

Counts at the principal seawatching sites were as follows:

Return passage was very light as no more than 12 birds were seen to the year's end, starting with two offshore in Rye Bay on 3 Aug. The last bird of the year was 1 W at Selsey Bill on 7 Dec. [JAH]

0575. **MEDITERRANEAN GULL** Larus melanocephalus Scarce but regular visitor throughout the year; has bred in recent years. Amber listed species of medium conservation concern.

This was another exceptional year for this species which continued its expansion in the county. The records were from approximately 115 different locations, noted on 238 different days. They included a further rise in the number of large counts with 116 records involving more than ten individual birds and 37 counts in excess of 40 birds. For the seventh consecutive year county records have been broken with 123 birds recorded at Rye Hbr LNR on 23 Apr and 98 at West Fields (Selsey) on 19 Aug.

In keeping with recent years the abundance of records, especially from several sites near Pagham Hbr, Rye Hbr and the coastal seawatching locations, makes it impossible to evaluate the number of different individuals in the county. The following table shows approximate monthly totals but no attempt has been made to split the different age classes in each month. However, apart from during September, October and November adults were the most frequently noted age group.

	No. of days Recorded	Total	Inland	Highest number recorded
Jan	20	28	1	22 at Pagham Hbr on the 11th.
Feb	17	42	2	20 at Pagham Hbr on the 10 th .
Mar	27	250	6	83 at Pannel Valley NR on the 31 st .
Apr	26	220	0	123 (7 first-year) at Rye Hbr LNR on the 23 rd .
May	19	147	2	28 at Hermitage (Emsworth) on the 14th
Jun	24	140	31	74 at Rye Hbr LNR throughout month.
Jul	22	137	18	82 (34 fledged birds) at Rye Hbr LNR on the 8th.
Aug	19	100	0	98 (c.20 juveniles) at West Fields (Selsey) on the 19th.
Sep	17	81	2	70 (only two adults) at Pagham Hbr on the 8 th .
Oct	16	47	1	26 (four adults) at Church Norton on the 6th.
Nov	13	103	2	53 (22 adults) at Church Norton on the 5th.
Dec	19	79	0	70 at Pagham Hbr on the 17th.

The pattern of occurrence was similar to other years with most being recorded in spring. Pagham Hbr was the main location in January, February and between August and

December whilst between March and July most occurred in East Sussex. Additional noteworthy counts, not shown in the table above, included 17 at Chichester Hbr on 13 Feb, 46 adults roosting in Chichester Hbr on 13 Mar, 58 at Rye Hbr LNR on 26 Mar, 36 at Thorney Deeps on 5 Apr, 21 at Pannel Valley NR on 8 Apr and 26 at Church Norton on 23 Jul.

Despite long hours of seawatching and large numbers recorded in the county, very few were seen passing offshore and, by comparison with recent years, the spring passage was small. However, a spring total of 120, with a peak of 25 on 3 Apr, seen at Brighton Marina, is not shown in the following table of monthly totals of birds passing the principal seawatching sites. Although birds were regularly recorded offshore the only notable autumn movement was 40, mainly first year birds, flying west at Selsey Bill on 6 Nov.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selsey Bill	Ε	3	2	2	3	-	5	13	-	-	2	1	1
	W	2	-	-	2	-	-	-	1	-	4	42	2
Worthing Beach	Е	-	-	2	11	10	-	-	-	-	2	-	-
	W	-	-	-		-	2	5	-	-	1	-	-
Telscombe Cliffs	Ε	1		-	4	-	-	-	-	-	-	1	1
	W	-		-	5	-	-	-	-	-	2	2	2
Splash Point	Е	-	-	5	17	2	-	-	-	-	-	-	-
	W	-	-	-	1	-	-	-	-	-	-	-	-
Birling Gap	Е	-	-	2	4	2	-	-	-	-	-	-	-
	W	-	-	-	-	-	-	-	-	-	-	-	-

The only breeding reported (there were none from Arundel WWT where breeding may have occurred) took place at Rye Hbr LNR where a minimum of 37 pairs nested and probably in excess of 40 young fledged.

Most birds were, as usual, recorded at or near the coast but during the summer unusual numbers were reported inland near Compton. Individuals had been seen in the area early in the year but ten were feeding in a maize field on 10 Jun and numbers increased until 30 were seen feeding on stubble near Chilgrove on the 30th. On 10 Jul a party of 16 was with other gulls at Funtington. One or two birds were recorded from nine other inland locations. [JAN]

0576. LAUGHING GULL

Larus atricilla

Very rare vagrant

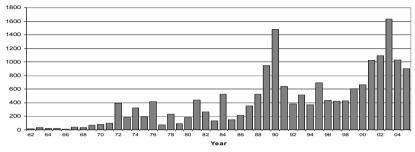
An adult in winter plumage was found on the beach at Ovingdean on 4 Nov (ITB *et al*). It performed well during the course of the morning (see Plate 5 and photograph in *Birding World* 18:463) but was pushed off by a particularly high tide and was not seen subsequently. It was part of an unprecedented national influx in which about sixty were recorded in Britain as a result of Hurricane Wilma racing NE up the eastern seaboard of America in late October (see *Birding World* 18:461:464). Longer staying individuals at Gosport (Hampshire) and Dungeness (Kent), left those unable to make it immediately to Ovingdean feeling somewhat hard done by. It has been accepted by *BBRC* and is the third county record, the others being in July 1923 (the first British record) and a mobile individual in April 1991. [RJF]

0578. LITTLE GULL

Larus minutus

Fairly common passage migrant, most numerous in spring. Scarce in summer and winter.

The total of 905 birds was slightly fewer than recorded during the previous four years but, as the following figure shows, 2005 was another good year for this species.



Approximate number of Little Gulls recorded each year in Sussex 1962 -2005.

The following table of approximate monthly totals shows the two clear passage periods in April and November.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly total	5	-	38	615	70	9	5	7	12	39	102	3
Inland	•	-	•	•	•	-	•	2	•	•	-	-

Early in the year two flew west at Brighton Marina on 8 Jan and singletons were recorded at Cuckmere Haven on 3 Jan, at Selsey Bill on 8 and 9 Jan and at Lancing Beach on the 15th. Thereafter none was seen until five roosted at Camber on 6 Mar and six were at Pagham Hbr on 12 Mar.

The spring coastal passage started on 21 Mar and, with the exception of 19 recorded at Brighton Marina on 23 Mar, remained light until mid-April. As usual the heaviest passage was recorded in East Sussex with peak days being on 19 Apr with 296 E at Splash Point (Seaford) in 13 hr and 142 E at Birling Gap (Beachy Head) in 5 hr; on 22 Apr with 193 E in 12 hr at Splash Point and 70 E at Birling Gap in 5 hr; and on 23 Apr with 93 E at Birling Gap in 6 hr watching. The only double figure day in West Sussex was 60 E at Selsey Bill in 11 hr watching on 22 Apr. The following table of the monthly totals from each site shows the April peak and reveals how scarce this species is, even at well watched sites, outside the spring passage period.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selsey Bill	Е	-	-	1	72	4	-	-	-	6	6	1	1
	W	-	-	-	-	-	-	-	-	-	25	81	1
Worthing Beach	Е	-	-	2	8	3	-	-	-	-	2	-	-
	W	-	-	-	1	-	1	-	-	-	1	-	-
Brighton Marina	Ε	•	•	19	123	44	-	I	•	•	-	-	•
	W	2	ı	-	-	-	-	•	-	•	-	-	•
Telscombe Cliffs	Ε	I	I	-	23	-	-	•	-	•	-	-	•
	W	-	-	-	-	-	-	-	-	-	-	-	-
Splash Point (Seaford)	Е	-	-	-	510	13	-	-	-	-	-	-	-
	W	•	•	-	-	•		•	-	•	-	-	•
Birling Gap	Е	I	I	3	306	7	-	I	-	•	-	-	I
	W	I	I	-	-	-	-	•	-	•	-	-	•

After 15 May none was recorded from seawatch sites but six were at Rye Hbr LNR on 21 May and up to three were there on five days in June. Three summered at Pannel Valley NR with one lingering until 29 Jul. Elsewhere there were singletons at Worthing on 19 Jun and at Pagham Hbr on 7 Jul. The tables show that the autumn passage was mainly observed from Selsey Bill where peak counts were 22 W in $6\frac{1}{2}$ hr on 24 Oct and 53 W in 7 hr on 10 Nov.

The only inland records were single birds at Darwell Res on 25 Aug and at Arlington Res between 27 and 29 Aug. [JAN]

0579. SABINE'S GULL

Rare autumn vagrant.

Single birds seen at Southwick Canal on 28 Sep (ADW, IJW) and flying west at Brighton Marina on 8 Nov (IJW) were both juveniles and both, typically, appeared during strong winds in the autumn. [JAN]

0582. BLACK-HEADED GULL

Common breeding species and abundant winter visitor and passage migrant. Amber listed species of medium conservation concern.

The highest counts were, as in recent years, at the evening roost at Bewl Water where 37,200 were counted on 7 Jan, 50,000 on 8 Jan, 63,000 on 11 Jan and a record 69,000 on the following day. On 12 Jan more than 100,000 gulls roosted at Bewl Water and as in previous years these high counts occurred after a period of windy weather (see *Sussex Bird Report* 55:199-203). Subsequent counts were considerably lower with month peaks of 13,500 on 10 Feb and 9500 on 15 Mar. The *Winter Gull Roost Survey (WinGS)* continued in 2005 but only 14¼ km of coast at eight locations were counted this year (see *Sussex Bird Report* 57:223-227) and the total of 2207 was eclipsed by the roosts at Bewl Water. The only other four figure count during the winter was 15,000 at Pagham Hbr on 10 Feb.

Spring coastal passage was, as usual, inconsistently recorded. The monthly eastbound totals and peak movements for the spring are shown below:

	Mar	Apr	May	Peak movement
Selsey Bill	50	56	46	50 on 25 Mar (5 hr)
Worthing Beach	282	379	800	524 on 1 May (13¾ hr)
Birling Gap	394	206	63	150 on 21 Mar (3¾ hr)

Additionally there were 800 E at Brighton Marina on 22 Mar and 23 Apr.

The breeding season was again successful with approximately 2350 pairs recorded. At Rye Hbr LNR the colony was estimated at 1500 pairs with most at Ternery Pool and highly successful with a total of 1800-2000 fledging (see Plate 6). The first chicks were seen at Ternery Pool on 5 May with the first fledgling seen on 2 Jun. An increase was also noted at Pannel Valley NR where 840 pairs nested. There were three nests on the tern raft at New Lake (Chichester GP) and four young fledged. There were again no records from Arundel WWT.

Away from the breeding colonies only small numbers were reported in the early autumn with 150 at Worthing on 20 Jul being the highest count. However, during August higher numbers were noted with 1800 at Rye Hbr LNR on the 8th, 2000 hawking for flying ants at Thorney Deeps on the 9th and 200 roosting at Camber on the 18th. There were at

Larus sabini

Larus ridibundus

least 4000 at Rye Hbr LNR on 19 Sep and a "huge" number, estimated at 6000, followed the plough at West Fields (Selsey) on 29 Sep. Thereafter there were 25 three figure counts but the only four figure counts were 1800 at Weir Wood Res on both 28 Nov and 18 Dec and 2000 at Thorney Island on 13 Dec.

A leucistic individual was seen at Hove on 7 Jan and at Southwick Beach on 12 Jan. The same, or a similar, individual returned to Shoreham Hbr in November where it was seen into the beginning of 2006. [JAN]

0590. MEW GULL/COMMON GULL Larus canus Common winter visitor and passage migrant; small numbers summer; bred until 1963. Amber listed species of medium conservation concern.

In keeping with recent years the largest numbers were recorded at the evening roost at Bewl Water. Peak winter counts were 29,000 on 11 Jan, 34,000 on 12 Jan, 32,000 on 20 Jan and 40,200 on 10 Feb; the highest counts were, as usual, after periods of stormy weather (*Sussex Bird Report* 55:199-203) when birds arrived at the roost from the east or northeast. In stark contrast very few were recorded from coastal roosts with 1000 on the R Adur (Shoreham) on 1 Feb being the largest and the 14¹/₄ km of coast surveyed for *WinGS* only produced 114 birds. In March roost counts at Bewl Water increased further to 55,170 on the 15th, 75,000 on the 17th and 30,000 on the 22nd whilst 1700 at Shoreham on 20 Mar and 10,000 at Rye Hbr LNR on 26 Mar were the highest coastal counts. Throughout the early portion of the year several smaller flocks were noted feeding on farmland of which 1500 at New Erringham Fm (Shoreham) on 16 Jan and 1000 at Patching Hill on 26 Feb were the largest.

The coastal spring passage was, as in previous years, inconsistently recorded and all of the sites providing timed watches recorded no more than double figure monthly totals. However, at Brighton Marina, there were 1200 E on 23 Mar, 1000 E on 10 Apr and 1100 E on 21 Apr.

As usual this species became scarce after early May; a pair summered at Rye Hbr LNR, a single bird did likewise at Chichester GP and five were seen at Stansted Park on 6 Jun. The first returning adult was noted at Pilsey Sands (Chichester Hbr) on 24 Jun but no large counts were noted at this site until 500 roosted there on 17 Aug. At Rye Hbr LNR 41 were counted on 26 Jul, 55 on 29 Jul, 350 on 8 Aug, 300 on 19 Aug and 1000 on 19 Sep. The only other notable autumn count was 570 at Lee Fm (Patching) on 12 Sep. By comparison with the numbers recorded in the first winter period those at the end of the year were low, with 400 at Rye Hbr LNR on 12 Nov, 220 at Weir Wood Res on 28 Nov, 260 on the R Adur at Coombes on 8 Dec and 3000 at Thorney Island on 13 Dec being the highest counts. [JAN]

0591. LESSER BLACK-BACKED GULL

Larus fuscus

Fairly common passage migrant and winter visitor; small numbers (mainly immatures) summer and a few pairs breed. Amber listed species of medium conservation concern.

Although there were more records than usual most involved small numbers of birds. A total of only nine was logged from the eight locations counted for *WinGS* and, despite a large roost of gulls at Bewl Water, the highest number of this species was seven on 22 Mar. Marginally higher counts were occasionally noted at coastal sites with 41 and 45 at

Pagham Hbr on 5 and 10 Feb respectively, 20 at Newhaven Tide Mills on 10 Feb and 30 at Scotney Court GP on 25 Mar. As usual, there was very little spring coastal movement recorded; 22 E at Brighton Marina on 21 Apr was the only notable record.

Nesting activity was reported from Worthing, Brighton, Newhaven (seven pairs) and Rye Hbr LNR (three pairs) but the species was more widespread in the spring as indicated by one or two being noted in eight of the 105 BBS squares surveyed. A pair showing territorial behaviour at Pulborough Brooks during April and May, was also noted as prospecting at nearby Widney Brooks in May and a pair was present, but did not breed, at Duncton Common

Between mid-June and 8 Oct there were 13 double figure counts from seven coastal sites with the highest being 45 at Brighton Marina on 16 Jul. On 13 Oct there were 120 at Scotney Court GP and on the following day 265 at Northpoint Pit (Rye). Thereafter the only notable counts were 70 at Weir Wood Res on 28 Nov and 40 at Rye Hbr LNR on 30 Nov. [JAN]

0593. YELLOW-LEGGED GULL Larus michahellis Fairly common but localised visitor, mainly in late summer and autumn.

The following table, showing the minimum monthly totals and highest counts at each of the main sites, reveals the usual summer peak:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	9	7	4	12	2	9	65	117	247	65	12	20
Selsey Peninsula	3	2	2	-	1	8	30	90	232	60	5	1
Shoreham area	-	-	-	-	1	1	7	13	14	2	-	-
Brighton Marina	6	-	2	4	-	•	11	10	-	•	4	5

Although the table shows the typical occurrence with a mid-summer influx to the Selsey Peninsula there were more records during other seasons. The highest summer counts were, as usual, from Pagham Hbr where eight were recorded on 20 Jun, 30 on 23 Jul, 90 on 20 Aug, 232 on 10 Sep and 60 on 18 Oct. Records from Southwick Beach suggested at least 20 different birds were seen in July although the peak count of 13 occurred on 11 Aug. The peak count on the R Adur (Shoreham) was 14 on 15 Sep. At Brighton Marina the highest numbers were also noted during the summer. However, from this site, there were notable records at other seasons including six on 6 Jan, four on each of three days between 20 and 24 Apr, which were considered to be different birds, and up to five recorded in November and December. Ten at Southwick on 6 Dec, during an influx of Herring Gulls, was the only double figure count in the winter.

With the exception of two at Small Dole on 9 Jul and singletons at Warnham LNR on 23 Nov and 26 Dec the records were from locations at or near the coast. [JAN]

0592. HERRING GULL

Larus argentatus

Common breeding resident, passage migrant and winter visitor. Amber listed species of medium conservation concern.

A total of 699 was recorded from the eight locations counted for *WinGS* and the highest number noted at the gull roost at Bewl Water was 106 on 11 Jan. Apart from these there were 11 three figure counts during the first winter period with the largest being 600 feeding, with other sea-birds, over fish shoals at Worthing on 26 Jan; 600 roosting at Brighton Marina also on 26 Jan and 1500 at Pagham Hbr on 10 Feb.

Nesting was sporadically recorded from just eight locations; at Bognor, Worthing, Shoreham-by-Sea, Southwick, Brighton, Saltdean, Rye Hbr LNR, and the roof tops at Rye Hbr and Wharf where over a 100 pairs were estimated. However, breeding was considerably more widespread than the records would suggest as it was recorded in 43 of 105 *BBS* 1-km squares surveyed. In the last full breeding survey 1918 pairs were found in 149 different 1-km-squares (Sussex Bird Report 54:182-185).

Notable non-breeding counts during the early summer from Brighton Marina were 255 on 22 May, 355 on 20 Jun and 600 on 6 Jul whilst at Worthing 1000, mainly immatures, were feeding offshore on 19 Jun. Inland there were 120 at Sandgate Park (Storrington) on 3 May and 600 near Small Dole on 26 Jul. This species has been recorded increasingly feeding on agricultural land typified by records of 2000 following the plough at Steyning Round Hill on 27 Aug, 1000 doing the same at nearby Steep Down (Lancing) on 29 Aug, 85 behaving similarly at High Cross Fm (Uckfield) on 27 Oct and 240 at the same site feeding on a newly sown field on the following day.

Four figure counts during the autumn and winter were 3000 at Rye Hbr LNR on 19 Sep, 1000 at Brighton Marina on 13 Nov, 2000 flew to roost at Shoreham on 17 Nov and 1000 roosting at Camber on 16 Dec.

There were no records of birds showing the characteristics of the northern Scandinavian Herring Gull (*L. a. argentatus*). Members are reminded that descriptions are required for all sub-species other than *L. a. argenteus*. [JAN]

0592.03 CASPIAN GULL

Very rare winter visitor.

A second winter bird was seen at Pebsham Pond on 19 Feb (KMJ). This is the 7th county record and the fourth to be found by the same observer in this general area. All records have been since 2001 and all but one during the period 12 Jan-19 Feb. The other, on 11 Aug is, to date, the only county record west of Newhaven. Although probably under-recorded in the county, and despite published records being fully documented, it is unlikely that all would meet the rather strict criteria by which *BBRC* judged all pre-2000 records. This tricky form remains part of the Herring Gull complex, at least for the time being, and those who struggle with its identity might prefer it to remain that way. [RJF]

0598. ICELAND GULL

Very scarce winter visitor and passage migrant.

A second winter bird at Selsey Bill on 27 Jan (BJC, OM) was the only record. This record is only the third in the past four years with none in 2004 and singletons in April 2003 and January 2002. [JAN]

0598.01 KUMLIEN'S GULL Very rare vagrant

A second summer bird was present in the Brighton area between 3 Feb and 21 Mar (IJW *et al*). It roamed as far west as King Alfred (Hove) and inland to Whitehawk but was most often encountered at Brighton Marina, at least during the first part of its stay. It was not, however, until it was 'relocated' on nearby Roedean mini-golf course on 1 Mar (ITB *et al*) that most were aware of its continued presence and likely identity. A series of

Larus argentatus cachinnans

Larus glaucoides kumlieni

Larus glaucoides

excellent digital images taken there (see Plate 7 and www.thebirdsofsussex.co.uk) enabled its identification to be established beyond doubt. This was the first record of this not-always-distinctive race in the county and while at Roedean it attracted a steady stream of admirers from inside and outside the county. [RJF]

0599. GLAUCOUS GULL

Larus hyperboreus

Very scarce but regular winter visitor and passage migrant.

2003: The first summer bird recorded at Widewater (Lancing) on 20 and 21 May was seen and photographed at low tide on the Adur Estuary on 25 May (CWM).

2005: There were four substantiated records involving probably three individual birds. One, in third winter plumage, was seen moving east at Telscombe Cliffs on 9 Jan (DHH). Another one, thought to be either a first or second winter plumaged bird, was at Cuckmere Haven from 28 Jan to 2 Feb (MDA, JC, ARK) and again in the Seaford to Cuckmere area from the 5th to the 8th (MO). A first winter bird was seen at Brighton Marina on 1 Apr (IJW) and may have been the same individual seen on the Adur Estuary (Shoreham) on the 4th (DG, PJ) and at Brooklands (Worthing) from the 4th to the 6th (MO). [JAN]

0600. **GREAT BLACK-BACKED GULL** Larus marinus Common winter visitor and passage migrant; small numbers summer; breeding confirmed for the first time in 2000.

Throughout the year the species was counted regularly at Chichester, Pagham and Rye Harbours. The following table shows the maximum count in each month from these sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chichester Hbr	2	-	-	28	60	80	85	48	3	70	45	57
Pagham Hbr	21	450	56	80	10	280	66	140	280	45	5	151
Rye Hbr	10	30	2	17	1	6	75	71	297	44	75	-

A total of 78 was recorded from the eight sites counted for the *WinGS*. Other notable counts early in the year included 80 at Brighton Marina on 6 Jan, 200 at Birling Gap (Beachy Head) on 5 Feb and 700 at Arlington Res and 400 at Pagham Hbr on 10 Feb.

Breeding occurred at all the previously recorded locations; at Southwick two pairs each raised two young, five pairs nested successfully in Brighton, a pair raised two young at Newhaven, a pair raised two young at Bexhill and a pair again nested on the roof of a building at Rye Wharf. Additionally a pair raised two young at Hastings Old Town.

Apart from the figures shown in the table above the highest numbers in the autumn and second winter period were 150 offshore at Selsey Bill on 3 Sep, 133 roosting at Camber on 24 Sep, 65 loafing on an island in the R Adur (Shoreham) on 22 Nov and 300 and 370 roosting at Camber on 10 and 16 Dec respectively.

During the year four birds bearing Norwegian rings were noted at Brighton Marina: two on 4 Jan in a flock of 45), one on 28 Apr and one on 16 Nov (in a flock of 50). [JAN]

Rissa tridactyla

0602. KITTIWAKE

Common but localised breeding species; common winter visitor and passage migrant. Amber listed species of medium conservation concern.

As usual most of the records of this species were of coastal movements but, like 2004, the numbers involved were lower than in recent years. The smaller numbers are evident in the following table showing the monthly totals from the principal seawatching locations. The close proximity of the breeding colonies to sites in East Sussex, particularly Splash Point (Seaford), makes the recording of movements impossible.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selsey Bill	Е	30	7	23	9	26	5	2	9	-	-	1	45
	W	60	9	27	-	13	16	-	4	2	474	111	60
Worthing	Ε	53	51	11	9	22	1	-	-	-	-	-	2
	W	23	5	9	3	1	-	-	-	-	1	-	39
Telscombe Cliffs	Ε	-	-	23	-	-	-	-	-	-	-	14	-
	W	96	-	-	-	-	-	-	-	-	-	21	-
Birling Gap	Ε	-	19	80	920	125	-	10	-	-	-	-	-
	W	-	2	-	-	-	-	-	-	-	-	-	-

At Birling Gap (Beachy Head) there were 200 E on both 18 and 19 Apr and 250E on 21 and 22 Apr in watches between 3 and $5\frac{1}{4}$ hr duration. The peak numbers recorded at Brighton Marina were 1300 W on 2 Jan, 300 W on 12 Mar, 265 E on 26 Apr, 430 E on 12 May and 610 E on 15 May. Interestingly, the largest movement of the year on 2 Jan was presumably fairly local as only small numbers were seen from the four other locations watched on the same day. The peak counts at Selsey Bill were during the autumn with 180 W in $6\frac{1}{2}$ hr on 24 Oct and 211 W in 8 hr on 30 Oct.

On 12 Jun 85 pairs were counted on the cliffs near Newhaven and on 10 Jul there were 721 nests at Splash Point, the majority apparently with two chicks. There were no inland records. [JAN]

0604. IVORY GULL

Pagophila eburnea

Not recorded with certainty in the county.

c1845: One obtained near Worthing in about 1845 is considered to be inadequately documented.

1848: One obtained at Hastings in August and one obtained at Rye in winter are considered to be inadequately documented.

1849: Two obtained near Brighton and one obtained at St. Leonards-on-Sea prior to 1849 are considered to be inadequately documented.

1875: One shot near Lewes on 16 Jan is considered to be inadequately documented.

1882: One shot at Beachy Head in February or March is considered to be inadequately documented.

1931: An adult at the mouth of the R Rother at Rye Hbr on 6 Jan is considered to be inadequately documented.

1954: An adult at Cuckmere Haven on 19 Nov has been re-examined by *BBRC* as part of a review of 1950-57 records and is considered to be inadequately documented (Wallace, Bradshaw & Rogers 2006, *British Birds 99:460-464*).

BBRC's decision on the 1954 record opened the way for a full review of the species' status in the county (see pages 214 - 225). This has resulted in all of the above records being considered to be inadequately documented by *SOSRC*. This view was endorsed by

SOS Scientific Committee and SOS Council and the species has been removed from the county list. [RJF]

0624. LITTLE TERN

Sterna albifrons

Scarce breeding summer visitor and fairly common passage migrant. Amber listed species of medium conservation concern.

	Apr	May	Total	No. per hr watched
Selsey Bill	272	272	544	1 3⁄4
Worthing Beach	95	31	126	1
Brighton Marina	-	-	316	n/a
Telscombe Cliffs	6	3	9	1/4
Splash Point (Seaford)	24	37	61	1/2
Birling Gap	53	15	68	1

The totals at the principal seawatching sites were as follows:

The first records were at Rye Hbr LNR with single birds on both 5 and 6 Apr. Then on the 15th three returned to Pilsey Island (Chichester Hbr) and a further two at Rye Hbr LNR. Birds were seen every day after that with observers at Selsey Bill recording 15 on the 17th, 38 on the 19th, 42 on the 24th and 80 on the 30th. Other significant counts were 25 at Birling Gap on the 23rd and 36 on both the 23rd and 30th at Worthing Beach. Reports from Brighton Marina comprised only a spring total and maximum counts of 79 on 30 Apr and 63 on 2 May. May figures were generally less than last year except at Selsey Bill where the best count was 52 on the 12th. Forty five were seen at the entrance channel to Chichester Hbr on the 13th.

Breeding at Rye Hbr LNR was better than last year. Eighteen pairs nested and scrape building was observed from 10 May. On 25 Jun a total of 17 chicks was present within the enclosure on shore ridges. Success at Flat Beach was low, perhaps due to predation by Kestrels and gulls, and only one chick was fledged from here. Overall, approximately 20 fledglings was the final total. There was no other breeding recorded this year, although a single pair in May and three pairs in June were reported from West Sussex.

In July, birds were recorded on 14 days, of which 12 were in double figures, the highest being 80 at Pilsey Sands on the 8^{th} and 50 at Rye Hbr LNR on the 11^{th} . There were two double figure counts from the 11 bird days in August; 21 at Rye Hbr LNR on the 8^{th} and 22 at Pilsey Sands on the 19^{th} . Records in September were down to four on the first three days, the highest being a group of eight at Church Norton on the 1^{st} . There were no other reports until the final single bird at Pilsey Sands on 6 Oct. There were no inland records. (DEGC)

0605. GULL-BILLED TERN Rare vagrant.

Gelochelidon nilotica

One was seen at Rye Hbr LNR on 7 May (WT, BW), at Widewater (Lancing) for an hour in the evening of 21 May (CWM *et al*), west off Selsey at 0955 hr on the 22^{nd} (TJE, OM *et al*), west off Worthing at 2005 hr on the 22^{nd} (JAN) and on the R Adur at Shoreham Airport from the 26^{th} to at least 6 June (RAI *et al*) (see Plate 8). All records have been accepted by *BBRC* and are assumed to relate to the same wandering second-summer or adult which was also seen at Dungeness (Kent) during the 4^{th} -15th May (photographed in *Birding World* 18: 186 and 509) and Titchfield Haven (Hampshire) on the 23^{rd} . When it

finally settled on the R Adur it was regularly to be found digging up lugworms from the exposed mudflats before washing them in the river (see pages 248 - 249).

This is the fifth to be seen in the county since 1990, the others being in late May (two together in 1995 and one in 2003) and July (1999). It is the first to be recorded in the Shoreham area since September 1950 when one was seen over fields and mudflats on the R Adur, while those with reservations about the identification of the regular flypasts reported from Selsev Bill in the early 1960s can finally acknowledge that the species has been recorded there. [RJF]

0606. CASPIAN TERN Rare vagrant.

An adult flew east at Portobello at 1916 hr on 8 Jul (DHH) and has been accepted by *BBRC.* This is the first to be recorded in the county since 2001 and only the 16th in total. There are records for every month from March (31^{st}) to September (13^{th}) with most in July (7), May (3) and September (2). With many observers not having seen this species in the county a lingering individual at a non-sensitive site would be most welcome. [RJF]

0627 **BLACK TERN** Scarce passage migrant.

The minimum monthly totals were as follows: Mav

70

Apr

Jun

10 15 41

Jul

Aua

Sep

24

Oct

Nov

Numbers on spring passage were significantly higher than those for last year but
estimating numbers in May was complicated by the absence of dated counts from Brighton
Marina. Records commenced a little later than last year with one at Splash Point (Seaford)
on 19 Apr. The next was at Birling Gap (Beachy Head) on the 22 nd followed by five on
the 23 rd . Also on the 23 rd two were seen at Brighton, two at Worthing Beach and one at
Selsey Bill, followed by another on the 24 th . There were records from three sites on the
30 th , the best being six at Birling Gap and ten at Worthing Beach. In May there were 22
records from nine sites, the highest count being 25 at Brighton Marina on the 2 nd .
Observers at Selsey Bill saw ten on the 12 th and 14 on the 13 th and at Splash Point there
were ten on the 15 th . The only inland spring record was of four at Weir Wood Res on 16
May.

There were only three records in June, all at Rye Hbr LNR, with seven on the 25th, ten on the 26^{th} and one immature on the 28^{th} . In July, birds were at three sites on six dates, the highest being five at Rye Hbr LNR on the 11^{th} and four at Church Norton on the 27^{th} .

The main period of autumn passage was from 17 Aug to 4 Sep. In August birds were seen at 12 sites on 16 dates with eight on Pilsey Island on the 17th, five at Arlington Res on the 26th, ten records of multiple single figure numbers at Rye Hbr LNR with a maximum of five on the 26th and a monthly maximum of nine at Ivy Lake (Chichester GP) on the 28th. In September 24 birds were recorded on six dates with a good count of 14 on the 1st at Ivy Lake. In October there was just a single bird on the 27th at Selsey Bill. In November, a singleton was seen at Barcombe Res from 7th to 13th but was found dead there on the 14th and was reported as being very thin. [DEGC]

Hvdroprogne caspia

Chlidonias niger

0611. SANDWICH TERN

Sterna sandvicensis

Scarce breeding summer visitor and common passage migrant; rarely recorded in winter. Amber listed species of medium concern.

There were records of two birds presumed wintering in Chichester Hbr on eight dates between 5 and 31 Jan. Three birds were reported at Climping Gap on the 6th and one flew west at Shoreham the same day. One at Selsey Bill on 12 Feb was surely on passage. The next spring migrants were probably three at Selsey Bill on 9 Mar, followed on the 14th by two at Feltham, two at Worthing Beach and one at Splash Point (Seaford), possibly the same birds. Thereafter, birds were recorded regularly in March as shown in the following table. At Rye Hbr numbers increased from 30 on the 18th to 220 on the 28th.

	Mar	Apr	May	Total	No. per hr watched
Selsey Bill	93	1809	888	2790	7.4
Worthing Beach	103	1491	1029	2623	17.2
Telscombe Cliffs	11	408	192	611	6.1
Splash Point (Seaford)	102	1659	760	2521	12.5
Birling Gap	49	1477	341	1867	22.6

The easterly spring passage totals at the principal seawatching sites were as follows:

Reports from Brighton Marina were only of a minimum spring total of 6400. On 1 Apr the minimum count at Ternery Pool (Rye Hbr LNR) was 350. Counts in double figures (all easterly) continued until the 18th when they began to peak as follows (some duplication is inevitable):

		18 Apr	19 Apr	20 Apr	21 Apr	22 Apr	23 Apr	24 Apr
Selsey Bill	No. of birds	125	230	8	116	282	-	-
	Hr watched	7	9	21/2	?	11	10	7
Worthing Beach	No. of birds	-	244	21	94	236	286	215
	Hr watched	3	31/2	1	?	51⁄2	7¾	5¾
Brighton Marina	No. of birds	200	-	400	-	600	-	-
	Hr watched	?	?	?	?	?	?	?
Splash Point (Seaford)	No. of birds	Nc	345	35	44	294	-	210
	Hr watched	Nc	13	21/2	?	12	6½	11
Birling Gap	No. of birds	600	270	12	40	-	-	-
	Hr watched	4	5¼	11⁄2	?	5	6	21/2
Rye Hbr LNR		-	100	500	150(*)	240	600(*)	-

On 25 Apr it was very unusual for 18 to be seen feeding inside Brighton Marina amongst 270 Common Terns. The highest counts in May were all at Brighton Marina with 480 E on the 1^{st} , 1130 E on the 2^{nd} and 610 E on the 15^{th} . High tide roosts at Rye Hbr LNR increased from 350 on 1 Apr to 500 on the 20^{th} and 600 on the 23^{rd} .

In June the Rye Hbr roost increased from 500 on the 15^{th} to 750 on the 21^{st} including juveniles. Five hundred were still there on 18 Jul, reducing thereafter but increasing again to 610 on 7 Aug. On the 18^{th} there were 365 on the Ternery Pool and 674 at the Flat Beach Level (Rye Hbr LNR) at the same time.

Breeding at Ternery Pool (Rye Hbr LNR) was not quite as good as last year's record figures, but still very successful with more than 200 pairs raising probably 300 fledglings.

Westerly passage was very slight throughout July, August and September, the highest counts being 110 offshore in 4 hr at Selsey Bill on 7 Jul, 40 in $1\frac{1}{2}$ hr at Telscombe Cliffs on 7 Aug and 43 in 3 hr at Selsey Bill on 25 Sep. On 3 Sep there was a count of 220 offshore at Rye Hbr LNR and a roost of at least 200 there on the 7th.

Records for October and November were nearly all in single figures except at Rye Hbr LNR, where there were 11 on 5 Oct and 18 on the 10th, and Pilsey Sands, where ten were counted on the 13th. Four were seen at Goring Beach on 24 Dec and up to four remained at Emsworth and Chichester Hbr during the month, (the last seen at Emsworth on the 28th.) There were no inland records. [DEGC]

0615. COMMON TERN

Sterna hirundo

Fairly common breeding summer visitor and common passage migrant.

Records show much higher figures than last year (see Common / Arctic Tern). The first record was of a single bird on 17 Mar at Rye Hbr LNR, four days earlier than the previous first arrival date (21 Mar). This was followed by further singletons on the 20^{th} at Worthing Beach and the 22^{nd} at Selsey Bill and then by seven at Newhaven on the 23^{rd} . Counts in single figures continued until 6 Apr when 20 were at Ternery Pool (Rye Hbr LNR). There were ten counts over 100 before the end of the month, the highest being on the 19^{th} with 272 at Splash Point (Seaford) and 320 at Selsey Bill. At Brighton Marina it was very unusual for 270 to be feeding inside the marina with 12 Arctic Terns on the 25^{th} . Finally there were 227 at Worthing Beach on the 30^{th} . High counts continued in early May, notably 1621 on the 2^{nd} at Seaford and 390 on the 15^{th} at Brighton Marina.

Breeding at Rye Hbr LNR was more successful than last year with more than 200 chicks fledged from 153 pairs. At New Lake (Chichester GP) 85 chicks were ringed from at least 134 eggs. At least three chicks were raised at Arlington Res. No breeding took place at either South Stakes Island (Chichester Hbr) or at Weir Wood Res after a raft containing a nest was abandoned because of drought.

Four birds at Bewl Water on 21 Aug included one juvenile. There were three juveniles on the Church Norton mudflats on 25 Aug and juveniles were well represented there on the mid-harbour mudflats in a group of 40 on 1 Sep.

In July counts were low, the most notable being 150 at Ternery Pool (Rye Hbr LNR) on the 16th, 450 offshore there on the 30th and 130 at Pilsey Sands on the 28th. A similar pattern of low counts occurred in August with a monthly maximum of 250 at Pilsey Sands on the 4th and at least 200 at Rye Hbr LNR on the 8th. The following months were, as usual, quiet following the exodus of the majority. On 1 Sep there were 40 at Pagham Hbr and 60 at Pilsey Sands. Only single figures were recorded during the next two months, on 12 days in October and just two days in November. The last bird was seen at Thorney Island on the 9th compared to the 10-year average of 30 Oct. [DEGC]

0614. **ROSEATE TERN**

Sterna dougallii

Very scarce passage migrant and non-breeding summer visitor. Red listed species of high conservation concern.

2004: Sightings in June included two at Selsey Bill on the 26th (JA).

2005: The first spring sightings were from Brighton Marina with single birds on 22 and 30 Apr and three on both 2 May (all IJW) and 15 May (IJW *et al*). There were a further three records in May: one at Selsey Bill on the 8th (MO), 1E at Splash Point (Seaford) on the 13th (TJW) and another there on the 15th (SHL *et al*) was probably the bird seen a short time later at Birling Gap (Beachy Head) (DC *et al*). Birds were seen almost daily at Ternery Pool (Rye Hbr LNR) from 14 June to 24 Jul: there were 24 bird days in June, mainly singletons but three on the 25th, and 48 bird-days in July, mostly of two or three,

but four on both the 3rd and 15th. On 7 Jul one was offshore at the mouth of Chichester Hbr and later came into the harbour (DIS et al). The last record was one feeding offshore with other terns at Selsey Bill on 3 Sep (JA). [DEGC]

0616 ARCTIC TERN

Sterna paradisaea Uncertain, but probably a fairly common spring and autumn passage migrant. Amber listed species of medium conservation concern.

The first bird of the year was recorded at Brighton Marina on 2 Apr, three days earlier than the previous first arrival date. Between 19 Apr and 15 May small numbers were recorded on 12 dates from the principal seawatching locations amounting to less than 100 birds and a peak of 18 at Splash Point (Seaford) on 12 May. Observations at Brighton Marina suggested, without detail, that it was an excellent spring with a peak count of 300 E on 2 May. This last is the third highest count recorded in the county (350 E at Seaford on 12 May 2002 and 335 E at Widewater (Lancing) on 3 May 1997) and is particularly notable considering the cumulative total for May (1977-93) was 140 (Birds of Sussex 1996). Unusually, 12 were feeding in association with 270 Common Terns inside Brighton Marina on 25 Apr. Following 300 E at Brighton Marina on the 2nd counts were small, the best being 18 at Splash Point on the 12^{th} . There were no sightings in June and in July just one at Rye Hbr LNR on the 24th.

Records for the rest of the year were all in single figures. In August 24 birds were seen over ten dates, the highest being seven at Selsey Bill on the 23rd. Counts of only one or two were made for the next three months. Birds are not generally seen after October but this year at least 9 birds were seen in November, the last being one at East Head (Chichester Hbr) on the 15^{th} during an SOS outing. This is the latest record since 23 Nov 1997 and compares to the 10-year average of 29 Oct.

One found drowning at Ovingdean on 28 Aug was taken into care and released on 5 Sep. There were no inland records. (DEGC)

COMMON/ARCTIC TERN

Sterna hirundo/paradisaea

Most birds passing seawatching localities remain unidentified as "Commic" Terns. The totals at the principal seawatching sites were as follows:

	Apr	May	Jun	Total	No. per hr watched(*)
Selsey Bill	3792	2813	92	6605	21
Worthing Beach	211	1990	119	2201	361/2
Brighton Marina	-	-	-	16451	-
Telscombe Cliffs	319	609	9	928	11¾
Splash Point (Seaford)	2282	4234	-	6516	41½
Birling Gap	4119	2099	-	6218	96

(*) = for April and May only

Spring passage figures were up c.64% on 2004 and reached similar levels to those for 2001. Only a total spring count was received from Brighton Marina so monthly counts are not available for comparison. The first notable movements in the spring were 500 E in 4 hr and 520 E in 5¹/₄ hr at Birling Gap (Beachy Head) on 18 and 19 Apr respectively. Passage then continued but with three distinct waves, as shown below (hours watched in parentheses):

	22 Apr	23 Apr	2 May	15 May	Peak count
Selsey Bill	107 (11)	448 (10)	520 (11½)	418 (13½)	1020 on 26 Apr in 111/2 hr
Worthing Beach	41 (5½)	779 (7¾)	1581 (7¼)	52 (1¾)	1581 on 2 May in 7¼ hr
Telscombe Cliffs	29 (2)	49 (3)	220 (21/2)	192 (1¼)	220 on 2 May in 21/2 hr
Splash Point (Seaford)	565 (12)	529 (61/2)	2025 (8)	1777 (13¼)	2025 on 2 May in 8 hr
Birling Gap	430 (5)	2368 (6)	880 (3¾)	996 (4¼)	2368 on 23 Apr in 6 hr

Following 108 E in $1\frac{3}{4}$ hr at Worthing on 2 Jun there were only four more records for the month. From 5 Jul records from coastal locations were of birds moving west; the highest count being 320 W in 7 hr at Selsey Bill on the 30^{th} . Records of only double figures occurred on 14 days in August except for 130 W at Worthing Beach on the 15^{th} . Birds were seen on ten dates in September, all in double figures, the best being 45 W at Selsey Bill on the 1^{st} . There were seven records in October, the last being one at Worthing Beach on the 22^{nd} . [DEGC]

0634. COMMON GUILLEMOT

Uria aalge

Fairly common winter visitor and passage migrant; formerly bred. Amber listed species of medium conservation concern.

The minimum monthly totals were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
262	798	100	18	11	13	2	1	3	10	7	100

The totals recorded at the principal seawatching sites (there were no detailed records from Brighton Marina and Birling Gap (Beachy Head) was not watched) were as follows:

	Ja	ın - Fo	eb	Ma	ar - M	ay	J	un - J	ul	Au	ıg - 0	ct	No	ov - C)ec
Direction	Е	o/s	W	Е	o/s	W	Е	o/s	W	Е	o/s	W	Е	o/s	W
Selsey Bill	1	-	4	2	3	2	3	-	12	2	1	2	9	1	13
Worthing Beach	4	2	7	1	2	1	nc	Nc	nc	-	2	2	-	7	-
Telscombe Cliffs	405	-	264	31	31	13	nc	Nc	nc	nc	nc	nc	nc	nc	nc
Splash Point (Seaford)	153	32	15	12	27	4	nc	Nc	nc	nc	nc	nc	nc	nc	nc

The first double-figure counts in January were 11 E and ten offshore at Splash Point (Seaford) on the 22nd. The next were 18 W on the 26^{th} and 56 E and 53 W on the 27^{th} at Telscombe Cliffs. In February there were 14 records in double figures plus, on the 14^{th} , 120 off Shoreham Beach (possibly the same birds) and 150 at Brighton Marina on the 20^{th} . March figures were poor.

During the eight months April-November there were 51 records of 74 birds including 38 singletons and one count of four on 22 Apr at Splash Point. However, numbers improved in December with 18 records of 101 birds including 11 singletons and counts of 16 on the 1^{st} at Selsey Bill, 60 on the 23^{rd} at Shoreham Hbr and 30 there on the 24^{th} .

The RSPCA reported 23 oiled birds in East Sussex and two in West Sussex but the only one appearing in SOS records was on the beach at Winchelsea on 3 Jan, where it was attacked by a Lesser Black-backed Gull and driven back to sea. One injured bird was picked up at Pagham North Wall on 27 Jan. Birds were seen inside Brighton Marina on three dates: two on 17 Feb, four on 4 Mar and one on 5 Sep. [DEGC]

0636. RAZORBILL

Alca torda

Common winter visitor and fairly common passage migrant; formerly bred. Amber listed species of medium conservation concern.

The minimum monthly totals were as follows and are more than eleven times greater than the very low figures of last year.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
188	7406	348	17	25	6	-	-	16	15	7	32

The totals recorded at the principal seawatching sites (there were no detailed records from Brighton Marina and Birling Gap (Beachy Head) was not watched)were as follows:

	Ja	ın - F	eb	Ma	ar - M	ay	Jı	un - J	ul	A	ug - C)ct	No	ov - D	ес
Direction	Е	o/s	W	Е	o/s	W	Е	o/s	W	Е	o/s	W	Е	o/s	W
Selsey Bill	9	8	13	2	3	2	-	-	5	3	1	19	14	-	18
Worthing Beach	11	35	6	3	22	6	nc	nc	Nc	nc	nc	Nc	-	1	-
Telscombe Cliffs	32	-	15	2	11	1	nc	nc	Nc	nc	nc	Nc	nc	-	1
Splash Point (Seaford)	528	12	132	18	38	10	nc	nc	Nc	nc	nc	Nc	nc	nc	nc

In January, the most notable counts were made at Splash Point (Seaford) of 28 E on the 25^{th} and 90 E on the 26^{th} . In February, at Brighton Marina, there were massive counts of 3000 on both the 8^{th} and 17^{th} , beating the previous county record at this site of 2000 on 31 Jan 2003. On the 16^{th} 140 were seen from Brighton Palace Pier and 700 on the 18^{th} . The highest count at Splash Point was 122 E in 1 hr on the 25^{th} . The largest number in March was 200 seen from Brighton Palace Pier on the 23^{rd} . There were three birds inside Brighton Marina on 4 Mar, one on the 5^{th} and one on 8 Sep.

During the eight months April-November there were 44 records of 103 birds including 24 singletons and eight counts of 5-9 from which it would appear that Razorbills are more likely to travel in larger groups than Guillemots. However, numbers improved in December with nine records of 33 birds including six singletons and a count of 11 E and 10 W at Selsey Bill on the 1st.

The RSPCA reported two oiled birds in East Sussex and one in West Sussex. Other reports were of one at Newhaven Tide Mills on 23 Jan and one slightly oiled at Brighton Marina on 3 Apr. [DEGC]

AUK species

The total of 62,243 reported was more than three times that for last year and, although nowhere near the huge numbers for 2003 or the record figures in 2001, was more in keeping with figures for 2002. It must be remembered that with counts both east and west at the same time and large flocks passing from one site to another, most likely feeding movements following fish shoals, duplication is inevitable. Detailed figures for February from Brighton Marina, where the largest counts are usually recorded, were received for only four days.

The approximate monthly totals recorded at the principal seawatching sites, including positively identified Common Guillemots and Razorbills, were as follows:

	Ja	ın - Fe	b	Ма	ır - Ma	ıy	Jun	- Jul	Aug	- Oct	N	ov - De	ec
Direction	E	o/s	W	Е	o/s	W	Е	W	Е	W	Е	0/s	W
Selsey Bill	1783	160	518	1018	80	40	6	6	3	18	4	-	13
Worthing Beach	2413	500	350	427	-	27	5	-	1	4	6	4	-
Telscombe Cliffs	3697	-	2685	111	36	88	nc	nc	nc	nc	11	•	10
Splash Point (Seaford)	6071	-	4160	981	36	42	nc	nc	nc	nc	nc	nc	nc
Birling Gap	66	-	66	926	-	13	-	2	nc	nc	nc	nc	nc

In January there were 14 counts of over 100 on nine days. Notable numbers were first seen on the 26th at Worthing Beach, when 500 were seen in large flocks moving both east and west, followed on the 27th by 377 E and 341 W in 2 hr at Telscombe Cliffs. On the 29th, observers at Selsey Bill saw 566 E in 3 hr and on the 30th there were 243 E in ³/₄ hr at Worthing Beach.

In the first half of February there were 12 counts on six days of over 100, the highest being a massive 12,000 W in large groups at Brighton Marina on 9 Feb. Other movements included 274 E and 93 W in 1 hr on the 2^{nd} and 221 E and 7 W in 1 hr on the 3^{rd} at Telscombe Cliffs. On the 14^{th} , 400 were reported from Brighton Palace Pier followed by a nine-day period when four-figure counts featured, as shown below:

		Worthing Beach		Brighton Marina	Brighton Palace Pier	Te	elscomb Cliffs	е		lash Poi Seaford	
	Е	W	Hr	E	No D	Е	W	Hr	Е	W	Hr
Feb 15	8	94	3/4	5000	1950	185	56	1			
16	1366	46	1	6000	2890	1461	520	2	2950	166	11/2
17	-	-	-	-	600(*)	-	-	-	-	-	-
18	-	-	-	-	120	121	171	1	-	-	-
19	276	3	3/4	-	-	64	368	1¼	63	3366	2
20	-	-	-	-	-	108	12	1/2	1079	231	11/2
21	-	-	-	-	800(*)	-	-	-	-	-	-
22	-	-	-	8000	-	-	-	-	-	-	-
24	-	-	•	4000	-	-	-	•	-	-	•

(*) = mainly Razorbills

At Selsey Bill there were 1060 E in 3 hr on 27 Feb and 700 E in $2\frac{1}{2}$ hr on 5 Mar. Elsewhere during March there were seven counts of over 100, the highest being 700 E in $2\frac{1}{2}$ hr at Selsey Bill on 5 Mar.

In November the highest of five counts on four days was 11 W at Selsey Bill on the 10^{th} , whilst in December birds were seen on four days with 18 W and 5 E at Telscombe Cliffs on the 12^{th} and a minimum count of 40 in Rye Bay on the 29^{th} .

Where birds were positively identified, the proportion of Common Guillemots to Razorbills was 15:85, a reversal of last year's experience. From observations over the past five years it would appear that, when the total number of auks is high, Razorbills outnumber Common Guillemots. However, much may depend on observer coverage and identification capability. [DEGC]

0647. LITTLE AUK

Very scarce autumn passage migrant and winter visitor.

2004: On 21 Nov at Worthing Beach one bird flew west into the observer's telescope view, giving excellent views but for only a few seconds (DIS). This brings the total for the year to four.

Alle alle

2005: After two poor years there was an improvement in 2005 with at least eight birds recorded. The first was seen briefly offshore at Selsey Bill on 8 Jan (JA) and one flew east past Worthing Beach on 13 Feb (JAN). More were recorded in the second winter period with singletons seen from Stanbury Point (Thorney Island) on 18 Nov (CBC) and on the sea at Church Norton on the 28th (AH). Three were recorded from Brighton Marina on 2 Dec with one, possibly remaining from the previous day, on the 3^{rd} . Also on the 3^{rd} a bird passed west with other auks at Selsev Bill (TJE et al). (DEGC)

0665 FERAL ROCK DOVE Common resident.

A total of 166 records were received, an increase compared with 2004. The highest count was noted at Cuckmere Haven with 300 on 27 Mar, although flocks generally averaged 30 birds. One individual, with a flock of Stock Doves at Beachy Head on 16 Oct and 23 Oct, was noted by two observers as having the plumage of a pure bird. [AHP]

0668. STOCK DOVE

Columba oenas Common resident and possible winter visitor. Amber listed species of medium conservation concern.

Records were received from across the county. During the first winter period, the largest flocks of 30 or more birds were confined to coastal areas in the east of the county. Peak counts were of 80 roosting at Rye Hbr LNR on 30 Jan, 70 there on 6 Feb while the 31 at Sidlesham Ferry on 21 Mar was the largest flock in the west. Such flocks were much smaller than those recorded at similar sites in 2004. The only sizeable flock inland was of 40 at Faygate on 27 Feb.

Display was first noted at Bedelands Fm (Burgess Hill) on 12 Mar, territorial activity was noted at Nutley Windmill (Ashdown Forest) on the 28th when a bird was also seen carrying food at Crow & Gate (Ashdown Forest), and a pair was seen at the nest at Weir Wood Res on 16 Apr.

During the breeding season birds were recorded in 27 of the 105 BBS 1-km squares surveyed. Examination of 37 nests revealed that 84% of them contained either two eggs or two chicks while the rest had only one. Eggs were being found up to, and a second brood was noted on, 23 Aug. Owl boxes were again very popular as nesting sites, being recorded at 48 of the 84 confirmed or probable breeding sites. Unusual flocks noted during the summer were of 20 at Pannel Valley NR on 2 May, 17 at West Wittering on the 13th and 20 at Perry Hill (Burpham) on 12 Jun.

Signs of post breeding dispersal and gathering were slow to appear. A flock of 40 was noted at Thorney Deeps (Chichester Hbr) on 1 Aug and there were at least 60 in flight over Rye Hbr LNR on 24 Sep. However, it was not until 11 Oct, when 250 were counted at Rye Hbr LNR that significantly large groups were seen and then mainly in coastal areas. Notable numbers at Beachy Head were 290 E on 16 Oct and 500 mainly west on the 23rd when 800 were also counted in Brighton during a period of Wood Pigeon movement. Movement of significant numbers continued into November with 500 over Brighton on the 4th and 650 at Beachy Head on the following day, 500 S at Westfield on the 5th and. finally, 300 over Brighton on the 9th. Thereafter the only significant numbers were of 190 roosting at Rye Hbr LNR on 14 Nov and 150 there on the 29th. At the end of the year the only sizeable flock was 220 at Pannel Valley NR on 28 Dec. [GK]

Columba livia

0670. WOOD PIGEON

Abundant resident and winter visitor.

The largest flocks noted in the first winter period included 1500 birds at West Dean Woods on 19 and 27 Feb, 10,000 at Stapleash Fm (Chilgrove) on 3 Mar, 600 at St Georges Retreat (Ditchling Common) on the 6^{th} and 5000 at Philliswood (Marden) on the 9^{th} .

During the summer, the only major count was of 700 birds at Perry Hill (Burpham) on 12 Jun and the only significant breeding season report was that 71 pairs bred at Brighton Wild Park.

Although 500 were counted at Cissbury Ring and 400 at Newmarket Hill on 29 Sep, it was not until 23 Oct that significant autumn passage numbers occurred when 3000 were counted at Beachy Head and 10,000 flew southeast at Shoreham Sanctuary. These were followed by a further 4100 E at Beachy Head on the 29th and 5000 at Weir Wood Res on the 30th. Significant numbers were also noted in November. On the 4th, 41,300 W were seen passing Cedar Fm (Hurst Green), 12,000 W at Cissbury Ring, 10,000 E at Goring passing through in half an hour from 0700 hr, 5000 S at Findon Valley (Worthing) and 3000 each at Whitbread Hollow (Beachy Head) and Brighton Wild Park. Passage continued on the 5th with 100,000 at Whitbread Hollow, 31,000 W at Cedar Fm (Hurst Green) 10,300 SW in one hour from 0715 hr at Holywell (Eastbourne), 10,000 SE at Shoreham Sanctuary and 8165 SW at Pett Level. Also on the 5th, a remarkable peak count of 175,000 heading south or southwest was made at Brighton, part of a minimum autumn total of an unprecedented 275,000 birds between 18 Oct and 12 Nov, approximately three times that of either 2003 or 2004.

Finally, on 13 Nov, 32,000 W which were counted at Cedar Fm (Hurst Green), 12,500 S at Beachy Head and 10,000 S at Edburton in just ten minutes, appeared to mark the last of this huge movement with the only significant flock for the rest of the year being 1000 at Horsham on 27 Nov. [AHP]

0684. COLLARED DOVE Very common resident.

The main concentrations of this widespread species still appears to be in the Rye Bay area with 70 at Harbour Fm (Rye Hbr SSSI) on 19 Jan and 96 there on 25 Dec, whilst at least 60 were at Winchelsea Beach on 14 Sep and 260 at the Dimsdale Pumping Station (Winchelsea) on 13 Oct.

Elsewhere, the counts of 38 at Furnace Green (Crawley) on 1 May, 60 at Southwick Beach on 22 Sep and 36 at Henfield on 8 Oct were the only ones of any note.

A Summary of Common Breeding Bird Counts can be found on pages 196 - 197. [AHP]

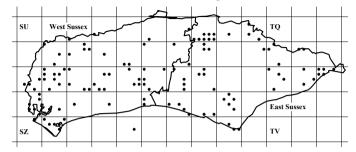
Streptopelia decaocto

0687. TURTLE DOVE

Streptopelia turtur

Scarce summer visitor and passage migrant. Red listed species of high conservation concern.

The distribution of all records is shown in the map below:



The first bird of the year was recorded at Toot Rock (Pett) on 17 Apr, followed by another at Rye Hbr on the 20^{th} and then a steady stream from the 24^{th} of ones or twos for the rest of the month, including four at Hog Wood (Plaistow) on the 29^{th} and four at Edburton on the 30^{th} . One bird, on 26 Apr, boarded a fishing boat five miles off Worthing for half an hour, before heading landwards. In May five were seen on the 1^{st} at Bayham and four at West Dean Woods on the 18^{th} . The highest count of the year occurred at Pannel Valley NR with 14 on 1 Jun.

Breeding season reports involved eight confirmed pairs, including two at Cedar Fm (Hurst Green) but single pairs elsewhere. There were 31 probable breeders, including three each at Thorney Island and The Burgh (Burpham) and two at Edburton, and at least 33 other singing males including three in the Brede Valley. This was a small reduction on last year's figures.

Most other summer records were of just ones and twos apart from eight at Bayham on 18 Jun all purring on territory, six at Castle Water (Rye Hbr LNR) on 1 Jul, and counts of four at Sidlesham Ferry on 2 and 6 Jul, Stretham Manor (Henfield) on the 9^{th} and Finchdean on 1 Aug on cut rape. At Thorney Deeps there was a monthly maximum of 11 roosting on the power lines on 7 Aug, while seven were seen at Harbour Fm (Rye Hbr SSSI) on the 27^{th} .

The only obvious reports of migrants involved a report of a forlorn juvenile in a garden in Angmering on 16 Sep and the last records for the year, on the comparatively early departure date of 24 Sep, were of singletons at West Itchenor and the Seven Dials area of Brighton, which compares with the 10-year average of 12 Oct. [AHP]

0712. **ROSE-RINGED PARAKEET** Very scarce introduced breeding resident.

Psittacula krameri

With only seven records for the year, there appears to be no evidence of any colonisation of the county from neighbouring counties. Apart from a maximum of nine at Copthorne (Crawley) on 12 Jan and two at Pagham Hbr North Wall on 26 Jun, the other reports were of singletons: a female was seen on a peanut feeder at Huntingrove Fm (Slinfold) on 27 Jan, one was at Hindleap Warren (Ashdown Forest) on 15 Apr, another

was reported from Chesworth Fm (Horsham) on 1 May, one was near Sidlesham Ferry on 24 Sep and another was at Pulborough Brooks on 4 Oct. [AHP]

0716. **GREAT SPOTTED CUCKOO** Very rare vagrant.

Clamator glandarius

1990: The individual seen to the north of Shoreham Airfield, from 4 Apr-1 May (SxBR 43:45) was a second-year and not an adult as previously reported.

2005: A second-year found beside the Adur Recreation Ground (Shoreham) on 3 Apr (DP) quickly vanished but was fortuitously refound on the mini golf course at Brooklands (Worthing) from the 5th-9th (CWM *et al*) when it flew off high north at 0945 hr. It was widely photographed (see Plate 9, *British Birds* 98: plate 142, *Birding World* 18:140-141 and 506). It has been accepted by *BBRC* and is the third county record, the first being picked up near Bognor Regis in August 1967. It was probably the highlight of the year for many although the inevitable few that were away at the time regretted that the length of its stay hadn't matched that of the previous record, its occurrence being so similar in every other respect. [RJF]

0724. COMMON CUCKOO Cuculus canorus Fairly common summer visitor. Amber listed species of medium conservation concern.

The first bird was heard at Polegate on 31 Mar, slightly earlier than the ten-year average date of 3 Apr. In the following week, Cuckoos were heard singing at Bewl Water, Old Lodge LNR (Ashdown Forest) and Barcombe Cross, and there was a sighting at Bishopstone. A steady stream of arrivals followed, with a peak count of 11 birds on 17 Apr.

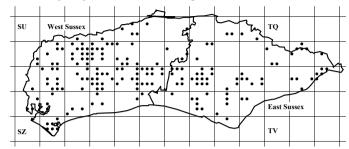
During the *BBS'* survey of 105 1-km squares, a maximum of 53 cuckoos was seen or heard in a total of 34 squares. This compares with the 2004 survey result of a maximum of 32 in 20 squares. Three or more birds were recorded in squares at Burwash, Shoyswell Manor (Etchingham), Laughton Place (Ringmer), Pellingbridge (Scaynes Hill) and Thorney Island.

One confirmed breeding was reported: a juvenile was seen being fed at Woods Mill (Henfield) on 5 Jul by a suspected Dunnock which was too far away for positive identification. Reports were received of probable breeding at 20 other locations, and the estimated number of pairs at the confirmed and probable breeding locations was 27. On Ditchling Beacon a juvenile was seen with two Meadow Pipits on 5 Aug. Twelve juveniles were reported between 24 Jun and 27 Sep, the juvenile recorded at Goring on 27 Sep being the last reported bird of the year, only one day later than the 10-year average date. [CR]

0735. BARN OWL

Scarce breeding resident. Amber listed species of medium conservation concern.

Records of all sightings are shown in the map below:



The monthly totals, excluding visits for ringing, were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
52	21	14	20	20	22	17	17	10	8	23	21

There were frequent reports throughout the year from the Arun Valley, Pannel Valley NR and Rye Hbr.

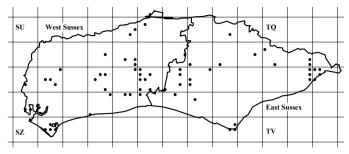
This was an exceptionally good year for Barn Owls nesting in Sussex, as in much of England. A good crop of berries and nuts for rodents in the previous autumn, followed by a mild winter with high numbers of voles and mice surviving, allowed most pairs to start laying two weeks earlier than usual. Breeding attempts were confirmed at 169 sites (97 in 2004) of which 111 were in West Sussex and 58 in East Sussex. One pair had a second brood. New sites used for the first time were 24 in the west and seven in the east but as usual some regular sites were not used. Boxes in barns were used by 83 pairs, boxes on trees by 57 and pole boxes by ten. Only two pairs were reported using natural tree holes. Four pairs nested amongst bales, of which one nest was destroyed by fire, one by theft of bales and one by predation. Other nests were in a church, a disused water tower, a pigeon loft, under an old railway bridge and in an owl loft provided in a modern barn conversion. Of broods counted at the time of ringing or at fledging when known, there were two single chicks, 12 broods of two, 33 of three, 26 of four, 17 of five and 10 of six.

Eleven Barn Owls were reported killed on Sussex roads during the year and one was found drowned in a cattle trough. Two were found dead on the ground after bad weather. [ABW]

0757. LITTLE OWL Fairly common introduced resident.

Records were received from 59 sites, compared to 60 in 2004 and 69 in 2003, and were distributed as shown on the following map.

Athene noctua



A single bird was observed on a newly erected nest box at Pulborough Brooks on 10 Apr. Breeding was confirmed at four sites with four nestlings observed at an undisclosed site on the South Downs on 7 Jul. Information on productivity was very limited with a further three pairs rearing two nestlings each. Breeding was probable at most other sites, due to the sedentary nature of the species. There were three recorded casualties, two adults and one juvenile. [DJM]

0761. TAWNY OWL Fairly common resident.

2005 was an exceptional year with records received from 137 sites, compared to 110 in 2004 and 78 in 2003. As with previous years most records were of calling birds. Birds were present all year at a number of sites, including East Grinstead and Etchingham, where two birds were observed.

Breeding was confirmed at 19 sites and was very probable at a number of others. At Weir Wood Res a breeding pair was observed with two eggs on 18 Mar. At Ashdown Forest a breeding female was observed with a juvenile and one egg on 5 May. At Lavington Plantation three juveniles were observed in a tree on 7 May. Two fledged juvenile birds were observed calling from scaffolding at Barcombe on 17 Jun.

There were two recorded casualties, one of which was an adult male and the other a nestling found underneath a nest box, not previously used, on 19 May. [DJM]

0767. LONG-EARED OWL

Very scarce resident, passage migrant and winter visitor.

Ninety one records were received from seven sites compared to 92 from ten sites in 2004. Roosting birds were present at Rye Hbr SSSI until 4 Mar, a maximum of three being observed on 14 Feb.

Only one record of confirmed breeding was received from West Sussex: at least two juvenile birds were heard, with an adult also nearby, during a Glowworm survey. Site details for this species are strictly confidential because of the species' sensitivity to disturbance.

The first autumn migrant was observed at Pannel Valley NR on 6 Sep. Twelve birds were seen at an undisclosed winter roost in West Sussex on 19 Nov and 5 Dec, decreasing to eight on 17 Dec. At Pannel Valley NR a bird was trapped and ringed on 4 Dec. [DJM]

Strix aluco

Asio otus

0768. SHORT-EARED OWL

Asio flammeus

Scarce winter visitor and passage migrant; has bred. Amber listed species of medium conservation concern.

The following table gives approximate monthly totals taking account of possible duplication at well watched sites.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8	6	11	6	3	1	-	-	5	13	21	22

At Pulborough Brooks one bird was present on 15 Jan with two on the 24th and at Thorney Island three birds were observed on 11 Feb. The first probable spring migrant was one flushed at Beachy Head on 19 Mar which departed high northeast. The next was seen at Sheepcote Valley (Brighton) on 27 Mar followed by another in off the sea at Selsey Bill the next day. The second migrant to be seen at Sheepcote Valley appeared on 16 Apr and a single bird was observed flying in off the sea at Telscombe Cliffs on 24 Apr.

Single birds were observed at Pulborough Brooks on 30 May and 11 Jun, the latter being the latest record of the season.

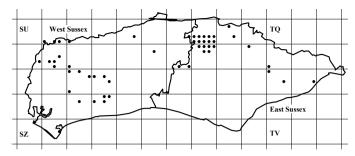
The first autumn birds were singletons observed at Pannel Valley NR and Pagham Hbr on 17 Sep and at Sheepcote Valley the next day. Although a fair number of birds were seen in the autumn, there were only six records of observed migration, all in October. A single bird flew out to sea from Beachy Head on 2 Oct before turning westwards and two went the same way on the 15th. One bird departed southwards from Selsey Bill on the 22nd, one flew out to sea westwards from Beachy Head on the 23rd, another was flushed by gulls and flew out to sea eastwards from Cow Gap (Beachy Head) on the 29th and one flew north at Selsey Bill on 30 Oct. In November, the only recorded movements were of single birds flying in off the sea to the Arun Valley on 13 Nov and roosting in Brighton Marina on 20 Nov.

Winter records were unexceptional, with six birds observed at Rodmell Brooks on 4 Dec, three at Pevensey Levels on 4 Dec, and Rye Hbr on 5 Dec. [DJM]

0778. **EUROPEAN NIGHTJAR** Caprimulgus europaeus Fairly common summer visitor rarely seen on migration. Red listed species of high conservation concern.

The first churring male bird was located in Ashdown Forest on 3 May, a typical date. Mainly single birds were reported thereafter from the breeding areas, apart from a flyover at Wivelsfield on 12 May, until an observer recorded six at Wren's Warren (Ashdown Forest) on 22 May.

Reports were received of birds seen or heard in 45 tetrads of which 22 (32 1-km squares) were in West Sussex and 23 (42 1-km squares) in East Sussex, as shown in the map below.



In West Sussex, the *Wealden Heaths Breeding Bird Survey* (see page 199) was not comprehensive for this species but recorded 21 confirmed breeding territories from eight sites. Observers at other commons noted three at Ambersham & Todham Rough and a further five churring or displaying males in the Lavington Common area. Away from the Wealden Heaths, 12 churring or displaying males were found at six sites (nine 1-km squares), the largest counts being of three at both East Dean and Angmering Park.

In East Sussex, Ashdown Forest Bird Group estimated the breeding population at 54 pairs against 67 in 2004. The remainder of East Sussex produced ten churring birds from six sites, with the largest count being of three at Darwell Wood.

The county totals were: West Sussex, 42 male birds and East Sussex, 64. The county total of 106 males was less than half the 2004 number (288) and reflected the incomplete monitoring of the species compared with the 2004 *Breeding Nightjar Survey (SxBR 57:214-221)*

The favoured "hot spots" provided most of the records received and, where direct comparisons are made at such sites as Ashdown Forest and Iping & Stedham Commons, the indication is that the population remains stable.

The first evidence of successful breeding was of three fledged young found in Ashdown Forest on 12 Jul. Sporadic reports were received from the breeding areas during August but mainly from Ashdown Forest, where two and one recently fledged young were seen on the 7th and 12th. The last sighting from this location was on 26 Aug

Coastal records involving migration were all from Pannel Valley NR where five individuals were noted from 15 Aug to 11 Sep. The final record of the year was of a flying individual at Warnham LNR on 28 Sep, slightly later than the 10-year average date of 22 Sep. [AP]

0795. COMMON SWIFT

Common summer visitor and passage migrant.

The first arrival was a singleton which flew in off the sea at Church Norton on 11 Apr, followed by one at Hassocks on the 16^{th} and another at Patcham on the 20^{th} . Sightings became daily from the 23^{rd} when ten were seen, mostly at coastal locations. The highest counts in April were 50 at Chichester GPs on the 26^{th} and 50 at Pulborough Brooks on the 30^{th} . During May, there were some large counts of birds on passage including 200 at Barcombe Res on the 8^{th} , 150 at Pagham Hbr on the 10^{th} , 300 NE at Chichester Hbr entrance on the 13^{th} and 250 N at Pannel Valley NR on the 17^{th} .

Apus apus

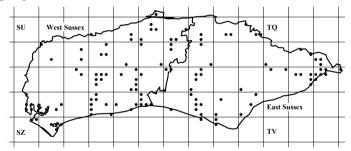
The first screaming, comprising a party of 12 birds, was reported from Chichester on 29 Apr. This is an early date for screaming activity, which indicates the return of birds to their breeding sites. Breeding records included approximately 15 pairs in Cuckfield, 12 pairs in Uckfield, ten pairs in Steyning, four pairs in a barn in Charlton and three pairs suspected breeding in East Chiltington Church. A pair bred successfully in a nestbox erected by the SOS in South Harting. Records of colonies are welcomed.

Some movements were noted in mid-June, the largest being 608 W at Telscombe Cliffs in 20 minutes on the 13^{th} . At least 500 were present at Sidlesham Ferry on 5 Jul. There was a large movement on 7 Jul with 1200 SW over Pannel Valley NR in only 15 minutes.

Return passage was observed at the end of July and early August with 350 at Newhaven Tide Mills on 27 Jul, 400 at Beachy Head on 28 Jul and 160, mostly heading south, from Beachy Head on 7 Aug. There were just ten sightings in September. The last bird of the year was a singleton at Burpham on 18 Oct, slightly later than the 10-year average date of 15 Oct. [GCMR]

0831. **COMMON KINGFISHER** Alcedo atthis Fairly common resident and occasional winter visitor. Amber listed species of medium conservation concern.

A total of 550 records was received for 173 1-km squares distributed as shown on the following map:



Observations during the winter months were similar to 2004 and were as follows:

	Jan	Feb	Nov	Dec
No. of birds	46	30	63	47
No. of inland sites	18	9	25	21
No. of coastal sites	13	11	13	12

There were fewer reports of confirmed or probable breeding than in 2004 and little breeding detail was reported. Breeding was confirmed at two Ashdown Forest sites and was probable at two others. Breeding was also probable at a further three locations in the east of the county and one in the west. Juveniles were sighted at three sites in the east and one in the west.

In the final quarter of the year there were sightings of three or more birds at nine locations. On the R Adur near Beeding Cement Works, two birds were seen together on 3 Oct, possibly disputing territory, and one was seen the same day near the bypass bridge. At the New Lake (Chichester GP), three birds flew across the lake on 5 Oct. On Thorney

Island, three was the monthly maximum in both October and November. There were three birds at both Cuckmere Haven on 4 Nov, Warnham LNR on the 18^{th} , at the Ouse-Glynde confluence on the 22^{nd} and at two sites on the R Ouse south of Lewes in November. In the east, three birds were seen at the Rother Levels on 28 Dec. [SB]

0840. EUROPEAN BEE-EATER Rare vagrant; has bred.

One flew east and then west over Hodcombe (Beachy Head) on 31 May (RHC, MEC) while a pair feasted on bees in gardens in Shoreham on 1-2 Jun (JAH *et al*). The Shoreham individuals (see Plate 10) were the first to linger in the county since four spent three days at Beachy Head in late June 1983, and in that respect were greatly appreciated (see *Birding World* 18:232), although even then one had to be quick off the mark to see them and, departing at tea-time on 2^{nd} , many were disappointed that they didn't stay longer. Nineteen have been recorded since the beginning of 2000, all between 1 May (Selsey Bill in 2000) and 1 Sep (Beachy and Seaford Heads in 2002). [RJF]

0846. HOOPOE

Upupa epops

Very scarce spring and even scarcer autumn passage migrant; has bred.

2004: One seen in a horse paddock near Winchelsea Beach on 25 Aug (NB) was the seventh of the year, the others being between 19 Mar and 8 May.

2005: Five single individuals were recorded in spring: in horse paddocks at North Wall (Pagham Hbr) on 23 Mar (DCo, ECo), on Rickney Marshes (Pevensey) on 3 Apr (SDA), on Henfield Levels on 2 May (KN) and, presumably the same, at Beeding Brooks on 12 May (DS), at Upwaltham on 18 May (per ABW) and at West Dean on 29-30 May (RJF, JWK, NAP). Although fewer than the seven recorded in 2004, this represents an above average showing for recent years as only 20 have been seen since the beginning of 2000. Of the 67 recorded since 1990 nine arrived in March, 29 in April and nine in May. [RJF]



Merops apiaster

0848. WRYNECK

Jynx torquilla

Very scarce passage migrant; has bred. Red listed species of conservation concern.

The 52 records received suggested a minimum of 24 single birds in the year compared with 31 in 2002, 12 in 2003 and 13 in 2004. The only spring record, a late one compared with previous years, was from Woods Mill NR (Henfield) on 22 May and, probably the same bird, in a nearby garden on 23 May.

In August single birds were seen at East Lavant on the 19^{th} , at Sutton Hall (Barcombe Cross) on the 23^{rd} , but reportedly seen there by the gamekeeper from the 5^{th} , and one was trapped at Whitbread Hollow (Beachy Head) on the 27^{th} .

In September there were reports of single birds from 14 sites. In the west these were Cissbury Ring on the 1st, Pagham Hbr on the 1st and 2nd and 9th to 11th, Partridge Green on the 6th, near the R Adur tollbridge on the 7th and Selsey West Fields on the 18th. In the east they were at Pannel Valley NR on the 1st and 9th, Cuckmere Haven on the 2nd, Charleston Reedbed on the 3rd, Winchelsea Beach on the 6th, Shooter's Bottom (Beachy Head) on the 7th and 29th and Birling Gap on the 10th and 22nd, Sheepcote Valley (Brighton) on the 11th, Bewl Water on the 14th and Steyning Round Hill on the 18th.

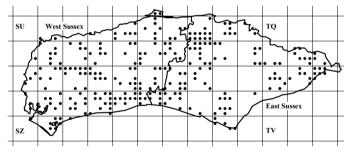
The only October sighting, on the 1st at Beachy Head, was likely to have been the bird reported there on 29 Sep. [RM]

0856. **GREEN WOODPECKER**

Picus viridis

Fairly common resident. Amber listed species of medium conservation concern.

A total of 894 records was received from 355 sites, distributed as shown in the following map:



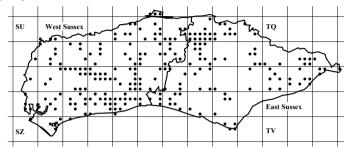
Reports relating to the breeding season provided the following totals of 1-km squares and pairs or territories:

Breeding status	Confirmed	Probable	Present	Total
No. of 1-km squares	32	32	89	153
No. of pairs/territories	40	38	89	167

Despite a large increase in the number of records compared with 2004, there were ten fewer confirmed or probable pairs/territories. Of the total of 153 1-km squares, 53 (cf. 16 in 2004) were in the Ashdown Forest area, with nine confirmed or probable breeding pairs there, the same as in 2004. Other breeding records are shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 197 and the *Summary of Heathland Breeding Birds Counts* on page 199. In addition, there were two confirmed pairs in the Arun Valley. [RM]

0876. GREAT SPOTTED WOODPECKER Common resident.

A total of 781 records was received from 323 sites, distributed as shown in the following map:



Drumming was first reported from Barcombe and Beeding Hill on 2 Jan and from Washington Hill on 5 Jan. Reports relating to the breeding season provided the following totals of 1-km squares and pairs or territories:

Breeding status	Confirmed	Probable	Present	Total
No. of 1-km squares	46	38	61	145
No. of pairs/territories	49	45	63	157

Of the above total of 145 1-km squares, 33 (cf. 16 in 2004) were in the Ashdown Forest area with 22 confirmed or probable breeding pairs/territories in 19 1-km squares (cf. 16 in 15 squares in 2004). Details of other breeding pairs/territories are shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 197 and the *Summary of Heathland Breeding Birds Counts* on page 199. Other notable sites where breeding was confirmed were Lavington Common (7 pairs), Graffham Common and Troutbeck (Eridge) (2 pairs each). In addition, there were single pairs at St. Anne's Well Gardens (Hove), Chucks Fm (Littleworth), Marsden Hill, Partridge Green, Friday Street (Rusper) and Wyckham Wood (Henfield).

Evidence of autumn movements at coastal sites was very scanty. In the Beachy Head area, 11 records for August involved counts of only 1-3 birds, with a maximum of 5 on the 13th and, in October, nine out of ten records were of singletons with a maximum of two. The maximum count at Rye Hbr LNR was only two birds during the year. Similarly, in the Pagham Hbr area counts were usually of singletons with a maximum of four on 28 Sep.

At the end of the year a bird was heard drumming at Isfield on 24 Dec. [RM]

0887. LESSER SPOTTED WOODPECKER Dendrocopus minor Scarce resident. Red listed species of high conservation concern.

A total of 76 records (cf. 63 and 102 in 2004 and 2003, respectively) was received from 54 1-km squares, distributed as shown in the following map:



Drumming was first reported from Ebernoe Common on 18 Jan. The first sighting at Burton Mill Pond was on 29 Jan, with calling and drumming first heard there on 1 Feb and 13 Mar, respectively. As in 2004, the only location to record the species throughout the year was Pulborough Brooks. Several fortunate householders had excellent sightings in their gardens. In Blackham a bird visited a peanut feeder on at least six occasions between 9-17 May, in Robertsbridge a pair made daily visits for approximately two weeks from 21 May to feed on a mature apple tree infested with woolly aphid, in Danehill a pair was seen daily from early April until at least 22 May on a peanut feeder in a plum tree and a single bird was seen in Whatlington on 6 Jun. On a disappointing note, a pair which bred at Troutbridge (Eridge) had their young predated by a Great Spotted Woodpecker on 31 May or 1 Jun (see SOS Newsletter 175, p.4), while a single bird seen at Barcombe on 20 Oct was probably killed by a cat.

Reports relating to the breeding season provided the following information:

Breeding status	Confirmed	Probable	Present	Total
No. of 1-km squares	2	4	11	17
No. of pairs/territories	2	4	4	10

Breeding was confirmed at Troutbridge (Eridge) (as above) and Five Ways (Ashdown Forest) and was probable at Bedelands Fm (Burgess Hill), Nutley Windmill (Ashdown Forest), Rowland's Castle and Waltham Brooks. Reports of territorial activity came from Old Lodge LNR (Ashdown Forest), Burton MP, Pulborough Brooks and Warren Hill (Washington). [RM]

0974. WOOD LARK

Lullula arborea

Scarce resident and passage migrant. Red listed species of high conservation concern.

Records were received for every month of the year and, as usual, the majority came from the species' strongholds on the Wealden Heaths and, to a lesser degree, Ashdown Forest. However, a new population seems to be establishing itself on the southern slopes of the South Downs near the Hampshire borders; by far the largest flock found in the first winter period was of 18 at Stansted Park on 1 Jan. The next largest flock was of eight at Coates Common on 30 Jan, a traditional wintering area.

By the end of January/early February, males were singing on the breeding grounds. The *Wealden Heaths Breeding Bird Survey* (see page 199) reported 36 potential pairs from ten locations (30 from ten in 2004). Iping & Stedham Commons held the largest number with seven while Ambersham & Heyshott Commons with the adjoining Goldballs Plantation held five. The population developing in the Rowland's Castle/West Marden area reached five potential pairs. Observers at Burton Mill and a site near Horsham also reported singing males which brought the West Sussex total to 43 pairs from 14 sites. Numbers in Ashdown Forest increased markedly to c.27-29 pairs compared with 13 in 2004. At two further sites, single pairs were recorded resulting in an East Sussex total of 29-31. The county total was 72-73 (54-55 in 2004).

The first evidence of successful breeding was of an adult carrying food on 10 Apr in Ashdown Forest where family parties with fledged young were in evidence on 16 May, the largest party being six on 20 May.

Autumn passage records were rather scarce, as they have been since 2003. Reports from near-coastal sites were of a singleton over Sheepcote Valley (Brighton) on 19 Sep and a further individual over Chichester GP on the 21^{st} . During October there were 18 reports from the Beachy Head area which included at least four birds, possibly seven, seen flying west on the 22^{nd} and 23^{rd} as well as four flying north on the latter date. The last coastal record of the year was from Pannel Valley NR of a single bird feeding on set-a-side on 28 Dec. Inland, a flock of 20-38 birds was present from 21 Nov to 23 Dec in the North Marden area of the South Downs. [AP]

0976. SKY LARK Alauda arvensis Fairly common resident, passage migrant and winter visitor. Red listed species of high conservation concern.

The highest numbers early in the year were 100, some singing, on undersown stubble at Steep Down (Lancing) on 16 Jan, 200 at Beeding Cement Works on 23 Jan and 120 at Stretham Manor (Henfield) the same day. At East Head (West Wittering), 40 to 50 were found from 27 Jan to 8 Feb, sometimes feeding on the salt marsh. Winter censuses on two mixed farms produced maximum counts of 20 in 95 ha at Sefter Fm (Pagham) and two in 67 ha at Marsh Fm (Yapton). The last large flock of the spring was 60 at Beachy Head on 4 Mar.

Only one was seen passing through at Selsey Bill in $62\frac{1}{2}$ hr of watching in March and one in $54\frac{1}{2}$ hr in June. One flew west out to sea at Beachy Head on 1 May.

Over 900 singing males/territories were reported from over 180 sites. In Ashdown Forest c.135 pairs were recorded. Elsewhere, at two sites in Newhaven 21 singing males compared closely to the 2004 figure of 22. Between 31 and 38 singing birds were heard at Pulborough Brooks compared with only 18-22 pairs in 2004 and 42 pairs in 2002; nearby Amberley Wild Brooks held 32 pairs against only nine pairs in 2002. At Steep Down (Lancing) a minimum of 25 males were singing on 2 Jun. Sefter Fm (Pagham) held 13 pairs compared to eight the previous year. Constantia Manor (Isfield) held 20 pairs and Knepp estate (Shipley) nine pairs in four 1-km squares. At Beachy Head 50 were noted on 15 May with the comment that, although fair numbers were breeding, most nests were destroyed by farming activity. Declines were noted at Pilsey Island (Chichester Hbr) with five pairs compared with seven in 2004 and at Goring with only one pair at Goring Beach.

More typical of many parts of the county were the results shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 197 and a 3-km *WBBS* transect on the River Rother (Petworth), where a maximum of only two Skylarks was seen.

The results from 106 1-km *BBS* squares produced a total of 320 Skylarks of which probably a large proportion were singing males. Only 59% of squares held Skylarks but the overall average per square surveyed at 3.04 was above the ten year average of 2.71.

Movement was noted at several sites with 25 W at Climping on 10 Oct, 35 E at Beachy Head the next day, 58 E on 16 Oct and 15 E the next day when 24 also flew east at Sheepcote Valley (Brighton). A movement of 27 was noted at Selsey Bill on 22 Oct. Small numbers flew south at Bewl Water on 2 Nov and 6 Nov while 82 W were noted on 5 Nov at Beachy Head.

Nine late year flocks of over 100 were reported including 300 at Stump Bottom (Steyning) on 9 Nov and 350 at Amberley Mount on 29 Nov. The regular winter flock on Sefter Fm (Pagham) rose from 39 in October to 126 on 27 Dec. At Constantia Manor (Isfield) flocks were small but this was thought to result from an increase in suitable habitat making it less necessary for birds to congregate in a few places. Three birds were singing at Newhaven on 7 Nov.

Again this year there was an increase in the number of reports for this species but even allowing for this it appears that there has been some improvement both in breeding and winter numbers. [ACG]

0978. SHORE LARK Rare winter visitor.

One was found on Seaford Head on 16 Oct. It frequented the rough cliff edge above Splash Point where it was quite approachable. It was last seen flying strongly out to sea mid-morning on 25 Oct (MO). This occurrence follows two in 2004 but prior to that the most recent records in the county were in 1998. There have been 20 since 1990, all between 18 Oct and 21 Apr making this the earliest recent record by two days, although there are earlier records in October (14th, 1960 and 8th, 1972) and one in September (28th, 1946). [RJF]

0981. SAND MARTIN

Riparia riparia

Fairly common summer visitor and very common passage migrant. Amber listed species of medium conservation concern.

There were 16 records in March, with the first sighting being a single bird inland at a pig farm at Funtington on the 10^{th} , the same day as the 10-year average. The next record was not until the 17^{th} when a singleton was seen at Pannel Valley NR. This was followed by ones and twos with the exception of four at Selsey Bill on the 26^{th} , and six at Sidlesham Ferry and 25 at West Langley Lake (Eastbourne) on the 29^{th} . Only five of the 30 records for April were counts over ten: 50 at Castle Water (Rye Hbr LNR) on the 4^{th} , 20 at Pulborough Brooks on the 5^{th} , 13 at Castle Water on the 14^{th} , 25 at Barcombe Res on the 25^{th} and the highest count of 60 at Waltham Brooks on the 28^{th} . The numbers recorded in these two months were about half the size of those in 2003 and 2004.

Breeding was reported from seven sand pits: 40 pairs at Coates, 60 at Duncton, 140 at Valdoe (East Lavant), 20 at Pendean, 50 at Stedham, 110 at Sandgate Park (Storrington) and six at West Heath; there was none at Rock Common (Washington). This is 74 fewer pairs compared to 2004, a fall apparently due to a decrease from 200 to 20 pairs at Pendean balanced by an increase from 80 to 140 at Valdoe and the inclusion of 60 at Duncton, figures for which site were not available in 2004.

In July, observers noted the first late summer movements with 120 N at Pett Level on the 9^{th} , 150 at Rye Hbr LNR on the 10^{th} and 200 at Pannel Valley NR on the 22^{nd} . Similar

Eremophila alpestris

numbers continued in early August with highs on the 3rd including 300 at Sidlesham Ferry and 6000 at Pannel Valley NR, the largest roost size there for the month. On the 5th, 350 were at Long Pit (Rye Hbr SSSI) and 300 were roosting at dusk on Thorney Deeps. On the 7th, 300 were noted at Rye Hbr LNR and, on the 9th, 300 again at Sidlesham Ferry and 400 at the Breech Pool (Pagham Hbr).

Lower numbers were recorded in September. The highest counts were of 100 at Pagham Hbr on the 2^{nd} , 300 on the sand at Camber Shore SSSI on the 8^{th} , 200 past Beachy Head on the 9^{th} and 200 roosting at Church Norton Spit on the 11^{th} and at Pannel Valley NR on the 13^{th} . Only double figure counts were recorded thereafter to the month's end.

During October, there were 12 records from 11 locations. Ten birds were seen at both Ivy Lake (Chichester GP) and the Ouse Estuary Project (Newhaven) on the 1st with singletons seen at several locations from the 1st to the 6th. The month's highest count was of 100 at Pevensey Levels on the 2nd when there were five at Wilbees Fm (Arlington) and 20 at the Ouse Estuary Project. There were ten at Eastbourne Old Town on the 8th and the final bird was noted at Pulborough Brooks on the 12th, 15 days earlier than the 10-year average and nearly two months earlier than the last sighting in 2004. [SB]

0992. BARN SWALLOW Hirundo rustica Common summer visitor and abundant passage migrant. Amber listed species of medium conservation concern.

The first record of the year was of a single bird, unusually at an inland site, at Shopham Bridge (Byworth) on 19 Mar, 12 days later than the 10-year average. This was followed by singletons at Carter's Fm (Pett) and Beachy Head the next day and then small numbers to the end of the month. Of the 35 records for March only eight were from East Sussex, suggesting a preference for a more westerly spring migration route.

The 261 records received for April represented over 25% of the total for the year and were mostly in single figures from all over the county. The highest counts came from the 25th onwards: 100 at Harbour Fm (Rye Hbr SSSI), 150 at Arlington Res on the 25th and, on the 30th, 115 at Worthing Beach and 125 at Selsey Bill. Records for May included 100 at Carter's Fm (Pett) on the 17th and another 100 at Pannel Valley NR on the 23rd. These two high counts for the month were noticeably lower than those in 2003 and 2004.

The first report of breeding was of two pairs nest building in stables in Byworth on 16 Apr, less than a mile from the first sighting of the year. At this site numbers rose to six pairs by 12 Jun and by 24 Jul a minimum of 40 young had fledged. Other breeding records included single pairs at Climping, Horsham, Knepp estate, Partridge Green, Plumpton, Sharpthorne, Thorney Deeps, Upmarden, Warnham and Winchelsea; two pairs at Ashdown Park, Groombridge, Steyning and West Hoathly; three pairs in Sidlesham; five pairs in Pagham and six pairs at Edburton. One pair attempted to nest between the mast and the jib of a small yacht in Chichester Hbr. Unfortunately, the nest was unknowingly dislodged when the sail was opened, luckily before any eggs had been laid. A late brood was recorded at Partridge Green SF with young still in the nest on 28 Aug. This species was recorded in 63% of the *BBS* 1-km squares with a total of 368 individuals (cf. 55% in 2003 and 57% in 2004).

With the exception of 30 at Thorney Deeps on 26 Jun, post-breeding groups were first noted at coastal sites from mid-July when 50 were recorded on the 15th at Pannel Valley NR. An estimated 700 roosted there on the 23rd. There were 30 at Beachy Head on 28th, a

dusk roost of 400 at Thorney Deeps on the 29^{th} and 100 at Deanlane End (Rowland's Castle) on 1 Aug.

Significant numbers noted at coastal sites from mid-August included 300 at Thorney Deeps on the 17th, a peak roost count for the month of 1500 at Pannel Valley NR, 200 at Pagham Hbr on the 29th, 3000 at Halsey's Fm (Sidlesham) and 1000 at Pagham Hbr on the 30th. The highest counts at Beachy Head were of 700, 300 and 400 on the 28th, 29th and 30th respectively. The only significant inland count was of 140 at Bewl Water on the 21st.

High counts in September included an estimated 1000 birds over Pagham Hbr on the 2^{nd} , 600 E at Splash Point (Seaford) and 540 at Selsey Bill on the 3^{rd} and 2000 at Pagham Hbr on the 13^{th} . Large numbers were noted moving from the 19^{th} when 2000 were counted at the Beach Reserve (Rye Hbr LNR) followed on the 20^{th} by 3000 E at Climping Gap, 2000 at Pannel Valley NR, 1000 at Sidlesham Ferry and 1000 E at Worthing Beach. The only significant inland records were 250 SE in Uckfield and a mixed group of 1000, including House Martins, at Pulborough Brooks on the 12^{th} , 300 S in Uckfield on the 18^{th} and 250 at Weir Wood Res on the 19^{th} . Autumn passage continued with significant movements up to 7 Oct with counts at Beachy Head of 470 on the 2^{nd} , 300 on the 4^{th} and the 6^{th} , 1000 roosting at Pannel Valley NR on the 4^{th} , 1000 past Worthing Beach on 5^{th} and 210 over Cissbury Ring on the 7^{th} .

In November, the last sightings of the year involved 21 records, all in single figures with the exception of 12 at Cuckmere Haven on the 7^{th} and, as the last record of the year, ten at Hove on the 24^{th} , slightly earlier than the 10-year average date of 30 Nov.

In contrast to the pattern of arrivals, two thirds of November's records were from East Sussex, suggesting that a majority of autumn migrants depart from the east of the county. [SB]

1001. HOUSE MARTIN

Delichon urbica

Common summer visitor and abundant passage migrant. Amber listed species of medium conservation concern.

The first sightings of the year were of a pair on 18 Mar at Lewes Brooks (four days later than the 10-year average) and a singleton at Seaford the following day. There were only two other records that month with one at Pannel Valley NR on the 25th and one on the 28th at Birling Gap (Beachy Head). Interestingly, these first records all came from the east of the county as did the first in April, two at Patcham (Brighton) on the 4th. There were then 16 records in single figures to the middle of the month except for ten at Ivy Lake (Chichester GP) on the 7th and 20 at Arlington Res on the 15th. There were 109 records for the rest of the month, with the main influx being on the 24th and 25th. The highest counts were of at least 25 at Runcton (Chichester GP) on the 18th, 40 at Barcombe Res and Guestling Thorn on the 25th and 26 at Falmer on the 28th. This year's spring migration numbers were, however, lower than in 2003 and 2004.

Pre-breeding flocks were seen in May, with 150 at Runcton on the 4th, 300 at Pulborough Brooks on the 11^{th} , 100 at Pannel Valley NR on the 17^{th} and 80 at Hermitage SF on the 24^{th} . The first sign of breeding was of a pair nesting in Chichester on 30 Apr. This pair had two broods of which the second fledged two young on 8 Sep. Breeding was also reported from 18 other sites with usually one to three pairs but eight at Climping, 20 at Bignor and 22 at Knepp Castle. This species was recorded in 36 (34%) of the 105 *BBS* 1-km squares surveyed with a total of 271 individuals (cf. 31% in 2003 and 37% in 2004).

The first post-breeding flocks were noted in August, firstly inland with 200 at both Barcombe Res on the 20th and Bewl Water on the 21st; then on the coast with 500 at Beachy Head and 200 at Whitbread Hollow (Beachy Head) on the 28th and 2000 at Halsey's Fm (Sidlesham) and 150 at Beachy Head on the 30th. Sightings continued in September with 1000 over Beachy Head and the Beach Reserve (Rye Hbr LNR) on the 9th and 19th respectively. A mixed group of 1000 with Swallows was reported at Pulborough Brooks on the 12th, 7000 flew over Climping Gap on the 20th, 2000 over Selsey Bill on the 23rd, 4000 at Sheepcote Valley (Brighton) on the 24th and 1000 on the 30th at Brighton Wild Park.

Significant movements seen in early October included 300 at Durrington on the 1st and 200 there the next day, followed by 600 at Worthing Beach, 2700 over Beachy Head, 1389 W in $1\frac{1}{2}$ hr over Telscombe Cliffs and 1500 W over Newhaven Cliffs on the 2^{nd} . On the 3^{rd} an incomplete count logged 5500 W in $1\frac{3}{4}$ hr at Newhaven Cliffs, 1000 at Brighton Wild Park and 400 at Church Norton followed by a count of 300 at Brighton Marina on the 4^{th} and 1000 on the 5th at Worthing Beach and 2000 over Beachy Head. Observers at Newhaven Tide Mills counted 530 on the 7^{th} and 374 E were counted at Telscombe Cliffs followed by 200 over Cissbury Ring on the 8^{th} and 300 at Beachy Head on the 17^{th} . The last sightings in the month involved 12 at Pannel Valley NR and two at Steyning on the 27^{th} and three over Ovingdean on the 29^{th} .

The final sightings for the year were in November of one over Bulverhythe (St. Leonards) on the 20th and 1 W over East Head (Chichester Hbr) the next day, eight days later than the 10-year average.

Two interesting records from Beachy Head in October were of an all white bird seen on the 2^{nd} and 3^{rd} and a leucistic bird with a brownish wash to the head and upper back on the 12^{th} . [SB]

0995. **RED-RUMPED SWALLOW** Rare vagrant.

One was seen at Birling Gap (Beachy Head) on 30 May (DC, JFC). It was flying around with other *hirundines* but moved off west after about five minutes. It has been accepted by *BBRC*. Twenty-two have been recorded in the county, 15 since 1990 and all but one between 17 Apr and 29 May (the other being in early September). It is the ninth record for Beachy Head, but the first there since 1999.

Occurrences from 2006 will no longer be considered by *BBRC*, although *SOSRC*, to whom the task of assessment will now fall, will endeavour to maintain standards and fully documented records will continue to be required for acceptance. [RJF]

1002. RICHARD'S PIPIT Rare vagrant.

One was seen in flight at Sheepcote Valley (Brighton) on 25 Sep (ADW, IJW) while another circled Thorney Airfield before departing south on 14 Oct (CBC). These are the first to be recorded in the county since 2000 and take the total since 1990 to nine. The first is the earliest in autumn since 1988 with records in October or November being more usual. [RJF]

Cecropis daurica

Anthus richardi

1009. **TREE PIPIT**

Anthus trivialis

Fairly common but local summer visitor and passage migrant. Amber listed species of medium conservation concern.

The 272 records received for c.93 1-km squares were distributed as shown in the following map:



The first sightings were not until 1 Apr (three days later than the 10-year average) with one at Southease (R Ouse) and the first singing male at Greenwood Gate Clump (Ashdown Forest). A single bird in song at Seaford on the 10th was the first of the spring coastal movements followed by singletons at Cow Gap (Beachy Head) on the 14th, Brighton College on the 16th and Shooters' Bottom (Beachy Head) on the 30th.

In the major breeding area of Ashdown Forest 51 territories were recorded in 39 1-km squares, a reduction to almost the same count as in 2003 after a high of 67 in 2004. The 63 pairs or territories recorded during the *Wealden Heaths Breeding Bird Survey* are shown on page 199. Elsewhere, at least 12 territories were noted in Broadwater Forest, two at Troutbeck (Eridge) and a pair at Hoth Fm (Rotherfield).

The first signs of autumn movement were in late July with one seen at Darwell Res on the 26^{th} and 2 S on the 30^{th} over the Old Airstrip (Ashdown Forest). Movement records in August were mainly of single birds but with highs of eight over Five Ways (Ashdown Forest) on the 7^{th} and six on 28^{th} , and five over Brighton Wild Park on the 15^{th} . At Beachy Head there were five on the 21^{st} followed by 11 on the 28^{th} and six on the 29^{th} . Most of the 19 records in September were of ones and twos except for highs of six over Edburton Hill on the 2^{nd} , five over Five Ways (Ashdown Forest) and eight over Pannel Valley NR on the 13^{th} where the last three birds of the year were recorded on the 28^{th} , over a month earlier than the 10-year average. [SB]

1011. MEADOW PIPIT

Anthus pratensis

Locally abundant resident, very common passage migrant and winter visitor. Amber listed species of conservation concern.

There were 49 records from 37 sites for January, 19 of which were in double figures. These included five roosts, three of which were in Ashdown Forest. There were five records over 40: 44 at Chesworth Fm (Horsham) on the 9^{th} , a roost of 60 on the 12th at the Old Airstrip (Ashdown Forest), a roost of 75 at Ashdown Res on the 13^{th} , another roost of 50 at Waltham Brooks on the 15^{th} and, on the 16^{th} , 50 at Lewes Brooks. There were 40 records from 30 sites for February. The highest counts were of 40 at Chesworth Fm (Horsham) on the 5^{th} , 50 at Woodlands Fm (Peasmarsh) on the 8^{th} , 80 roosting at Five

Ways (Ashdown Forest) on the 14th and 35 by Brockley Wood (Gatwick) on the 20th. The only other roost reported was of 15 on the 20th at Trotton Common.

Spring passage was first noticed at Selsey Bill on 15 Mar: 767 birds were recorded there on seven dates from the 15^{th} to the 27^{th} , including counts of over 250 on the 20^{th} and 300 on the 21^{st} . On the 25^{th} 250 came in off the sea at Selsey West Beach. However, the main influx was seen on the 26^{th} with records from along the county's coastline, including highs of 55 at Beachy Head, 300 in off the sea at Brighton Marina and 150 at Selsey Bill. The only other notable count of the month was of 50 at Church Norton on the 31^{st} .

Continued movement was recorded in April with the highest counts still at Selsey Bill with 110 on the 4th and 80 on the 21^{st} . Elsewhere, there were 63 at Pannel Valley NR and 46 at Worthing Beach, both on the 13^{th} , and the largest inland record of 11 at Weir Wood Res on the 10^{th} .

The first song of the year was heard at Widewater (Lancing) and Crow's Nest (Ashdown Forest) on 19 Mar. Breeding records came from 34 sites and totalled 190-200 pairs, compared to 58 sites and 132 pairs in 2004. Of particular note was a minimum of 40 pairs at Amberley Wild Brooks, a minima of 24 at Pulborough Brooks, 73 in Ashdown Forest and ten at Pilsey Island.

The first coastal movement was noted in September with 40 over Beachy Head on the 9th rising to 270 by the 24th. The highest count of the month was 1400 E at Winchelsea Beach on the 13th, followed by 300 on the 17th at Pannel Valley NR, 200 in fields on the west side of Pagham Hbr on the 18th and 500 there on the 29th. Inland records of note included 80 at Levin Down (Singleton) on the 17th, a large count of 160 at Weir Wood Res on the 21st and 80 at Stonehill (Ashdown Forest) on the 28th.

The first notable records in October were from inland sites with 103 S at Warnham LNR on the 1st and 200 at Weir Wood Res on the 2nd. However, most movements during the month were noted at coastal sites. On the 2nd there were 700 W at Beachy Head, 363 W in 1¹/₂ hr at Telscombe Cliffs, 500 in off the sea at Selsey West Fields, 250 at Sidlesham Ferry and 98 W at Worthing Beach. On the 9th there were 200 at both Whitbread Hollow (Beachy Head) and Selsey West Fields followed by 250 E and 300 E at Beachy Head and Church Norton respectively on the 14th. Movement continued at Beachy Head with 250 E on the 15th and 200 on the 16th with 150 at Sidlesham Ferry also on the 16th. Inland roosts noted were of 100 at Lavington Common and 80 at Iping Common on the 23rd, 100 at Cedar Fm (Hurst Green) on the 25th and 30 at Poundgate (Crowborough) on the 27th. The last coastal movement of 80 over Selsey Bill was also recorded on the 27th.

In November, of the 20 records involving ten or more birds, the largest counts were 50 at the Ouse – Glynde confluence on the 5^{th} , 100 at Weir Wood Res and 60 at Ashdown Res on the 8^{th} . There were six roosts reported, all at heathland sites, of which none were over 20 birds. There were only 39 records in December, which included 60 at Pagham Hbr and a roost of 55 at Iping Common on the 19^{th} . [SB]

10142 ROCK PIPIT

Scarce resident and scarce visitor; rare away from the coast.

As in 2004 only 12 of the 148 records received came from east of Beachy Head and these all came from the Rye Bay area, with four in the first winter period and seven in the second.

Anthus petrosus

There were reports from 11 locations in January (cf. ten in 2002, 12 in 2003 and 14 in 2004) including up to three seen around Pagham Hbr from the 6th to the 16th and a large count of 12 by Fishbourne Channel on the 13th. In February, records from 15 locations were spread evenly along the coast with two seen at Splash Point (Seaford) most of the month; the highest counts were of three in flight at Rye Hbr LNR on the 24th, three at Sidlesham SF on the 8th and seven individuals seen at both Fishbourne Channel on the 8th and at Pagham Hbr on the 10th. Birds were also recorded at 15 locations in March. Although they involved only half the number of individuals as in earlier months they included four at Pagham Hbr on the 12th, three on the 24th and probably the same three at Sidlesham Ferry on the 31st.

There were records from eight locations during the breeding season, but breeding was confirmed only at Rottingdean, where an adult and juvenile were seen on 23 Jul. Breeding was probable with three pairs seen between Birling Gap and Crowlink on 6 and 30 May. Birds seen in suitable habitat included two at Splash Point (Seaford) on 5 Apr, two at Saltdean on 29 May (with three there on 2 Jul suggestive of breeding) and two at Ovingdean on 12 Jun.

The only sightings in September were of birds away from breeding areas. One was at Southwick Beach on the 16^{th} , two birds were seen flying east at Church Norton on the 22^{nd} and two birds, possibly the same, were seen at Selsey West Beach the same day.

In October, following a count of four at Church Norton on the 4th, there was an influx between the 16th and 19th which included two at each of Sidlesham Ferry, Selsey West Fields, Rye Hbr LNR and Church Norton, three at Pagham Hbr on the 17^{th} and four at Rye Hbr Saltmarsh on the 19^{th} followed by a later record of three at Newhaven Marina on the 23^{rd} .

During November and December there were sightings at 25 locations with 18 away from the cliffs. These included counts of five at Cuckmere Haven, Newhaven West Pier and Saltdean Beach and exceptional counts at Fishbourne Channel of 12 on 22 Nov and 15 on 31 Dec and a maximum of 16 at North Wall (Pagham Hbr) on 30 Nov. The only inland record of the year was a single bird at Southease (R Ouse) on 20 Dec. [SB]

10143SCANDINAVIAN ROCK PIPITAnthus petrosus littoralisProbably a very scarce winter visitor and passage migrant.

2004: A road casualty at Bosham on 15 Nov had been ringed on 29 Jul 2003 at Onsala (SW Sweden). Its inclusion in the main report was overlooked (see *SxBR* 57:203).

2005: One was seen at Shoreham Fort on 12 Mar (RJF) with three at Cuckmere Haven on 13-16 Mar (JC, GG). Typical records at a time of year when some individuals of this form are starting to show their true colours. [RJF]

10140 WATER PIPIT

Scarce winter visitor and passage migrant.

Overwintering birds were seen at Barcombe Res on 16 Jan (SHL) with three present at Sidlesham SF during 6 Jan-31 Mar and four there on 8 Mar (BFF, OM, DIS *et al*). Also during the first winter period one was seen at Thorney Deeps on 9 Feb (CBC) and three at Fishbourne SF on 25 Feb (PJ).

Anthus spinoletta

One was again seen on Thorney Deeps on 4 Nov (CBC), one returned to Barcombe Res on the 5^{th} (SHL *et al*) and was present to the end of the year and four were seen at Sidlesham SF on 26 Dec (CBC). With the exception of the Barcombe records all were in the west of the county, although no records were received from Combe Haven, traditionally the species winter stronghold in the county. [RJF]

1017. YELLOW WAGTAIL

Motacilla flava

Scarce and localised summer visitor and fairly common autumn passage migrant. Amber listed species of medium conservation concern.

The first record was a fairly early one of eight birds at Weir Wood Res on 13 Mar, only three days later than the earliest date on record. There were only two further March records of singletons at Church Norton on the 16th and at Castle Water (Rye Hbr LNR) on the 24th. The first bird recorded at Selsey Bill was a singleton on 2 Apr and at Thorney Deeps 1 N on the 4th. On that latter day, 22 were counted at Rye Hbr LNR where, on the 10th, 12 were reported with eight there on the 11th and ten on the 12th. Only ten were noted at Selsey Bill during April and 14 at Worthing Beach. But in the east, at Splash Point (Seaford), only one bird was logged in 103 hr of watching. The total count for April, excluding any duplication in the Rye Hbr LNR records, at about 125 was below that of over 130 for 2004.

There were 49 records in May, a considerable increase on the 21 in 2004. However, there were few coastal records with only three at Selsey Bill in $153\frac{1}{2}$ hr of watching, one at with Worthing Beach in 53 hr and three at Splash Point in 54 hr.

Breeding records repeated the rather gloomy picture drawn by migration watchers. Breeding pairs at Rye Hbr decreased from 12 in 2004 to a mere five. There was no breeding recorded at either Amberley Wild Brooks or Pulborough Brooks. The six pairs located on Horse Eye Level (Pevensey) constituted the only record showing an increase.

One bird at Pulborough Brooks on 3 Jun and one at Barcombe Res on the 20^{th} were the only June records away from Rye Hbr. The next sighting was on 10 Jul when the first autumn migrant at Pannel Valley NR was recorded and there were then five subsequent July records, including 1 N over Beachy Head on the 22^{nd} .

In August numbers picked up and significant movements were noticed at coastal sites from the 12^{th} , characterised by a series of peaks and troughs. At Rye Hbr LNR, following no more than 20 birds on the 6^{th} and 7^{th} , 150 were counted on the Beach Reserve on the 12^{th} when c.230 left an overnight roost at Carter's Pit. Numbers at the Beach Reserve then fell to a trough of 60 on the 18^{th} to be followed by another peak count of at least 300 on the 26^{th} . Observers at Beachy Head had a similar experience except that numbers there rose from 23 on the 18^{th} to a peak count of 75 on the 21^{st} , a trough of 25 on the 28^{th} but another peak count of 70 on the 29^{th} . Locally high counts were also noted from the 28^{th} further west at Ovingdean (54 on the 29^{th}) and Climping and the Pagham Hbr area while in the Selsey area a count of 40 on the 28^{th} rose to 70 on the $30^{th}/31^{st}$ and there were up to 40 at Thorney Deeps from the 21^{st} to 28^{th} .

Movements continued through the first half of September although peak numbers were generally much lower. At Rye Hbr LNR, a low count of 30 birds on the 3rd and 8th was followed by a last peak of only 50 on the 12th. At Climping there were 70 birds on the 1st, the highest count at Beachy Head was only 15 on the 3rd and at Pannel Valley NR was 32 on the 4th. At Pagham Hbr, a count of 30 on the 3rd in the North Fields was followed by

one of 61 on the 8^{th} on the Shingle Spit while the highest count at Selsey Bill was 53 on the 3^{rd} .

Inland, the highest counts were made in September with 26 at Beeding Brooks on the 13^{th} , 20 at Edburton on the 17^{th} when there were 32 at Elmer (Middleton) and 20 at both Small Dole and Steyning Levels on the 18^{th} .

There were 13 records of 26 birds in October, all in low single figures except for eight at Sidlesham Tramway on the 5th. The last sightings were of singletons on the remarkably early dates of 9 Oct from Climping and Brighton Marina and finally the 15th at Pagham Hbr, over a month earlier than the 10-year average date. [CB]

1019. **GREY WAGTAIL** *Motacilla cinerea* Fairly common resident, passage migrant and winter visitor. Amber listed species of medium conservation concern.

Thirty two records for January and 26 for February were a welcome increase over recent years but there were fewer records from town centres. Typical records included one at the University of Sussex on 6 Jan, one at Gatwick Airport on 22 Jan, one spent January and February around a Goring garden, another favoured Edburton through most of February and the first half of March, one at Crawley bus station on 23 Feb, one at West Dean Woods on 26 Feb and two were together at Stopham Woods on the 28th.

There was no marked spring passage. The first bird at Ashdown Forest was recorded at Millbrook on 8 Feb (cf. 12 Feb in 2004) but later sightings there were not until 19 Mar. Birds were around Ebernoe from 15 Mar. At coastal sites, 1 NW over Beachy Head on 12 Mar, 1 N there a week later and two singletons at Selsey Bill on 9 and 21 Mar were the only attributable records. In April, one was seen at Splash Point (Seaford) on the 16th and there were two records from around Pagham Hbr in the last week of May.

Birds were found in only six of the 105 *BBS* 1-km squares surveyed. Other breeding season records came from at least 23 inland sites where breeding was confirmed by at least 25 pairs. Recently fledged young were first seen at Troutbeck (Eridge) on 9 May, and at Pippingford Park (Ashdown Forest) the next day. At Warnham LNR, three pairs bred, one raising five young. Five young in a nest in a garage at Kingscote Old Station unfortunately suffered from the attentions of a fox. A pair bred in the riverside wall of the R Ouse in Lewes and another pair bred in a culvert under a road in Nutley. Breeding was again suspected on the cathedral at Chichester.

Post-breeding movements were noted from the early date of 23 Jun when a juvenile was seen on the beach at Selsey Bill. The next such record was of 1 E on 31 Jul over Beachy Head and the next day one, the first of five for August, flew over Pannel Valley NR.

August records came mainly from coastal sites. At Newhaven Tide Mills birds were present from 27 Aug to the end of the year, having been absent in the first half of the year. Sixty five birds flew over Pannel Valley NR during September. One frequented an Angmering garden from 4 Sep to 9 Oct and one was in St. Anne's Well Gardens (Hove) from 15 Sep to 8 Oct and again from 1-11 Nov. The last birds seen on the ground in Ashdown Forest were at the Army Training Area on 17 Sep and at Millbrook on the 20th although a few birds were subsequently heard flying over.

There were no double figure counts in September. The largest groups were of seven at Barcombe Res on the 4^{th} , six at Pett Level on the 11^{th} and 9 E over Winchelsea Beach on the 13^{th} . The total of c.70 noted in October was well down on last year's c.90. The 33 records for November were mainly of single birds while numbers in December were comparable with 2004. There were four birds at Weir Wood Res on 24 Dec and five at Bewl Water on the 25^{th} . [CB]

1020. PIED WAGTAIL

Motacilla alba yarrelli

Common resident, passage migrant and winter visitor.

Three figure counts in January were 125 at Hook Straight (Bewl Water) on the 16th, Hermitage SF (Emsworth), 100 on the 21st, and Uckfield, 120 on the 24th in the car park of the Highlands PH where there had been only 30 there on the 18th.

In February there were 200 at Sidlesham SF on the 3^{rd} , 250 there on the 11^{th} but only 40 on the 12^{th} , 120 in a pre-roost gathering at Castle Water (Rye Hbr LNR) on the 6^{th} , 150 in a pony field at Thorney Deeps on the 16^{th} and 180 at Hermitage SF on the 21^{st} . Two other records from Thorney Deeps of 40 on 2 Jan and 60 on 2 Feb were of birds flying westwards going to roost in Hampshire. A count of 175 in a pre-roost gathering at the University of Sussex on the 22^{nd} appeared to have been an isolated one as the next highest count there was six on 4 Mar with smaller numbers to the month's end. Unusually, there were no large counts from anywhere in Brighton or Lewes.

Winter surveys at Sefter Fm (Pagham) found none in January but eight on 20 Feb and at Marsh Fm (Yapton) there were two on 14 Jan and a singleton on 9 Feb.

At coastal sites in March, six birds noted at Cliff End (Pett) on the 6th may have been migrants. Observers at Beachy Head recorded their first bird on the 10^{th} and only three were seen flying over Worthing Beach in 28 hr of watching. Passage during April was no more noticeable; recorders at Selsey Bill noted just a single bird in 163 hr of observation and at Worthing Beach no more than two were logged in 72 hr. Inland, the 40 noted at Bewl Water on the 17^{th} was the maximum count in March.

During the breeding season, Pied Wagtails were present in 44 of the 105 *BBS* 1-km squares surveyed, with a maximum of seven present in a square at Lyminster. In addition, there were three territories at Sefter Fm (Pagham). The first juveniles seen out of the nest were at Edburton on 8 May (cf. 30 May 2004). In June, post-breeding gatherings were noted at Weir Wood Res when there were four juveniles on the 5th and eight on the 26th. During the summer, there was a juvenile at Birling Gap (Beachy Head) on 3 Jul, a group of 12 at Greatham Bridge on the 17^{th} , 15 at Denne Park (Horsham) on 2 Aug, 20 at Pulborough Brooks on the 11^{th} , 21 at Barcombe Res on the 12^{th} and 25 there on the 16^{th} .

At Weir Wood, there was a decline in numbers during September from 15 on the 3rd to five on the 20th, but at Barcombe Res 20 were still present in mid-month. Urban roosts seem to have developed quite early. There were 20 on Centenary House (Durrington) on 8 Sep and 53 went to roost at the Princess Royal Hospital (Haywards Heath) on the 21st.

Numbers along the coast remained low during September. The maximum count at Selsey Bill was 30 on the 29^{th} but passage became more evident in early October when 40 were there on the 2^{nd} and 160 flew over Sheepcote Valley (Brighton) on the 3^{rd} . At Beachy Head the maximum count during Oct was 64 on the 14^{th} and observations indicated that most birds were moving east although on the 22^{nd} and 23^{rd} a westerly movement was noted there.

Altogether forty one double figure counts were recorded for Oct. The 350 which came in to roost at Southwater CP on the 22^{nd} was the maximum for the month, followed by 180 at Chesworth Fm (Horsham) where the pre-roost gathering on the 20^{th} was disrupted by a Sparrowhawk. On the 21^{st} , 100 birds were with Meadow Pipits at Cedar Fm (Hurst Green). The ten found at Sefter Fm (Pagham) on the 23^{rd} had increased to 25 by 5 Nov but had fallen to ten on 27 Dec. The largest gatherings in November were 80 feeding on filter beds at Heritage SF (Emsworth) on the 23^{rd} and 82 on a muddy field at Partridge Green SF on the 26^{th} . The only notable count in December was of c.200 roosting in trees at the Princess Royal Hospital (Haywards Heath). [CB]

1020.01 WHITE WAGTAIL Motacilla alba alba Probably a scarce spring and autumn passage migrant; both pure and mixed pairs have bred.

Two birds were seen at Weir Wood Res on the exceptionally early date of 6 Feb. Subsequently, there were four waves of passage: from 16-21 Mar, 28-31 Mar, 10-17 Apr and, finally, 29 Apr to 1 May with a final late bird on 6 May. The total number recorded was 25 with three at Pilsey Sands on 30 Apr being the largest group.

There was an isolated record of a singleton at Sidlesham Ferry on 25 Aug. Later in the autumn, one was on Goring Beach on 23 November and the last of the year was seen at Crowborough on the 25^{th} .

2005 continued a run of poor years for White Wagtails in the county. [CB]

1048. WAXWING Rare winter visitor.

Bombycilla garrulus

As part of a huge national influx, the first winter period of 2005 was a remarkable year for Waxwings in Sussex, with possibly over 2000 birds at the peak in February, the largest numbers ever recorded in the county. As with the last major influx in 1996, the majority of the birds were seen in East Sussex and birds were recorded from 2 Jan right through until 1 May (a first record for the county for May). For a full account and analysis of the invasion, see the paper on pages 233 - 237.

In the second winter period, there were a further eight records from 15 Sep (a first record for the county for the month) to 15 Dec. Three were around Hindleap Warren (Ashdown Forest) from 15 to 18 Sep (SRT) and there were five subsequent records, each of single birds: at Burgess Hill (flushed from a puddle) on 28 Oct (RHC), in Forest Row (sadly dead) on 27 Nov (IMS) and flying south over Littlehampton on 5 Dec (RJLK). Finally, one was ringed at Pannel Valley NR (RBRG) on 15 Dec and one, the same or another, spent the morning on Pett Level. [CB/AT]

1066. WREN

Abundant resident.

	5		5									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hotham Pk (Bognor)*	7	6	7	10	12	13	11	6	2	6	6	5
Sefter Fm (Pagham)*	10	13	-	-	-	35	-	-	-	21	30	20
Pagham Hbr	12	11	5	20	27	21	-	9	11	28	15	15
Newhaven Tide Mills	4	-	8	9	-	-	5	3	1	5	4	3
Carter's Fm (Pett)	11	10	9	11	9	10	6	5	5	-	-	7

The results of monthly surveys undertaken at several sites are shown below:

* = see also Summary of Common Breeding Bird Counts on pages 196 - 198 A hyphen (-) does not necessarily mean the species was absent.

A total of 913 birds was counted in 101 *BBS* 1-km squares of the 105 surveyed, i.e. in 94% of squares compared with a UK average of 91% in 2004 (BTO *BBS results 2005*). There were five counts of over 20 birds and, in one largely urban square, 11 birds were noted. Additional breeding season counts included 35 territories at Sefter Fm (Pagham) (a 95 ha mixed farm), 14 territories in Barns Copse (Binsted) (16 ha of deciduous woodland), 89 territories in the Brighton Wild Park (*cf.* 102 in 2004 and 103 in 2003), 91 territories at Pannel Valley NR and ten territories at Scobells Fm (Barcombe). At the Rye Hbr SSSI, 43 territories represented an increase over the 35 in 2004 and 36 in 2003.

The first juvenile reported was one at Climping on 3 Jun. At Norton (Westergate) a nest which had been built in two days was found on 2 Apr without eggs in a pair of jeans hanging on a washing line. On 6 Oct two birds were engaged in a singing competition at Brightham's Fm (Partridge Green) and on 28 Dec seven were found inside the loft of a thatched house at East Head (Chichester Hbr).

Reported signs of autumn movement were scarce: 15 were noted at Beachy Head on both 9 Aug and 6 Oct and the peak count at Pagham Hbr was 28 on 17 Oct. [CB]

1084. DUNNOCK

Prunella modularis

Very common resident. Amber listed species of medium conservation concern.

The total of 871 records received was almost double the number for 2004. During the *BBS*, 386 birds were recorded from 89 of the 105 1-km squares surveyed, an average of 3.65 birds per square and a density of 85% compared with a national density of 75% (BTO *BBS Report 2005*). In six squares more than ten birds were recorded with a maximum of 16. Other breeding season records from defined areas are summarised on pages 196 - 198. In addition, there were 57 territories at Pannel Valley NR, 50 in the Rye Hbr SSSI and monthly records from three other sites as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pagham Hbr	13	9	6	19	17	6	7	6	12	20	19	17
Crowborough	3	4	4	4	4	4	6	6	5	3	5	6
Newhaven Tide Mills	9	-	15	20	-	-	10	8	5	5	4	3

In the later months of the year some evidence of autumn dispersal was noticed at a few sites where numbers increased noticeably but there was no general evidence of autumn movement.

Lest it be thought that the Dunnock is an ubiquitous and common bird, it is worth noting that very few were discovered during woodland surveys carried out in 2005. The highest count was only five on a 3-km transect at Stedham Marsh, with three at both Venus Wood (1.7 km) and Brightling Park (1.4 km). Although four were counted in February at Luth Fields (West Grinstead) further visits in May, June and October failed to find any. In an Angmering garden, from one to five were noted in each of the 46 weeks for which records were kept. Here a newly fledged bird fell to a Magpie on 28 May, while another bird was taken by a Sparrowhawk on 29 Sep. [CB]

1099. **ROBIN**

Erithacus rubecula

Abundant resident, passage migrant and winter visitor.

In the *BBS*, Robins were recorded in every one of the 105 1-km squares surveyed, compared with 89% of all UK squares (BTO, *BBS Report 2005*), and the total count was 939 birds giving an average of 8.9 per square. By comparison, surveys in the 1980s suggested a breeding density of 48 pairs per km² (*Birds of Sussex 1996*). In 39 squares, more than ten birds were recorded and the highest count of 37 was recorded at Scayne's Hill followed by 30 in Southleigh Forest (Emsworth). A *Summary of Some Common Breeding Birds Counts* in defined areas can be found on pages 196 - 198.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pagham Hbr	21	30	15	14	11	29	14	17	34	56	33	7
Pulborough Brooks	20	10	30	12	10				25	10	15	30
University of Sussex	29	25	25	27		19		22	26			

The results of monthly surveys at three other sites were as follows:

Early in the year, 32 were noted at Marsh Fm (Yapton), a 67 ha mixed farm, on 14 Jan and 28 on 1 Feb.

The gradual decline in the number of breeding pairs at the Brighton Wild Park continued with 101 in 2005 (*cf.* the most recent peak of 148 in 2002). There were 76 territories at Pannel Valley NR and 17 on the 89 acres of Sefter Fm (Pagham) (*cf.* 16 in 2004). As in 2004, there were 5 or 6 territories at the Rye Hbr SSSI where, as at the Wild Park, a peak had been reached in 2002.

The first autumn song was heard at High Cross Fm (Uckfield) on 1 Aug. Autumn passage was barely visible this year. At Whitbread Hollow (Beachy Head), following a count of 30 on 13 Aug a peak count of 50 was recorded on 8 Oct followed by further counts of 30 on the 9th and 19th. There were also 50 at Beachy Head on 6 Oct, described by the recorder as a 'good arrival'. It might be added, though, that 'probably in excess of 15 pairs' bred in that area. At Sheepcote Valley (Brighton), there were a couple of minor autumn peaks of 15 on 17 Oct and 30 on the 23^{rd} .

At the end of the year, a winter census of the 95 ha Sefter Fm (Pagham) recorded 16 on 23 Oct, 14 on 5 Nov but only 9 on 27 Dec. [CB]

1104.COMMON NIGHTINGALELuscinia megarhyncosFairly common summer visitor and infrequently seen passage migrant. Amber listedspecies of medium conservation concern.

The first bird of the year was recorded at Wyckham Fm (Steyning) on the early date of 25 Mar (21 Mar is the earliest Sussex date for this species, the 10-year average being 5 Apr). The second bird was located on 4 Apr, already ensconced at a traditional site at Wisborough Green. The next day, there were two at Pulborough Brooks and by the 10th

there were four at Ditchling Common, where this species seems to thrive despite human presence.

Most spring records were from breeding sites, although one was singing during the lunch hour on 26 Apr at Southway Playing Fields (Burgess Hill), another dropped into Thorney Deeps on 29 Apr and one was in Brighton Wild Park the same day. There was less evidence of migration in May than there had been in 2004 although birds which were singing from scrub at Robertsbridge Station on the 1st and at Partridge Green SF on the 5th probably fall into this category. In all, birds were reported from 76 1-km squares in April and May.

Breeding by 11 pairs was confirmed at four sites: Amberley Wild Brooks, Wisborough Green, Pulborough Brooks and Burgess Hill, all in West Sussex. However, there were records of at least 57 singing males from an additional 30 1-km squares of which 20 were in West Sussex and 10 in East Sussex. Numbers are probably under-reported but the total is within the historic range of 53-163 recorded in non-survey years (*SxBR 1999, p189*).

Observers at Ebernoe Common reported that 2005 was a poor year. At Wisborough Green, four males were singing on 17 Apr with three still present on 8 May and two fledged young seen on 7 Jun. At Burgess Hill, a pair brought off two young and the family was seen for the last time on 18 Jun. Eight singing birds on 1 Jun was the maximum count at Pulborough Brooks, up from the six of 2004. Five birds were counted along a 1.9 km transect of the Roman Woods (Slinfold) on 21 Apr and three were at Trout Lakes (Chichester GP) on 1 May. A survey of the Henfield area on 30 Apr discovered 13 birds at 11 sites, a considerable decrease from the 20 found in 2004. However a separate record from one of the Henfield sites on the previous day was of five birds, rather than the one found on the 30th, so perhaps the real totals were very similar. Thirteen singing birds were in Abbots Wood (Hailsham) on 13 May representing a continuing decline from the 23 in 2003 and 17 in 2004. Most sites in East Sussex held only one or two birds, though there were three on the Rother Levels on 28 Apr.

There were very few records in late June. One at High Cross Fm (Uckfield) may have been a returning migrant. Two birds were heard at Pulborough Brooks on 1 Jul. The next records were not until the very end of the month when, on the 30th, ringers at Cissbury trapped their only bird of the season and, on the 31st, the first returning birds were found at Pannel Valley NR, where there were 11 bird-days during the autumn, and at Chat Vale (Beachy Head). Records in August were all from the coast except for one at Pulborough Brooks on the 14th. There were three September records; the penultimate bird was recorded in the copse on the west side of Pagham Hbr on the 9th and the last was noted at Weir Wood Res on the 19th compared with the 10-year average last date of 14 Sep. [CB]

1121. BLACK REDSTART

Phoenicurus ochruros

Rare resident, fairly common passage migrant and scarce winter visitor. Amber listed species of medium conservation concern.

The approximate monthly totals were as follows:

ſ	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	-	2	89	17	2	-	1	2	4	86	48	28

Unusually, there were no sightings in January whereas in the years 2000 to 2004 there were 21, 27, 10, 19 and 6 respectively. The first sightings were in early February of two over-wintering individuals, a male at Southwick on the 3^{rd} and a female at Birling Gap on

the 5th which had been seen there the previous December. The usual spring passage, noted from 6 Mar at coastal sites, was of mainly single birds except for seven at Beachy Head on the 19^{th} and eight at Selsey Bill on the 20^{th} contributing to a monthly total of 89 (see Plate 11). Numbers then dropped off during April with possibly the last spring migrant being a single bird at Brighton on 1 May.

Summer records involved a lone first summer female at Beachy Head on 30 May, a single male at Portobello on 4 Jul and a female there on 3 Aug. There were, however, no records of even attempted breeding.

The first obvious autumn migrant was noted at Pannel Valley NR on 20 Aug but, following four birds noted in September, numbers then increased to a total of 86 in October, mainly in ones and twos. Observers at Beachy Head, however, recorded three on the 8th and 29th and four on the 23rd while at Ovingdean there were four on the 23rd alongside 29 Bramblings in a horse paddock. Numbers dropped away in November and December, with single birds and a few pairs, although Southwick Beach was favoured by four on 10 Dec. [GM]

1122. COMMON REDSTART Phoenicurus phoenicurus Scarce summer visitor and fairly common passage migrant. Amber listed species of medium conservation concern.

Spring migration commenced with two individuals at Selsey Bill on the relatively early date of 16 Mar (earliest 13 Mar, 10-year average 27 Mar). Two further birds were noted there on the 20th and 29th. There was a further March record on the 25th of an early male at Old Lodge Reserve (Ashdown Forest), one of the main breeding areas. Coastal and downland migration records totalled 59 (36 in East Sussex and 23 in West Sussex) compared to 50 in 2004. The bulk of recorded migration occurred in April and, as usual, the highest counts were at coastal sites: at Pagham Hbr (14), Selsey Bill (9), Ovingdean (8) and Beachy Head (9). There were also records of singletons from 20 other sites, excluding Ashdown Forest, from some river valleys and the Downs.

By the end of April coastal migration records had fallen away, although a male was seen in a Worthing garden on 2 May and females were at Pagham and Climping on the 5^{th} and 8^{th} respectively. Three birds were seen on the 17^{th} and 18^{th} of the month in the Pagham Hbr area of which one was noted as a male. Of the birds that were sexed during this period 19 were male and six female.

During the second week of April reports from the Ashdown Forest area increased dramatically as birds returned. At the traditionally favoured locations of Old Lodge Reserve and Pippingford Park, which provide the bulk of the breeding records, nest boxes are provided but these are only supplementary to an existing favourable breeding habitat (*D King, pers. comm.*). The estimated breeding population in Ashdown Forest was c.35-36 pairs. The only other reported breeding area was from the *Wealden Heaths Breeding Birds Survey* (see page 199) in the far northwest of the county where a total of 11 territories were identified. At Linchmere and Stanley Commons there were six pairs, at Blackdown two and at Weavers Down and Chapel Common one each. A nest with six young was found in Ashdown Forest on 30 May and the first fledgling was seen on 14 Jun. The total county breeding population was estimated at 46-47 pairs/singing males, compared to 38 in 2004.

Early records of post-breeding dispersal were of a female at Pulborough Brooks on 20 Jul followed by a singleton at Darwell Res on the 26th, a juvenile at Cissbury North Scarp on 31 Jul and two females at Whitbread Hollow (Beachy Head) on 7th Aug. The peak counts were of seven at Kithurst Hill on 13 Sep, six at Sheepcote Valley (Brighton) on 17 Sep, up to five from late August into September at Steyning Round Hill and Edburton Hill and five at Idsworth (Finchdean) on 18 Sep. Typically most of the coastal records were from the Beachy Head and western peninsular areas. Monthly numbers for the county were 66 in August, 96 in September, nine in October and one in November totalling a disappointing estimated 172 individuals, well below recent years and the annual average of 200-300 (*Birds of Sussex 1996*). A male lingered in Ashdown Forest until 28 Sep and the final record of the year was of a singleton at Newhaven on 8 Nov, compared to the 10-year average of 26 Oct. [AP]

1137. WHINCHAT Sa. Rare summer visitor and fairly common passage migrant.

Saxicola rubetra

The approximate monthly totals were as follows:

Apr	May	Jun	Jul	Aug	Sep	Oct
41	21	-	1	356	621	40

The first spring arrival was a male at Pulborough Brooks on 7 Apr, slightly later than the 10-year average of 27 Mar. This was followed from the 20th by an influx of mainly ones and twos except for eight at Beachy Head and nine at Ovingdean on the 30th. Passage continued during May when the largest number seen in one day was five birds at the North Fields (Pagham Hbr) on the 11th. The final sighting was of two at Beachy Head on the 25th. Most sightings came from 19 coastal or near-coastal sites with only six sites inland.

A pair noted at Deanlane End (Rowland's Castle) on 30 Apr and 1 May and a female still there on the 15th was the only indication of a pair lingering. There were no breeding records. The only summer record was of a single un-sexed bird at Waltham Brooks on 12 Jul in company with four juvenile Stonechats.

The first autumn migration sighting was of three birds on Steyning Round Hill on 6 Aug but total numbers quickly built up to one of the better Augusts since 2000. At Pannel Valley NR 40 bird-days were recorded during the month and 119 at Beachy Head where ten or more birds were noted on four dates with a maximum of 18 on the 28^{th} . There were also 11 at Cliffe Hill (Lewes) on the 25^{th} , the only other count greater than ten.

September's total count was almost as high as in 2002 and 2003. The number of birddays counted at Pannel Valley NR was 122 and at Beachy Head was 85 where again there were four dates when numbers exceeded ten with a maximum count of 25 on the 2^{nd} . A highest count of 20 was made at Pagham Hbr on the 2^{nd} , at Birling Gap a maximum count of 20 occurred on the 7^{th} and a similar count was made in Sheepcote Valley (Brighton) on the 11^{th} , rather fewer than the autumn total of 320 there in 2002! The highest count at Constantia Manor (Isfield), exceptional for an inland site, was of 12 on 4 Sep with a similar number present a week later and again on 3 Oct.

The last sighting of the year was near Hollies car park (Ashdown Forest) on 26 Oct, slightly earlier than the 10-year average of 5 Nov. [GM]

1139. STONECHAT

Saxicola torquata

Fairly common resident and partial migrant. Amber listed species of medium conservation concern.

The approximate monthly totals were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
146	91	242	186	286	248	140	175	296	507	309	119

January numbers were well up on the 80 or so for 2002, 125 for 2003 and 90 for 2004. At least 18 pairs were seen, four pairs being recorded at Thorney Island on 15 Jan and five pairs there on 8 Feb. The first record of a male displaying was on 14 Mar in Ashdown Forest and of one singing there on the 19th (rather later than usual, the three previous year's being the 12th, 4th and 8th respectively) with further records up to 3 Jul. The highest counts in the spring were from Beachy Head where 18 were noted on 18 Mar and Iping Common where 13 included several fledglings on 14 May.

Breeding was confirmed by at least 61 pairs in 29 1-km squares away from Ashdown Forest, the species' stronghold, for which area it is almost impossible to produce a reasonably accurate estimate of breeding pairs. The first fledglings were sighted on 29 Apr in Ashdown Forest and were still being reported up to mid-September. Breeding was, however, variable with observers at Thorney Island recording that no birds had bred there this year despite the presence of at least eight males and five females, while at Constantia Manor (Isfield) the species had spread all over the estate.

In the autumn, counts of 15 or more were noted at five sites; a monthly maximum count of 15 occurred at Pett Level on 9 Oct, an observer at Cissbury Ring spotted 15 in one sweep of the binoculars on 22 Oct, at Beachy Head a maximum count of 24 included ten together at the east end of Whitbread Hollow (Beachy Head) on 23 Oct, there were 20 at Cuckmere Haven on 21 Nov and the monthly maximum count at Thorney Island was also 15 on 22 Nov. Numbers in both October and November, reflecting the effects of migration and dispersal, were up on 2003 and 2004. [GM]

1146.NORTHERN WHEATEAROenanthe oenantheVery scarce breeding summer visitor and common passage migrant.

The approximate monthly totals were as below:

		5						
Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
347	369	97	32	39	670	634	206	30

The first of these harbingers of spring was one noted at Rye Hbr on 10 Mar, somewhat later than the 10-year average of 2 Mar. The next was one at Selsey Bill on the 14th. Numbers then increased rapidly, mainly at coastal sites, with threes at Climping and Thorney Island and 18 at Southwick Beach followed by 17 at Newhaven Tide Mills and 20 at Beachy Head on the 18th. Observers at Selsey Bill recorded 30 birds on 25 Apr and those at Beachy Head 37 on the 30th.

Wheatears of the larger and brighter Greenland form *leucorhoa* (not unexpected but not noted in 2001 and 2003 although seen in 2002 and 2004) were first noted on 24 Apr when a single bird was at Church Norton. This was followed, at Beachy Head, by five on the 29th and a notable 25, including a single flock of 17, the next day. Single birds were recorded on 3 and 15 May at Cuckmere Haven and Henfield Levels respectively, two at

Beachy Head on the 21st and a final three there on the 25th to give a total of 38 of this form for the period.

The only breeding records were from Rye Hbr LNR where 13 pairs nested along the Beach Reserve, at least six pairs on Flat Beach and two pairs west of Gasson's Ruin (see Plate 12). Overall success was high with many pairs successfully rearing second broods. During June, birds were noted behaving as though they were holding territory at three coastal sites: Cuckmere Haven, Climping Beach and Newhaven Cliffs.

The small numbers noted towards the end of July may have been either failed breeders or early returning migrants. Returning birds were noted widely during August and numbers of 20 or more included 25 at Thorney Island on the 7^{th} , 20 at Beachy Head on the 15^{th} and 17^{th} , no less than 100 roosting at Church Norton on the 20^{th} and 30 at Beachy Head on the 21^{st} . Numbers during September held up well albeit without such big individual counts, although 40 at Church Norton on the 7^{th} and 28 on Worthing Beach between the Marine Gardens and Goring on the 16^{th} were notable. In October, modest numbers were seen mainly on beaches, cliff-tops and ploughed fields. The largest count in November was four at Cuckmere Haven on the 4^{th} with nothing but singles elsewhere.

The last bird was seen at Nutbourne on 23 Nov, nearly two weeks later than the 10-year average of 12 Nov. [GM]

1186. RING OUZEL

Turdus torquatus

Passage migrant, scarce in spring, often fairly common in autumn. Red listed species of high conservation concern.

A fine spring total was followed by an autumn similar to the exceptional 1998 passage and together they totalled 434 birds compared to 113 last year. The spring total was 50% above the average (18) and the autumn total of 406 was three times the average (133), even including 1998's count. The approximate monthly totals were as follows:

Mar	Apr	May	Sep	Oct	Nov
5	6	17	5	351	50

All spring migrants were seen east of central Brighton and most no further than 10 km from the coast on the South Downs. The first arrival was at Sheepcote Valley (Brighton) on 19 Mar, slightly later than the 10-year average of 15 Mar. This was followed by an unusual spring sighting at Pannel Valley NR two days later. All spring records were of singletons apart from two at Cissbury Ring and the closing report of a remarkable minimum of 16 at Malling Down chalk quarry (Lewes) on 10 May, a week later than the 10-year average date though not exceptional.

The autumn return was spearheaded by single birds at Pannel Valley NR and the Garden of Eden (Ashdown Forest) on a slightly early 13 Sep and ones and twos followed, but it was another month before birds appeared at Climping and Sidlesham. A few autumn birds were seen as far north as Bewl Water and Ashdown Forest.

There was a sudden influx on 18 Oct when observers at Cissbury Ring counted 48 birds, including a flock of 16 flying south, and 65 the next day. A count of 13 at Whitbread Hollow (Beachy Head) on the 18^{th} was followed by 53 in the area on the 19^{th} , including 39 at Whitbread Hollow where there were at least 40 through the autumn. In the west, 14 birds at Rackham Hill on the 18^{th} , five at Sidlesham Tramway on the 19^{th} and ten

at Climping on the 20^{th} were also notable. The year's most northerly bird appeared at East Grinstead on the 18^{th} .

November counts were generally small and widespread but on the 1^{st} 25 birds at Cissbury Ring was a huge count there for the date and the year's last record, a singleton, was there on 19 Nov, two days later than the 10-year average date. [JHW]

1187. BLACKBIRD

Turdus merula

Abundant breeding resident and winter visitor; perhaps a passage migrant.

Numbers appear to have dropped slightly despite a large increase in records submitted. Promising winter numbers continued the late surge in 2004 (due to BirdTrack inputs) but autumn numbers declined fractionally. However, they are still well up compared to 2003 and the total sightings probably reflect 4140 birds. A BTO survey trebled the May count. The following table shows the approximate number of birds and records received during the year:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	554	447	694	472	2109	296	172	159	223	351	516	373
No. of records	105	95	148	140	235	99	48	44	46	72	83	75

The number of records submitted in January jumped seven-fold from 14 in 2004 and bird counts doubled until April. In January there were few counts of more than 20 birds but Marsh Fm (Yapton) held 44 (55 in 2004) and the University of Sussex another 40 in the middle of the month. Numbers at the University increased to 46 birds in February but most other large counts came from the southwest, though none exceeded 26. Signs of migration came in March with nearly 700 birds recorded, including 22 at Burgess Hill on the 1st, 30 at Pulborough Brooks on the 4th and 36 at Offham (Arun Valley) on the 5th. Fifty or more were seen at Cliff End (Pett) on the 6th, at Beachy Head on the 10th and at Darwell Res on the 14th. Thirty four birds remained at the University up to 15 Apr and there were still 26 at Darwell Res on the 10th.

During the *BBS*° survey of 104 1-km squares, 1502 birds were recorded. These included 50 birds at Furnace Green (Crawley), 41 at Peacehaven, 38 at Warnham, 35 at Westergate, 34 at West Worthing and 33 at Northbrook Fm (Worthing). Non-transect May sightings amounted to another 607 birds.

Breeding activity was noted at Partridge Green (Littleworth) on 14 Mar and at Camp Hill (Ashdown Forest) on the 17th but these were the only records for March. Confirmed breeding reports of 280 pairs were submitted, with another 100 "probables", including 110 pairs at Brighton Wild Park, 25 in Ashdown Forest, 23 at Darwell Res, 21 at Sefter Farm (Pagham) and 21 at Hotham Park (Bognor). At least 41 territories were noted within Rye Hbr LNR. Juveniles were still being fed in Barnham in early September.

Numbers in October to December were lower than in 2004 but still $2\frac{1}{2}$ times the 2003 count. Notable monthly maxima of 20 or more came from Sefter Farm (40), Pagham Hbr (29), Cissbury Ring (60), Beachy Head (40), Darwell Res (42), Sidlesham (40) and Hove and Upper Beeding with twenty each. [JHW]

1198. FIELDFARE

Turdus pilaris

Common, occasionally very common, passage migrant and winter visitor. Amber listed species of medium conservation concern.

Winter birds recorded totalled 9600, comfortably exceeding the 10-year average of 7600, but the autumn return was disappointing at 5060 birds, only half the recent average of 10,600.

The approximate monthly totals and the number of records submitted were as follows:

	Jan	Feb	Mar	Apr	May	Oct	Nov	Dec
No. of birds	4144	3486	1991		1	95	3261	1707
No. of records	90	53	73		1	20	62	41

There were four counts of 300 or more birds in the first week of the year and nine others of 100+ during the first month, reflecting the previous good winter. Pannel Valley NR opened the east's account with 300 on 1 Jan followed by 400 at Stump Bottom (Steyning) the next day, the same number at West Dean on the 4th and 350 on the 8th at Cedar Farm (Hurst Green) to round off the week. The only big count in February, was of 2000 on the 13th in the orchards at Bewl Water (reducing to 1300 by the 25th). Another 350 were counted at Pannel Valley NR on 4 Mar, a further 200 at Cedar Farm on the 5th and 170 at West Grinstead on the 15th. Two birds were still at Pannel Valley NR on 31 Mar and the last of the spring was a singleton at Balcombe on 1 May, a week later than the 10-year average of 27 Apr.

Barcombe hosted seven returning birds on 4 Oct, ten days later than the 10-year average date, but there were only two October reports of over twenty birds, those being of 25 at Swanbourne Lake (Arundel) on the 8th and 23 at Pannel Valley NR on the 26th. November picked up the pace when 100 appeared at Constantia Manor (Isfield) on the first day, 1000 flew north at Ovingdean on the 9th, 300 were back at Cedar Farm on the 17th (dropping to 250 by the month's end) and Weir Wood Res supported 550 on the 26th. Two hundred birds appeared at Bewl Water and another 200 at the Ouse-Glynde confluence on 4 Dec and 300 at Rye Hbr village on the 27th. Three further sites held 100 birds or more in the last two weeks of December. [JHW]

1200. SONG THRUSH

Turdus philomelos

Decreasing resident and partial migrant; common passage migrant and winter visitor. Red listed species of high conservation concern.

2005 was a year similar to 2004 with numbers above the ten-year average. Monthly totals in the spring reflected the increased number of records from the *Breeding Bird Survey* (*BBS*) and *Scarce Woodland Bird Survey* (*SWBS*) and consequently the year's total of 2450 was double that of two years earlier.

The approximate number of birds and records received is as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	118	138	229	314	739	140	68	35	58	385	117	121
No. of records	60	64	112	140	237	63	41	21	22	52	54	46

Nest building was noted at Camp Hill (Ashdown Forest) on 20 Mar and feeding of young at Partridge Green on 16 Apr. Fifteen singing males were found at Ebernoe Common on 30 Apr and another 15 pairs at Brighton Wild Park a week later. Nineteen pairs were present at Pannel Valley NR, ten males sang at East Dean in May, another ten at

Pulborough Brooks in June and six territories were located at Rye Hbr LNR. Overall nearly 100 confirmed breeding pairs were recorded, an improvement on last year, 100 probably breeding and 240 birds active in suitable territories, a situation that under-records the species' true status in the county.

Autumn movement was evident in October when a peak of 40 was recorded at Beachy Head on the 6th. On 19 Oct, 200 or more were seen at Cissbury Ring. Sixteen were seen on Sidlesham Tramway on 15 Nov and 14 at Newhaven Tide Mills on 1 Dec. The year closed with 30 in the Edburton area on 29 Dec. [JHW]

1201. REDWING

Turdus iliacus

Common, occasionally very common, passage migrant and winter visitor. Amber listed species of medium conservation concern.

Numbers recorded in the first winter period continued last autumn's significant counts and the 4560 birds recorded compared well with the 10-year average of 3150. The autumn return count of 10,756 did not match last year's 17,800 but was double the average of 5000.

The approximate monthly totals and the number of records submitted were as follows:

	Jan	Feb	Mar	Apr	Sep	Oct	Nov	Dec
No. of birds	2325	1315	913	5	4	960	9450	438
No. of records	76	54	62	4	1	49	65	26

The highest counts in January were 300 at Cedar Fm (Hurst Green) on the 8th followed by 200 at Kneppmill Pond on the 16th and at Stapleash Fm (Chilgrove) on the 23rd. Numbers then faded but still yielded 250 at Bewl Water on 10 Feb and 200 at Coates Common on 19 Feb. West Dean Woods held 100 on the 27th. In March, 110 were counted at Greenhill Wood (Linchmere) on the 6th and 150 at Darwell Res on the 14th, but counts then tailed off with just 50 at Millbrook (Ashdown Forest) on the 22nd. The last birds were noted at Burgess Hill on 17 Apr, slightly later than the 10-year average of 14 Apr.

Four birds at Wakehurst Place (Ardingly) heralded the autumn return on 30 Sep, over a week later than the 10-year average of 19 Sep average. They were followed by ten flying west at the Old Airfield (Ashdown Forest) on 4 Oct, 50 at Warnham LNR on the 12th and 180 there on the 18th. An appreciable movement was heard over Brighton on that and the following night. At the beginning of November, there were 160 birds at Cissbury Ring and 200 at Constantia Manor (Isfield). Then c.3000 E crossed Brighton at dawn on the 2nd in flocks of up to 500, 800 flew south over West Chiltington in fifteen minutes on the 3rd and 500 arrived overnight next day in the east at Pannel Valley NR. On the 9th 3000 were counted at Ovingdean, another 800 were at Brighton on the 13th and there were 200 at Weir Wood Res on the 24th. It was quiet in December until the 27th when 100 birds flew over Rye Hbr village and next day three flocks totalling 75 birds were at or over Newhaven Tide Mills. [JHW]

1202. MISTLE THRUSH

Turdus viscivorus

Common resident and partial migrant. Amber listed species of medium conservation concern.

The number reported was higher than in 2004, monthly counts totalling 815 (from 382 records) against 650. Numbers reflect, perhaps, less than 600 actual birds though 250 of

them were seen in flocks of ten or more. Autumn numbers seem stable. The following table shows the approximate number of birds and records received during the year:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	45	53	111	58	136	116	13	116	31	46	53	35
No. of records	32	34	56	49	88	21	6	13	16	20	29	18

The first congregation of note was 11 birds seen at St George's Retreat (Burgess Hill) on 26 Feb complemented by the same number at Falmer on 7 Mar and 15 at Pulborough Brooks on the 4th. The *BBS* contributed 81 birds in May including six at both Lidsey Lodge (Shripney) and Hempstead (Uckfield).

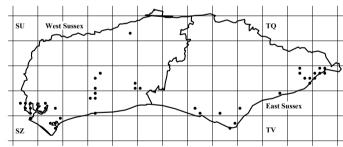
Breeding reports are undoubtedly conservative. Breeding was confirmed at 13 sites and was probable at another five with a further 47 possible territories. Ten males were reported singing and two sets of three young seen.

A remarkable flock of 44 birds was at Chilgrove on 19 Jun which may have formed around the 12 and 20 seen at nearby West Dean on the 17th. In Ashdown Forest, the Garden of Eden hosted eight on 8 Jun which grew to ten at the end of August which may have been remnants from a peak of 24 at Old Lodge Reserve on the 6th. In the west, there were 18 at Shopham Bridge (Byford) in pasture on 13 Aug, 16 at Thorney Island on the 20th and 34 at Graffham on a polo pitch on the 26th. Old Lodge still supported 12 on 1 Oct and numbers at Pannel Valley NR peaked at eight on the 10th. Observers at Whitbread Hollow (Beachy Head) counted ten birds on 5 Nov and 15 departed northwest from the Garden of Eden on 3 Dec. [JHW]

1220. CETTI'S WARBLER

Cettia cetti

Scarce but increasing resident, passage migrant and winter visitor.



Records were distributed as shown in the following map:

The first two months of the year brought records from 12 different sites, four in East Sussex and eight in the west, with a maximum of six at Pannel Valley NR, five between Arundel and South Stoke, and two heard regularly in the Brede Valley.

During April and May, there were 11 singing males at Pannel Valley NR, at least seven at Rye Hbr, five at Shinewater Lake (Eastbourne), nine at Pagham Hbr, eight from Arundel to South Stoke and 13 males were reported holding territory at Thorney Deeps where the first fledged young were noted on 6 Jun. In all 11 broods were located at this site, producing over 40 fledged young. At Warnham LNR three nests produced a total of nine young.

Post-breeding season records came mostly from the regular sites, though there were also birds seen or heard at Udimore on 4 Nov, Newhaven Recreation Ground on the 7th, Snowhill Marsh (West Wittering) on 15 and 21 Nov, Charleston Reedbed on the 16th and Amberley Wild Brooks on the 22nd. A long-staying bird ringed on 22nd Oct at Beachy Head was retrapped on the 29th and again on 5 Nov. [VJB]

1236. **GRASSHOPPER WARBLER** Locustella naevia Very scarce and declining summer visitor and fairly common passage migrant. Red listed species of high conservation concern.

A reeling male at Hope Gap (Seaford) on 13 Apr was the first record of the year, slightly later than the 10-year average of 10 Apr. There was another at Beachy Head on the 25^{th} . In West Sussex the species was first noted at Waltham Brooks on the 23^{rd} .

Possible breeding records were of two reeling males at Amberley Wild Brooks on 1 Jun, two singing males at Waltham Brooks on 4 and 18 May and a reeling male at Rodmell on 26 June. One of the Waltham Brooks birds was still reeling on 28 Jul.

Autumn passage was first noted on 16 Jul when a singleton was seen at Beachy Head followed by three at Pannel Valley NR on the 18th. Thereafter, there was a steady stream of birds through mainly two coastal sites.

	Jul	Aug	Sep	Oct
Monthly total	12	56	60	21
Cissbury Ring	•	-	•	2
Charleston Reedbed	•	-	4	-
Beachy Head	9	26	14	2
Pannel Valley NR	3	24	30	15
Other sites	1	6	12	2

The number of birds recorded at the main ringing sites were as follows:

Only 13 birds were ringed at Beachy Head, just over half the 2004 figure. At Pannel Valley NR, 23 were ringed in August, 30 in September and 15 in October, the last one on the 16^{th} .

The last birds of the year were recorded at Cissbury Ring on the 18^{th} and 20^{th} and, finally, at Sheepcote Valley (Brighton) on the 22^{nd} , slightly later than the 10-year average of 17 Oct. [VJB]

1242. AQUATIC WARBLER

Acrocephalus paludicola

Very scarce autumn visitor to selected sites, rare elsewhere. Considered Vulnerable by *IUCN*. Red listed species of high conservation concern.

Five were trapped at Pannel Valley NR in the autumn, on 22 Aug, 28 Aug, 31 Aug, 10 Sep and 18 Sep (RBRG). Four were juveniles and that on the 31st an adult. Twenty have been recorded since 2000 and although five is an above average showing for recent years, it is well below that for the 1990s when a total of 97 were seen (including 30, all trapped at this site, in 1997). Four have been recorded away from Pannel Valley NR since 2000, two each at Thorney Deeps and Combe Haven. Most records are in August and all fall between late July and early October. [RJF]

1243. SEDGE WARBLER

Acrocephalus schoenobaenus

Fairly common summer visitor and abundant passage migrant.

The first record was at Castle Water (Rye Hbr LNR) on 25 Mar, two days later than the record-breaking 2004 date, but five days earlier than the 10-year average. There was another March record of a single bird at Pannel Valley NR on the 31st. Early April saw a steady trickle of records with an influx on the 11th, when ten were recorded at Rye Hbr LNR, numbers growing there to 15 by the 12th. At the end of the month 17 were recorded at Shinewater Lake (Eastbourne) on the 30th. On 18 May one was observed bathing in a garden pond at Seaford and by the end of May and the beginning of June larger numbers were being recorded with 26 singing males at Pannel Valley NR on 27 May and 28 pairs at Thorney Deeps (Chichester Hbr) on the 28th.

Observers at Amberley SWT Reserve recorded a minimum of 38 singing on 1 Jun, ten pairs were recorded at Waltham Brooks on the 5th and there were 21 pairs at Pulborough Brooks on the same date. At Rye Hbr LNR, 48 territories were mapped, a large decrease from 104 territories in 2004.

In July a singleton on the 3^{rd} at the Ouse Estuary Project (Newhaven) was followed there by the first notable outward movement of ten on the 10^{th} , 17^{th} and 23^{rd} while a single bird was seen at Whitbread Hollow (Beachy Head) on the 17^{th} . As usual, the greatest autumn numbers were recorded from Pannel Valley NR where the maximum daily trapping totals were 160 on 30 Jul, 249 on 9 Aug and 175 on 2 Sep. In October, 40 were trapped at this site and the last individual for the county was recorded there on the 16^{th} , compared to the 10-year average of 12 Oct. [TWP]

1250. MARSH WARBLER Acrocephalus palustris Very scarce summer visitor and passage migrant. Red listed species of high conservation concern.

An adult was trapped at Pannel Valley NR Level on 29 May with juveniles trapped there on 8 Aug, 19 Aug and 25 Aug (RBRG). About 30 have been recorded in the county since 2000. This is the second year running that no potential breeding birds have been reported. [RJF]

1251.EURASIAN REED WARBLERAcrocephalus scirpaceusCommon summer visitor and very common passage migrant.

The first bird was observed at Piddinghoe (Newhaven) on 9 Apr, two days later than in 2003 and 2004 but only a day later than the 10-year average. It was followed by further singles at Castle Water (Rye Hbr LNR) and Peter Pond (Emsworth) on the 10th. There then followed a steady trickle of records during the month with eight at Shinewater Marsh (Eastbourne) on the 30th including one that was imitating a Cetti's Warbler and a car alarm! Passage continued throughout May but no significant falls were noted and birds were well into breeding by the month's end.

During the summer, records were widely distributed, the main breeding concentrations being 69 pairs at Thorney Deeps (Chichester), 130 pairs at Rye Hbr LNR, possibly 12 pairs at the Ouse Estuary Project (Newhaven) and 46 pairs at Sefter Farm (Pagham).

Return passage began around 10 Jul with one at Whitbread Hollow (Beachy Head) coinciding with the last date recorded at Barcombe Res, as happened in 2004, and

continued steadily through July and August. Numbers for August were generally in single figures but 20 in Whitbread Hollow on the 8th was the maximum noted there. At the end of the month trapping at Pannel Valley NR yielded 193 on the 27th with a further 206 on 2 Sep and 84 during October.

The last records were of singletons at Pannel Valley NR on 17 and 18 Nov, exceeding the previous latest date for the county of 13 Nov and considerably later than the 10-year average of 31 Oct. [TWP]

1260. MELODIOUS WARBLER Very scarce visitor.

A first-year was present at Hodcombe (Beachy Head) on 15-16 Jul (MEC, RHC) and is the first record since 2002. Twenty-three have been recorded in the county since 1990 and 58 in total. Of the more recent records, four have been seen during the second half of May, one in June, this one in July (the first since 1987), eight in August and nine in September. Thirteen of these have been at Beachy Head, five at Pagham Hbr (predominantly Church Norton) and one each at five other locations (four along the coast between Combe Haven and Littlehampton and one at Weir Wood Res). 2003 and 2004 were the first consecutive blank years since the mid 1970s. [RJF]

1277. BLACKCAP

Very common summer visitor and passage migrant; small numbers winter.

There were records of 40 wintering birds in January and February from 28 different sites. In February, a male was at the University of Sussex feeding on spindle on the 2^{nd} , a female was in alders near the river at Arundel on the 15^{th} and a male was heard in full song at Findon on the 8^{th} . Others were seen on bird tables, seed feeders, at fat bars, on ivy and in *Mahonia*.

The first obvious migrant was noted at Pagham Hbr on 18 Mar, while in East Sussex the first singing male was at Pannel Valley NR on 19th. From April onwards this successful species was widely recorded. There were six pairs at Kilsham Fm (Petworth), nine at Pulborough Brooks, nine at Thorney Island (a decrease of one on 2004), 20 at Deanlane End (Rowland's Castle) and 15 at Brighton Wild Park. A total of 256 were counted in 79 of the 105 1-km *BBS* squares surveyed.

In the autumn fairly good numbers were recorded at Whitbread Hollow (Beachy Head) although fewer in October than usual; 200 passed through the site on 29 Aug, 150 on 3 Sep, 300 on the 10^{th} , 500 on the 11^{th} , but only 120 on the 25^{th} . The October maximum there was 200 on the 9^{th} , but thereafter no more than ten were noted on any one day. Possibly the last departing individuals were at Pagham Hbr on 7 Nov and at Pannel Valley NR on 4 Dec.

The winter influx into parks and gardens started with a female at Plumpton Green on 12 Nov. A female seen at Bramber several times in December was feeding on apples, one at Wisborough Green on 11 Dec was eating honeysuckle berries and a male and two females were seen in a Seaford garden on Christmas Day. Wintering numbers were four times higher compared with the last two months of 2004, with a total of 40 individuals from 31 sites. [VJB]

Hippolais polyglotta

mppolais polygiolia

Sylvia atricapilla

1276. GARDEN WARBLER

Common summer visitor and passage migrant.

A singing male at Deanlane End (Rowland's Castle) on 28 Mar was two days earlier than the previous county record and nine days earlier than the 10-year average. The next report was of one at Pulborough Brooks on 7 Apr and the first East Sussex bird was at the University of Sussex on the 19th.

During the breeding season there were records from 59 different sites, comprising at least 98 singing males, and 27 were found in 15 out of 105 1-km BBS squares, including nine at Blackham. There was a maximum of five at Pulborough Brooks, four in a BTO *WBBS* tetrad at Kilsham Fm (Petworth), and three at both Maresfield and Venus Wood (West Dean). The proportion of adult to juvenile birds trapped at Cissbury Ring was 10:7 and suggested that breeding success in the area had been poor. Conversely, at Shoreham Sanctuary the proportion was 3:13. At Whitbread Hollow (Beachy Head) 30 on 13 Aug was the highest daily total seen and numbers ringed were the lowest seen since 1999 and 1993 despite greater ringing effort than in those two years. At Pannel Valley NR the highest daily number was 23 on 28 Aug.

There were just 27 records in September, mostly of single birds. The final reports were of one at Beachy Head on 2 Oct and another at Pulborough Brooks on the 17th, slightly earlier than the 10-year average of 20 Oct. [VJB]

1273. BARRED WARBLER

Very scarce autumn visitor.

on the 29th

A first winter bird was seen at the Newhaven Tide Mills during 4-6 Sep (MFA *et al*). It frequented a small area of scrub and bushes between the railway footbridge and the lagoon and generally gave good views to those prepared to spend time looking for it. It is the first record since 2003 and the seventh since 2000. Twenty have been recorded in the county since 1990 and 52 in total. Perhaps surprisingly this is only the second to be recorded between Beachy Head and Littlehampton, the previous one was also the county's first, at Shoreham-by-Sea on 31 August 1959. All records fall between 17 Aug and 31 Oct with September generally the best month, accounting as it does for 34 records. [RJF]

1274. LESSER WHITETHROAT

Fairly common summer visitor and passage migrant. As in 2004, arrivals were later than average, with the first report from Toot Rock (Pett) on 17 Apr compared to the 10-year average of 12 Apr. The first returning West Sussex birds were three at Pulborough Brooks on the 20th. Singing males were heard at 26 different sites by the end of the month, with a first local sighting at Novington (Plumpton)

Breeding season reports of singing males came from 56 sites across the county; there were four pairs at Amberley Wild Brooks (twice the 2004 total), eight pairs at Beachy Head and 11 at both Thorney Island and Rye Hbr LNR, an increase of one and four pairs respectively at these two sites compared with the previous year. A total of 14 were counted in 11 of the 105 1-km *BBS* squares surveyed.

An increase in passage numbers was evident at Beachy Head where twice as many were ringed than in 2004 and there was a maximum of 25 on 13 Aug. However, numbers

Sylvia curruca

Sylvia nisoria

have not recovered to those of the mid-1990s and the peak autumn count at Brighton Wild Park was only three on 18 Aug.

The last two reports of departing migrants were from Sidlesham Ferry on 6 Oct and Cow Gap (Beachy Head) on the 10th, slightly earlier than the 10-year average of 14 Oct.

However, later reports were received of an individual seen regularly in a Burgess Hill garden, visiting a feeding station and taking sunflower seeds. There was no obvious injury which may have prevented migration, though an injury to a leg developed later in the winter, and the bird was seen regularly until the spring of 2006 (AD, CD). This is the second record of an overwintering Lesser Whitethroat in Sussex, the first being from 17 Nov 2002 to 14 Apr 2003 in a Worthing garden, where the main food preference was for peanuts (*SxBR 55, pp 205-6*). [VJB]

1275. WHITETHROAT

Sylvia communis

Very common summer visitor and passage migrant.

The first returning migrant was noted at Pagham Hbr on 23 Mar, two weeks earlier than the first 2004 record and over a week earlier than the 10-year average of 1 Apr. The next was a singing male at Sheepcote Valley (Brighton) on 3 Apr. Two days later a pair seen at Climping had probably not arrived recently as one was carrying nesting material. From 14 Apr there were daily reports of singing males establishing territories throughout the county, with four at Pulborough Brooks on the 25th, seven at the University of Sussex on the 21st and 31 at Beachy Head on the 25th.

Breeding season records were widespread. Thirty birds were counted on 10 May at Cissbury Ring, there were six territories at High Salvington (Worthing), 20 singing males at Round Hill (Steyning) and 21 pairs bred at Brighton Wild Park. There were up to 21 singing/displaying males at Pulborough Brooks, 28 singing males on the Knepp Estate, 30 breeding pairs at Beachy Head and, at Rye Hbr, 50 breeding pairs was broadly similar numbers to 2004. A total of 204 birds was counted in 58 of the 105 *BBS* 1-km squares surveyed.

As autumn migration commenced a leucistic individual was noted among 40 at Birling Gap on 31 Jul. 2004 had been the best year since 1977 at Beachy Head but numbers ringed were significantly lower in 2005, with only half the total of the previous year, and the highest daily count of birds passing though was 120 on 28 Aug. In September passage slowed; there were 36 at Beachy Head on 6 Sep and 30 at Sidlesham on the 18th. From 21 Sep only a handful of records was received, mostly from Pagham Hbr. In October, singles were at Hope Gap (Seaford) on the 16th and Church Norton on the 23rd. Possibly the same individual was seen at the latter site on 12 Nov and the final sighting was of a single bird in willows at Arundel WWT on the 19th, a month later than the ten year average. [VJB]

1262. DARTFORD WARBLER

Sylvia undata

Fairly common but localised resident. Amber listed species of medium conservation concern.

The year's first sighting was on 5 Jan at Pagham Hbr of a single bird in the company of Stonechats, as is often the case. Further reports suggested two, possibly three individuals, were wintering in this area with the last bird being seen on 5 Feb at Sidlesham Ferry. Elsewhere, there were singles at Waltham Brooks on 6 and 18 Jan, Chailey Common 18 Feb and the Brede Valley 24 Jan. Typically the majority of the first winter period reports were from the two main breeding areas, Ashdown Forest and the Wealden Heaths. Sporadic reports from the former area were mainly of single birds and the highest day counts from the latter were of eight at Iping Common on 6 Jan and six there on 23 Jan.

On 18 Feb the wind changed to the north bringing severe weather conditions which lasted until early March, particularly affecting the east of the county, including part of Ashdown Forest, where there was snow and sharp overnight frosts. The Wealden Heaths escaped the worst of this weather and this was reflected in the contrasting reported breeding numbers from the two sites. The *Wealden Heaths Breeding Birds Survey* (see page 199) produced 64 pairs (57 in 2004) from seven heaths (Iping & Stedham being treated as one). The highest number of pairs was recorded at Ambersham and Heyshott Commons, with 23, followed by 15 pairs at Iping and Stedham. Weavers Down produced ten and at Wheatsheaf Common five pairs bred. In contrast the numbers recorded from Ashdown Forest were down to 36 pairs against 40-45 in 2004. The eastern side of the Forest was most severely hit by the harsh weather; here the population crashed though numbers on the former less well populated western side expanded, albeit not enough to compensate for the eastern side losses (*D King pers comm*). The estimated county total was 100 pairs/males holding territory.

A single bird was found on 28 Jul in coastal habitat at the seaward end of Cuckmere Haven.

The autumn and second winter period post-breeding dispersal numbers reported from coastal areas were not as high as in 2004. The first record was of two at Pagham Hbr on 21 Aug. Subsequently approximately nine individuals wintered on the Selsey Peninsular, at least two of which were juveniles. A single bird was also noted at Climping during December and remained into 2006. East Sussex coastal records were mainly from Beachy Head where six were reported on 23 Oct, of which at least two were juveniles. Records from this area were mainly of single birds and commenced with one at Shooters' Bottom on 19 Oct, the last there being on 1 Nov. Away from the Beachy Head area, three were reported from Rye Hbr on 14 Nov, a single bird was trapped and ringed at Pannel Valley NR on 26 Oct and two further individuals were noted there on 9 Nov and 28 Dec. Single birds were also recorded at Newhaven on 16 Nov and 11 Dec and Lewes Brooks on 11 Dec. The estimated monthly totals of coastal birds were as follows: -

Jul	Aug	Sep	Oct	Nov	Dec
1	2	5	15	15	8

The highest count of more than two birds from the breeding areas during this period was of ten at Iping Common on 5 Nov. [AP]

1265. SUBALPINE WARBLER

Sylvia cantillans

Rare vagrant.

A first-summer male was found at Shooter's Bottom (Beachy Head) on 30 Apr (DC, JFC *et al*) but did not linger. It has been accepted by *BBRC* and is the 13th to be recorded in the county. It was considered to belong to one of the western races (*cantillans* or *inornata*). Previous records have been in April (4, from the 21st), May (6), June and October (2, last on the 26th). Nine have now been recorded at Beachy Head, three around Pagham Hbr and one at Fairlight.

Occurrences from 2006 will no longer be considered by *BBRC*, although *SOSRC*, to whom the task of assessment will now fall, will endeavour to maintain standards and fully documented records will continue to be required for acceptance. [RJF]

1293. **GREENISH WARBLER** Verv rare vagrant.

Phylloscopus trochiloides

One present in Cow Gap (Beachy Head) from 7-9 Oct (MC, DC, JFC *et al*) has been accepted by *BBRC* and is the third county record. On the first date it was only seen briefly and not identified (it was a dull individual with an almost non-existent wingbar on its left wing) but it gave good views subsequently, favouring the bushes in the gulley just up from the steps leading onto the beach. Both previous records were at Beachy Head, in May 1981 and September 1995.

Occurrences of this species from 2006 will no longer be considered by *BBRC*, although *SOSRC*, to whom the task of assessment will now fall, will endeavour to maintain standards and fully documented records will continue to be required for acceptance. [RJF]

1298.**PALLAS'S LEAF WARBLER**Phylloscopus proregulusVery scarce visitor, mostly in late autumn.

2004: The individual at Belle Tout Wood (Beachy Head) on 26 Oct (*SxBR* 57:149) was also seen on the 27^{th} while another was at Whitehawk (Brighton) on 29-30 Oct (both NB) taking the year's total to five.

2005: Just one was recorded, a rather elusive individual at Church Norton from 29 Oct to 1 Nov (JA *et al*). A significant change in wind direction towards the end of October prevented this species from really contributing to what was otherwise the county's best ever year for rare *phylloscs*. Sixteen have been recorded since 2000 with at least 37 during the 1990s, eleven during the 1980s, seven during the 1970s and three in 1968. Most records are from mid October to mid/late November. [RJF]

1300. YELLOW-BROWED WARBLER Very scarce visitor, mostly in late autumn.

A record number were recorded in the county, all in October. The first was at Hodcombe (Beachy Head) on the 3^{rd} (MEC, RHC) with up to four in the Beachy area on the 6^{th} : one in Cow Gap gulley (JFC), two in the old trapping area (JFC, RKH *et al*) and one at Hodcombe (MEC, RHC), the last also being present on the 7^{th} . A juvenile male was trapped at Pannel Valley NR on the 7^{th} (RBRG), while three were seen at Hodcombe on the 9^{th} (MEC, RHC *et al*) with another there on the 11^{th} (MEC, RHC), when one was seen

Phylloscopus inornatus

157

Occurrences of this species from 2006 will no longer be considered by BBRC, although SOSRC, to whom the task of assessment will now fall, will endeavour to maintain

standards and fully documented records will continue to be required for acceptance. [RJF]

One at Poole Place (Climping) from 7-10 Oct (JD, OM et al) has been accepted by BBRC and is only the fourth county record. Like most individuals of this species it was often easier to hear than to see, although many managed good views with perseverance. Previous records, also in October, were at Beachy Head in 1974 and 1991 and Combe Haven in 1992, making this the first to be recorded in West Sussex. It is also the earliest county record, the others falling between 18-30 October. There are many fewer records of this species in the county than for the superficially similar Radde's Warbler, despite the number of British records of the two species being very similar.

trapped at Pannel Valley NR (also in 1992, 1995 and 2003). The remaining records were at Selsev Bill (1991), Church Norton (1995), Worthing (1994) and Combe Haven (2000), The Beachy individual was in the same private garden which hosted the county's first record. All records fall between 30 September and 3 November. With four trapped at a site a little way from the coast and another seen in an urban garden (in Worthing) it is likely that this species is greatly under-recorded in the county.

Two first-winter birds were recorded in the autumn, the first at Hodcombe (Beachy Head) on 7 Oct (RHC et al) and the other trapped at Pannel Valley NR on 12 Oct (RBRG). Both have been accepted by *BBRC* and take the county total to 12. They are the fourth for the Beachy Head area (following records in 1974, 1995 and 1999) and the fourth to be

Occurrences of this species from 2006 will no longer be considered by BBRC, although SOSRC, to whom the task of assessment will now fall, will endeavour to maintain standards and fully documented records will continue to be required for acceptance. [RJF]

1301 **RADDE'S WARBLER**

DUSKY WARBLER

Verv rare vagrant.

1303

Very rare vagrant.

December (3). Records have shot ahead of the previous species with 33 since 2000. although the 37 during the 1990s is the same. [RJF]

briefly at Shoreham Sanctuary (JAN). These were followed by one at Littlehampton GC on the 15th (RJLK, ES et al), one in Belle Tout Wood (Beachy Head) on the 16th (DC et al), one at Holywell (Eastbourne) on the 21st (CFB) and finally one at Sheepcote Valley (Brighton) on the 22nd (ADW, IJW).

Although there may have been some duplication amongst the Beachy Head records a total of 15 for the year does not seem unreasonable. The best year previously was 1996 with nine, although none were seen as recently as 2001, and the first was in 1965. October is the best month for the species, as one might expect from these records, accounting for 89 out of a grand total of 118 recorded in the county. The others were in January (in 2004), April (in 1971 and 2004), September (5, earliest 18th in 1988), November (18) and

Phylloscopus fuscatus

Phylloscopus schwarzi

1307. WESTERN BONELLI'S WARBLER Verv rare vagrant.

Phylloscopus bonelli

Phylloscopus sibiltrix

One present at Beachy Head from 2-4 Sep has been accepted by BBRC. It was found at the old trapping area of Beachy Head on 2 Sep (JFC, RKH *et al*) but quickly moved off west. It was later relocated at Hodcombe (MEC, RHC, JFC *et al*) but appeared to leave quickly and was then not seen for the rest of the day. It reappeared at Hodcombe on the 3rd-4th providing the usual dilemma associated with rare birds in private gardens. The generosity of Hodcombe's owners in allowing many locals access to see it was acknowledged, a process which raised £68 for cancer research, but the need not to broadcast the news widely left others understandably disappointed. It is only the fourth county record following others at Beachy Head on 9 April 1972, 15 September 1977 and 30 September 1986, the first two in Whitbread Hollow and the third also at Hodcombe. There are also four records of Western/Eastern Bonelli's Warbler in the 1970s which were very unlikely to have been the latter: one at Rye, two at Beachy Head and one in Alfriston. [RJF]

1308. WOOD WARBLER

Very scarce summer resident and passage migrant. Amber listed species of medium conservation concern.

The year's total was 33 records relating to some 23 individuals, slightly up on 2004's 29 reports for 13-15 birds. The first to be recorded were on 16 Apr with singles at Paines Wood (Arundel) and Cissbury Ring, slightly earlier than the 10-year average of 20 Apr. Other April records were of singles at Pagham Hbr Information Centre on the 25^{th} and another at the Severals (Church Norton) on the 27^{th} . These were followed by an inland record at Ashdown Forest on the 29^{th} and another coastal record of one at Hodcombe (Beachy Head) on the 30^{th} . Other migrants were recorded at Cow Gap (Beachy Head) on 8 May and lastly at Church Norton on 22 May, quite a late date.

In the breeding season, at least eight singing males were noted, split between the northwest of the county and the Ashdown Forest area, but a decline was evident in the latter area with no records from two previously occupied sites.

Return passage was first noted in July with one trapped at Cissbury Ring on the 30^{th} quickly followed by one, possibly two birds, at Beachy Head on the 31^{st} . August records included singles at Warnham LNR and Birling Gap (Beachy Head) on the 2^{nd} followed by a minimum of three at Beachy Head on the 6^{th} , which was quite outstanding as this species is rarely observed on autumn passage. The last record was of a singleton at Pagham Hbr Information Centre on 29 Aug, ten days earlier than the 10-year average of 8 Sep. [TWP]

1311. COMMON CHIFFCHAFF

Phylloscopus collybita

Very common summer visitor and passage migrant; small numbers winter.

As usual there were many records for January and February from at least 25 sites of mostly single birds, but there were six at Coldwaltham SF on 5 Jan increasing to 15 on the 18th. At Hermitage SF (Emsworth) 26 were counted on the 21st falling to 12 by 21 Feb. Numbers did not achieve the large counts made in 2004.

Spring migrants started appearing from the middle of March but there were no large falls recorded at any of the coastal sites. However, 27 were counted singing on Ditchling

Common on the 27th and 25 at Deanlane End (Rowland's Castle) on the 28th. A useful indicator of arrival dates were those recorded at the University of Sussex with one there on 14 Mar, 2 on the 16th, 9 on the 29th and 11 on the 30th. In April 20 were noted at Beachy Head on the 1st and birds continued to arrive throughout the month.

During the breeding season 11 pairs were counted at Thorney Island (Chichester Hbr). 15 pairs at Brighton Wild Park and a minimum of 12 singing/displaying birds at Pulborough Brooks. In the BBS 83 of the 105 1-km squares surveyed held 347 birds.

Autumn passage began in August and 20 together at Mount Harry (Offham) on the 30th was the highest count for the month. Passage accelerated in early September when, on the 11th, a significant change in Willow Warbler: Chiffchaff proportions was noted at Beachy Head and 20 were trapped at Weir Wood Res on the 13th. At Climping Gap, 60 were counted on the 7th, 61 at Beachy Head on the 18th and 75 in Whitbread Hollow (Beachy Head) on the 25th. Passage continued well into October with 20 at Brooklands (Worthing) on the 8th, 100 at Beachy Head on the 9th, at least 50 at Brooklands again on the 11th, when 'chiffs were everywhere', and 20 were there on the 23^{rd} .

In November 23 birds were trapped at Pannel Valley NR and 14 were counted at Waltham Brooks on the 16th, with numbers dropping at this now traditional wintering site to ten by the year end. At least 30 individuals were noted from a number of sites during December, [TWP]

EASTERN/SIBERIAN CHIFFCHAFF 1311.01 P. c. abietinu/tristis Very scarce winter visitor and autumn passage migrant.

An individual showing characteristics of one of the currently recognised 'eastern' races (abietinus/tristis) was seen, and heard calling, near Coldwaltham SF on 29 Nov with two others there on 16 Dec (BFF, DIS). They were considered most likely to have been *abietinus*, with the former being one of the puzzling grey and white individuals with an atypical call (see below). The definitive work on this complex is currently Dean and Svensson (Dean, A.R. and Svensson, L. 2005. 'Siberian Chiffchaff' revisited. British Birds 98:396:410.) although they acknowledge that some fundamental questions remain unanswered. In particular, the origin of the 'grey and white' chiffchaffs with atypical calls, often reported as *tristis*, remain something of a mystery but seem most likely to be pale *abietinus* from European Russia. Dean and Svensson also state that "the approach to identification of *tristis* must address the full suite of plumage and vocal characteristics. aided at a minimum by high-quality photographs and preferably by trapping (the latter also providing subsidiary if not conclusive biometric data)". [RJF]

1312. WILLOW WARBLER

Phylloscopus trochilus Common summer visitor and passage migrant. Amber listed species of medium conservation concern.

The first records were of two in the Ashdown Forest area and a single at Ovingdean on 23 Mar, somewhat later than the 10-year average of 14 Mar. These were followed by a further 32 counted at 22 sites during the month. There was a steady trickle in the first few days of April, mostly of singles birds, but 15 were at Pett Level on the 5th and eight at Brooklands (Worthing) on the 10th. The first real fall was noted on the 12th with 26 at Beachy Head and at least 65 at Pagham Hbr, with 25 there on the 15th. There were 72 at Beachy Head on the 25th, 20 there on the 30th and 25 at Church Norton the same day. Passage continued during May but no significant numbers were involved.

During the breeding season a survey of 105 1-km BBS squares revealed 36 squares holding 83 birds. On 1 Jun at least eight birds were singing at Amberley SWT reserve and at least six likewise at Pulborough Brooks. Many other breeding records were received with the Ashdown Forest area being one of the strongholds of the species; however, it does seem that it is still declining in some areas of the county.

Autumn passage started on about 21 Jul when eight were recorded at Pannel Valley NR and, at Beachy Head, 18 were noted on the 31st.

During August, the main passage month, peak counts at various sites included 150 at Whitbread Hollow (Beachy Head) on the 6th and 45 at Cissbury Ring on both the 6th and 15th, 86 on the 8th at Whitbread Hollow, 100 at Pagham on the 9th and 69 at Pannel Valley NR on the 13th. The last significant number was 25 at Church Norton on 2 Sep. During September, 70 birds were recorded from five sites. October produced 12 records from Pagham, Cuckmere Haven and Pannel Valley NR.

The last bird was recorded at Church Norton on 5 Nov, over a week later than the 10-year average of 26 Oct.

Although the autumn passage figures looked quite good, there has been a definite downward trend of observed birds in Sussex since 2001. [TWP]

1314. GOLDCREST

Regulus regulus

Very common breeding resident, common passage migrant and winter visitor. Amber listed species of medium conservation concern.

A total of 629 records was received from 249 locations across the county, including 122 sites in the breeding season. Birds were recorded in 40 of the 105 *BBS* 1-km squares surveyed in Sussex in 2005. After below average January numbers in 2004, numbers this year were back to normal with many sites holding small wintering parties of up to ten birds. During February and March birds continued to be recorded in good numbers, including 20 at Ashdown Park on 9 Feb and ten at Pulborough Brooks on 4 Mar.

Migrant birds were recorded from coastal areas from mid-March and a light passage included 19 at Beachy Head on the 19^{th} . Two birds were actually observed coming in off the sea at Birling Gap on the 20^{th} .

Records of breeding in some defined areas are shown in the *Summary of Some Common Breeding Bird Counts* on pages 196 - 198. In addition, at least 12 pairs were found at Wiggonholt Common, six pairs at Rackham Plantation and at least 59 singing males were found throughout Ashdown Forest (49 in 2004).

Autumn passage did not appear to begin until late September when birds started to be observed at coastal locations such as Beachy Head and Sidlesham Ferry; both locations holding up to 20 birds during October. A high count for the year of 130 birds at Seaford Head on 22 Oct marked the start of the main passage period. Over the next two weeks daily maxima included 50 at Whitbread Hollow (Beachy Head) on 29 Oct and 4 Nov, 30 at Climping and 40 around Church Norton on 31 Oct. Autumn passage then rapidly diminished but small numbers of birds were recorded in winter habitat until the end of the year with a maximum of ten at Broadstone Warren (Ashdown Forest) on 30 Nov. [DG]

1315. FIRECREST

Regulus ignicapilla

Scarce breeder, passage migrant and winter visitor. Amber listed species of medium concern.

The English breeding population is assumed to migrate whilst the over-wintering birds are believed to originate from northeastern Europe (*Birds in Britain 2005*). In Sussex, wintering birds are widely distributed and mainly occupy the coastal region. Reports for January and February ranged from Pagham in the west to Rye Hbr in the east and refer mainly to single birds apart from three at Church Norton on 3 Jan and two at Pagham on 4 Feb. Limited inland reports were of singletons from Midhurst on 1 Jan, West Dean Woods on 30 Jan and Burton MP on 6 Feb.

Observations over a recent seven-year period indicate that, certainly on the Sussex/Surrey borders, Firecrests arrive with the main fall of Chiffchaffs (*P Hollow, pers. comm.*). It is evident from the reports received that spring migration commenced in early March and, although only singles were noted, continued until the end of the month. Thereafter, coastal counts were infrequent.

The minimum monthly totals, including breeding birds, were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
16	9	42	19	18	3	-	-	5	26	21	6

As a breeding species, Firecrests are certainly under-recorded, not least because the pitch of its rapid "machine gun" like song can be difficult to pick up and differentiate from Goldcrest. This species favours Norway Spruce plantations but can also be found in mixed conifer and deciduous woods, particularly where there is ample ivy covering the latter's trunks. This year's records, from either known or new breeding sites where at least two singing males were present, suggest that the species has a propensity for elevated sites. This may be merely a coincidence or it might be accounted for by the availability of suitable habitat but, certainly in West Sussex, where there are suitable lowland sites, these are only occupied sporadically and usually by single pairs (*pers. obs.*). The elevated areas in the northwest around the Surrey/Sussex/Hants borders show this trend, particularly in Haslemere which is right on the border and has a long established breeding population. Here birds are just as likely to be found in urban gardens as in plantations.

The records received indicate a minimum county breeding population of 23 pairs. An interesting comparison is with Hampshire, where the breeding population has doubled since 2002 to 109 pairs in 2004. In northeast Hampshire, adjoining the Sussex/Surrey border, at least 38 singing birds were noted and a single site had 28 (*Hants Bird Report 2004*).

The approximate totals recorded at the main sites during the autumn and early winter periods were as follows:

	Sep	Oct	Nov	Dec
Pagham Hbr	1	10	12	2
Beachy Head	1	18	3	-
Rye Hbr	3	1	5	1
Other sites	-	12	2	3

The first autumn migratory movement was noted from mid-September with five individuals between the 15^{th} and 28^{th} , all but one being in the Rye Hbr and Beachy Head areas. Throughout the main passage period of October into early November, birds were noted on an almost daily basis at coastal sites mainly as singletons except for three at Hodcombe (Beachy Head) on 10 Oct and at Church Norton on 17 Oct and 2 Nov. [AP]

1335. SPOTTED FLYCATCHER

Muscicapa striata

Scarce summer visitor and fairly common passage migrant. Red listed species of high conservation concern.

An early bird was seen at Pulborough Brooks on 19 Apr, four days earlier than the 10year average. The next birds were two at Wisborough Green and one at St. Anne's Well Gardens (Hove) on the 25th. Migrants continued to be recorded from the coast through to late May but only in ones or twos.

Records were received from 25 breeding sites (the same as last year) from 18 May; breeding was confirmed at 15 sites (the same as 2004) and was probable at a further ten. Three juveniles fledged from nests at Peasmarsh and Nuthurst but all other records were of fewer young. In the *BBS* eight birds were recorded in seven of the 105 1-km squares surveyed.

Although autumn migrants were widely recorded from both the coastal strip and inland, the overall numbers were significantly below those recorded in 2004 when concentrations of over 30 birds were found.

As usual migrants began to appear in small numbers at the beginning of August, but the period of heaviest passage is usually during the last week of August and the first two weeks of September. This was again the case with groups of ten recorded at Church Norton on 20 Aug, Angmering Park on the 31^{st} , Cissbury Ring on 4 Sep, Edburton Hill on the 2^{nd} and 7^{th} and, at Beachy Head, 14 on 29 Aug and 15 on 4 Sep. From the middle of September numbers fell rapidly with the last record from the Pagham Hbr area on the 24^{th} and from Beachy Head on the 25^{th} .

There were only four records for October. The latest were one at High Cross Fm (Uckfield) on the 11^{th} and another at Wisborough Green on the 26^{th} , nearly two weeks later than the 10-year average. [DG]

1349. **PIED FLYCATCHER**

Ficedula hypoleuca

Scarce passage migrant, more numerous in autumn than spring; has bred.

The approximate monthly totals were as follows:

Apr	May	Jun	Jul	Aug	Sep	Oct
12	-	1	-	28	22	1

Passage numbers during spring were normal but autumn passage was only fair, with a minimum of 51 birds recorded compared with 73 in 2004 and 124 in 2003.

The first spring migrants were an individual at Hodcombe (Beachy Head) and at least two at Church Norton on 11 Apr, which compare with the 10-year average of 8 Apr A further eight birds were recorded during the following two weeks. The final passage bird of the spring was an individual at Sidlesham Ferry on 28 Apr. The only record outside the normal passage period was of a bird seen at Beachy Head on 19 Jun (ST), an unusual date.

Autumn passage commenced on 2 Aug, a typical date, with a singleton at Stansted Forest. During the next week four further birds were recorded on the coast but there were then no sightings until the 17th when three were at St. Anne's Well Gardens (Hove). Birds were then recorded virtually daily to the end of the month with inland records at Barcombe Res, Patcham, Devil's Dyke and Firle. The largest gathering of the year was of four birds at Pulborough Brooks on 2 Sep. Further records were received until the 20th with the

majority coming from the coast. Church Norton continues to be the most likely place to encounter this species in the county.

The last record of the year was an individual at Hodcombe on 7 Oct, slightly later than the 10-year average of 3 Oct. [DG]

1364. BEARDED TIT

Panurus biamarcus

Scarce breeder, and scarce passage migrant and winter visitor. Amber listed species of medium conservation concern.

The peak counts outside the breeding season at the seven sites where the species was recorded were as follows:

	Jan	Feb	Mar	Aug	Sep	Oct	Nov	Dec
Thorney Deeps	15	8	10	44	1	34	24	32
The Severals (Church Norton)	•	1	1	1	•	1	•	-
Breech Pool (Pagham Hbr)	-	-	-	-	-	-	10	1
Long Pool (Sidlesham Ferry)	-	-	-	-	-	1	-	-
Broadwater Lake (Eastbourne)	-	2	-	-	-	-	-	-
Pannel Valley NR	1(*)	-	2	-	20	20	4	10
Rye Hbr	1	2	-	-	-	8	11	-

(*) = small numbers present all month but not counted

Numbers were slightly below those in 2004 but again the autumn influx of birds from outside the county was obvious. No records were received from Piddinghoe Pond or Filsham LNR where birds were recorded in 2004.

Breeding was confirmed at only two sites. At Thorney Deeps (Chichester Hbr) five males and four females fledged at least 35 young. The first juveniles were recorded on 25 May and throughout the year adult males outnumbered adult females at this site. At Pannel Valley NR eight pairs bred successfully and 20 birds were recorded on 3 and 15 Oct. There has been a reduction in the number of sites occupied during the breeding season over the last five years and any records of this species, particularly during the breeding season, would be gratefully received.

Typically, 'high flying' behaviour was noted at Thorney Deeps and three occurrences were recorded. On 11 Oct ten birds performed some 'high flying' as did nine birds on the 23rd. On 4 Nov 20 birds were present and ten of these flew off high to the west in the early morning. [DG]

1437. LONG-TAILED TIT

Very common resident.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sefter Fm (Pagham)	10	1	-	-	-	2	-	-	-	1	14	6
Hotham Pk (Bognor)	-	-	-	-	-	1	1	-	-	-	9	-
Warren Hill (Washington)	6	5	2	3	-	-	-	-	-	-	1	1
Burgess Hill	6	3	7	2	-	-	-	-	-	10	15	-
Tegdown Hill (Brighton)	12	-	2	3	-	-	-	-	12	-	-	-
University of Sussex (Falmer)	16	14	12	14	-	9	-	17	11	-	-	-
Weir Wood Res	7	3	2	2	7	4	2	5	5	4	6	9
Scobells Fm (Barcombe)	6	•	2	1	4	-	-	-	13	-	-	7
Ouse Estuary Project (Newhaven)	1	-	3	-	-	18	-	-	-	12	8	-

The monthly maxima at some regularly counted sites were as follows:

In the early months the largest concentrations reported were 20 at Peasmarsh and Pannel Valley NR on 2 and 25 Jan respectively and 21 between Arundel and South Stoke on 3 Feb.

A total of 142 birds was recorded in 46 of the 105 *BBS* 1-km squares surveyed. Records from defined areas are shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 198. The largest post-breeding flocks recorded were 32 at Pannel Valley NR on 4 Jul, 20 at Carters Fm (Pett), Pagham Hbr and Brooklands (Lancing) on 4 Sep, 6 Sep and 23 Oct respectively, and 37 at Pannel Valley NR on 29 Oct. At a garden in Angmering, where the species was present in nine of the 46 weeks in which garden birds were recorded (22 out of 45 weeks in 2004) and the maximum count was eight on 30 Oct.

Birds were noted on peanut feeders at Diplocks Fm (Hailsham) (4) and Pulborough Brooks (5). [PJ]

1462. **BLUE TIT** Abundant resident.

Cyanistes caeruleus

The monthly maxima	at regularly counted	sites were as	follows
The monthly maximu	at regularly countee	i sites were us	10110 # 5.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sefter Fm (Pagham)	19	22	-	-	-	17	-	-	-	16	14	28
Hotham Pk (Bognor)	13	14	8	6	13	6	6	6	7	5	5	4
Marsh Fm (Yapton)	26	18	-	-	-	-	-	-	-	-	-	-
Parham Estate	-	10	-	-	19	-	-	-	-	-	-	-
Warren Hill (Washington)	1	14	6	1	-	-	1	-	-	-	10	1
River Mole (Gatwick)	14	-	5	1	3	2	6	3	-	5	2	7
Burgess Hill	27	22	17	10	15	30	25	3	4	40	30	5
Patcham (Brighton)	3	2	6	4	7	2	6	I	4	2	I	-
Tegdown Hill (Brighton)	8	-	4	6	I	-	I	I	9	-	I	-
University of Sussex (Falmer)	35	40	40	34	-	27	-	29	39	-	-	-
Weir Wood Res	10	-	4	10	9	4	8	63	33	41	20	11
Scobells Fm (Barcombe)	-	-	8	15	5	-	7	•	-	-	1	-
Ouse Estuary Project (Newhaven)	10	6	10	3	4	1	•	2	2	8	6	2
Newhaven Tide Mills	5	-	6	5	-	-	3	2	2	10	2	2
Wilbees Fm (Arlington)	•	-	11	10	8	-	-	8	-	5	-	25

At a garden in Angmering, where the species was present in each of the 46 weeks in which garden birds were recorded, the maximum count was ten on 18 Sep.

A total of 1378 birds was recorded in 104 of the 105 *BBS* 1-km squares surveyed. Records from defined areas are shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 198. At the Bluebell Railway (Horsted Keynes) a total of 49 nest boxes was used. Eggs were laid in 45 of these of which 41 fledged young. [PJ]

1464. **GREAT TIT**

Parus major

Abundant resident.

The monthly maxima at regularly counted sites were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sefter Fm (Pagham)	11	14	-	-	-	9	-	-	-	2	7	8
Hotham Pk (Bognor)	9	5	5	8	4	1	-	1	4	2	2	4
Marsh Fm (Yapton)	12	10	-	-	-	-	-	-	-	-	-	-
Parham Estate	-	20	-	-	5	-	-	-	-	-	1	-
Warren Hill (Washington)	1	5	3	3	-	-	-	-	-	-	5	1
River Mole (Gatwick)	13	-	8	5	5	6	5	-	-	1	2	5
Burgess Hill	6	2	4	4	5	5	6	•	2	25	25	2
Patcham (Brighton)	1	1	3	6	1	2	2	-	2	1	-	-
Tegdown Hill (Brighton)	4	-	3	4	-	-	-	-	4	-	-	-
University of Sussex (Falmer)	25	22	24	-	24	17	-	11	19	-	-	-
Weir Wood Res	5	-	4	6	9	39	28	39	34	16	5	3
Scobells Fm (Barcombe)	-	-	11	9	9	-	-	-	-	-	-	-
Ouse Estuary Project (Newhaven)	2	2	1	1	1	-	-	1	-	6	3	-
Newhaven Tide Mills	2	2	1	2	-	-	-	2	-	2	1	1
Broadstone Warren (Ashdown)	-	3	-	5	1	-	-	-	2	-	3	-
Wilbees Fm (Arlington)	-	-	7	8	5	-	-	6	-	5	-	5

At a garden in Angmering, where the species was present in each of the 46 weeks in which garden birds were recorded, the maximum count was 11 on 16 Oct.

A total of 696 birds was recorded in 99 of the 105 *BBS* 1-km squares surveyed. Records from defined areas are shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 198. At the Bluebell Railway (Horsted Keynes) a total of 61 nest boxes was used. Eggs were laid in 57 of these of which 52 fledged young.

A melanistic bird with an all dark head was recorded at Angmering for three days from 20 Jun. [PJ]

1461. COAL TIT Verv common resident.

Periparus ater britannicus

A number of concentrations outside the breeding season included counts of 13, 15, 26 and 15 at Ashdown Park on 26 Jan, 9 Feb, 7 Apr and 26 Oct respectively, 11, 14 and 13 at Hazel Grove (Burgess Hill) on 29 Jan, 15 Oct and 5 Nov respectively, ten at West Dean Woods on 27 Mar and 18 at Old Lodge NR on 28 Nov. At a garden in Angmering singletons were noted in 25 of the 46 weeks in which garden birds were recorded.

A total of 63 birds was recorded in 29 of the 105 *BBS* 1-km squares surveyed. Records from defined areas are shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 198. At other sites there was a minimum of five pairs at Rackham Plantation and ten pairs at Wiggonholt Common.

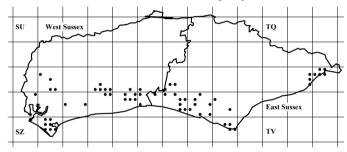
The usual scattering of coastal sightings included twos at Carters Fm (Pett) on 8 Feb and 18 Mar, Thorney Island on 26 Mar, Toot Rock (Pett) on 17 Apr, Bognor Regis on 5 Jul and 1 Nov and Church Norton on 16 Oct, and singletons at Fairlight on 22 Jan, Carters Fm on 21 Jun and 13 Sep, Climping on 8 Sep, Church Norton on 10 Sep, Rye Bay Wood on 20 Oct and Hove on 6 Nov.

The autumn was notable for a large influx of birds showing characteristics of the continental race *ater*. The first was a single bird at Ovingdean on 22 Sep (IJW) followed by further singletons at Cow Gap (Beachy Head) on 5 Oct (JFC), Birling Gap on 8-9 Oct (RJF, ARK), Whitbread Hollow/Cow Gap (Beachy Head) on 22-23 Oct (RJF) and Church Norton on 20 Oct, 30 Oct and 1 Nov (DIS *et al*), one at Brooklands (Lancing) on 8 Oct (CWM) with two there on 10 Oct (BFF), Littlehampton GC also on 10 Oct (CWM), Goring on 15 Oct (DIS), Rottingdean on 20 Oct (IJW) and Birling Gap on 22 Oct (DIS). Up to three were recorded at Pett Level from 1 - 11 Oct (RBRG). This would appear to be the largest ever influx of continental birds recorded in Sussex, the total of approximately 19 exceeding the ten recorded in 2003. [PJ]

1442. WILLOW TIT *P* Scarce resident. Red listed species of high conservation concern.

Poecile montanus

Records were distributed as shown in the following map:



There was a welcome increase with birds recorded in 26 tetrads in 2005 compared with 17 in 2004 and 22 in 2003. The map again shows a cluster of tetrads on the Downs in West Sussex from Harting Down to Chanctonbury Ring and also a second cluster of tetrads extending across the High Weald in the north of the county from Warnham LNR to Bayham. Elsewhere there were scattered records from the greensand ridges (Ambersham, Graffham and Marley Commons and Stedham Marsh) and the woodlands north of Hastings (Ashes Wood, Footland Wood and Powdermill Res) and also an isolated sighting from Ripe.

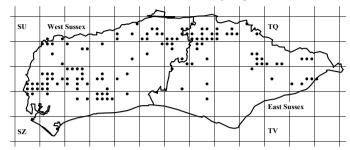
An indication of the scarcity of this species in the county is provided by the *BBS'* results with just six birds recorded in four of the 105 1-km squares surveyed. At West Dean Woods, however, there were at least six singing males in three 1-km squares. The preference shown for dense conifer plantations at this site suggests that other similar sites in the west of the county may also hold this unobtrusive species.

At Weir Wood Res no new birds were ringed for the first time in 27 years though there was one re-trapped twice during the year. [PJ]

1440. MARSH TIT

Fairly common resident. Red listed species of high conservation concern.

Records were distributed as shown in the following map:



There was a welcome increase with birds recorded in 134 tetrads in 2005 compared with 100 in 2004 and 103 in 2003. The map again shows a similar pattern to previous years with most of the records for the western Downs and adjacent wooded areas to the north, the High Weald from Horsham to Ashdown Forest, and the wooded areas to the north of Bexhill and Hastings. The coastal records were of singletons at Pannel Valley NR on 23 Sep and 9 Oct and at nearby Mallydams Wood on 3 May and 10 Nov, with another single at The Severals (Church Norton) on 20 Sep

In the early part of the year the largest concentrations were 12 at Eartham Woods on 9 Jan and six at both West Dean Woods and Lee Fm (Patching) on 20 Feb and 5 Mar respectively while in the latter part of the year there were six at Weir Wood Res on 21 Dec.

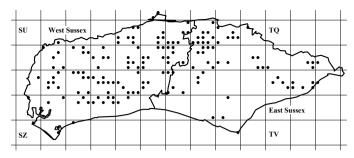
A total of 19 birds was recorded in 15 of the 105 *BBS* 1-km squares surveyed. Breeding records included 12 pairs at Eridge Park, four pairs at Bayham, two pairs at both Nap Wood (Frant) and Saxonbury and two or three pairs at Mallydams Wood where one pair nested in a Dormouse box. Other records from defined areas are shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 198.

Birds were reported using feeders at Arundel WWT, Pulborough Brooks, a Warnham garden, Buchan Park (Crawley), Wakehurst Place, Weir Wood Res and Bewl Water. [PJ]

1479. NUTHATCH Common resident.

The map below shows the distribution of the 159 tetrads in which the species was recorded in 2005 (101 in 2004 and 83 in 2003).

Sitta europea



In the first winter period the largest concentrations reported were six at each of Warren Hill (Washington) on 5 Jan, Wakehurst Place on 6 Jan and Nymans (Balcombe) on 6 Feb, nine at Pippingford Park (Ashdown Forest) on 1 Mar and seven at Stopham Woods on 19 Mar.

A total of 109 birds was recorded in 47 of the 105 *BBS* 1-km squares surveyed. Records from defined areas are shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 198. Additionally there were seven territories at Ebernoe Common. At the Bluebell Railway (Horsted Keynes) a total of three nest boxes was used, all of which successfully fledged young.

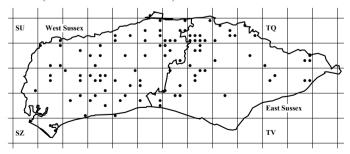
Unusually there were again several records for coastal areas comprising pairs at Hotham Park (Bognor) and Carters Fm (Pett) and single birds at Cliff End (Pett) on 6 Mar, Beachy Head on 31 Aug and Pagham Hbr on 6 -13 Sep. The bird at Beachy Head landed on a bush on the cliff edge opposite the Old Trapping area, stayed for two minutes and then departed east dropping below the cliff edge after a short flight.

The largest concentrations reported for the latter part of the year were at Wakehurst Place where there were ten on 26 Aug and 12 on 24 Sep and Hazel Grove (Burgess Hill) where the largest count was nine on 5 Nov. [PJ]

1486. EURASIAN TREECREEPER Common resident.

Certhia familiaris

The map below shows the distribution of the 102 tetrads in which the species was recorded in 2005 (96 in 2004 and 83 in 2003).



The largest concentrations reported outside the breeding season were four at Bewl Water on 8 Jan, Grattons Park (Crawley) on 25 Mar and Wakehurst Place on 30 Sep and six at Constantia Manor (Isfield) on 14 Mar.

A total of 30 birds was recorded in 18 of the 105 *BBS* 1-km squares surveyed. Records from defined areas are shown in the *Summary of Common Breeding Bird Counts* on pages 196 - 198. Additionally there were at least three territories at both Amberley Wild Brooks SWT Reserve and Pulborough Brooks.

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 4 3 1 5 1 9 3 3 4 - 1 2	1	The usual spread of coastal signifigs was recorded as follows.											
4 3 1 5 1 9 3 3 4 - 1 2	ſ	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		4	3	1	5	1	9	3	3	4	-	1	2

The usual spread of coastal sightings was recorded as follows:

These included singletons at Goring Gap on 6 Jan, 11 Jun and 24 Sep, Climping on 12 Sep, Sidlesham Ferry on 27 Sep, Church Norton on 13, 23 and 28 Nov and Hove Park on 27 Dec. [PJ]

1490. **PENDULINE TIT**

Remiz pendulinus

Rare vagrant.

2001: A juvenile was recorded at Filsham LNR and Combe Haven between 23 Sep and 2 Oct (EJC, KMJ). It has been accepted by *BBRC* and was the first of two recorded in 2001, the other being trapped at Pannel Valley NR on 27 Oct. It is the first record for September and at the time was the earliest county record. Despite daily coverage throughout the length of its stay, the bird at Filsham/Combe Haven was only encountered on three occasions: it was heard on 23 Sep, heard and seen in flight on 29 Sep and heard and seen flying in silhouette on 2 Oct.

2004: Three, two males and a female, were seen at Filsham LNR on 9 Apr (KMJ *et al*) with a juvenile male trapped at Pannel Valley NR on 26 Oct (RBRG) and an adult male there on 30 Oct (RBRG). All have been accepted by *BBRC* and those in April are the first to occur outside the period late September to early November. The female was colourringed and almost certainly originated from southern Sweden where it was likely to have been ringed as a juvenile in 2003.

2005: An adult male was seen well but briefly in scrub near the Beachy Head Hotel on 11 Oct (DRC, JFC) before flying off strongly to the east, while a first-winter bird was trapped at Pannel Valley NR on 14 Nov (RBRG). These records have been accepted by *BBRC* and take the county total to 25, all since 1987. The November bird is the 11^{th} to be trapped there and the latest county record by nearly two weeks. The Beachy Head individual is the first in the county to be recorded away from a reedbed, giving those that do not regularly watch in that habitat some hope of finding one, not that it is very great as its appearance was sadly even more fleeting than is usual for this species. [RJF]

1515. **RED-BACKED SHRIKE**

Lanius collurio

Very scarce passage migrant; formerly a breeding visitor. Red listed species of high conservation concern.

Two were found on 3 Jun, a female at Combe Haven (KMJ) and a male at Amberley Wild Brooks (PFM *et al*) but neither lingered, while in the autumn a juvenile was seen on rough ground just north of Newhaven on 6-9 Nov (MO)(see Plate 13). Fifteen have been seen since 2000, in early June (4), August, September (8) and October. The June record

provided a good 'double' with the Woodchat Shrike seen at the same location in late April while that in November is the second latest in the county, only surpassed by one in 1991 that remained at Selsey Bill until the 16th. [RJF]

1520. GREAT GREY SHRIKE

Very scarce winter visitor and passage migrant.

Records were again few with two, possibly three, in the first winter period and three, possibly four, in the second winter period.

The bird first located at Ashdown Forest on 11 Oct 2004 was most often seen in the Wrens Warren/Gills Lap area until 27 Mar (RH) while a second bird frequented the area just west of Partridge Green from 27 Feb (IMS) until 27 Mar (SGH, RNS). Another bird seen at Poundgate (Crowborough) on 14 Mar (DP) may have been the Ashdown Forest bird.

In the second winter period, the first two records were of a possibly returning bird at Ashdown Forest (RNS) and another at Pagham Hbr (DE), both on 23 Oct. The latter may have been the same bird that was seen at Pulborough Brooks on 25 Oct. The Ashdown Forest bird was seen by a number of observers in both the Wych Cross and Gills Lap areas until 11 Dec. Another bird was reported to be at Heyshott on 24 Dec. [PNP]

1523. WOODCHAT SHRIKE

Rare vagrant.

A female was present at Combe Haven on 25-27 Apr (KMJ). Only the fourth record since the start of 2000, it was the 45^{th} in total. Those since 1990 have been in April (2, from 22^{nd}), May (5), June (4), July and September. It is the third record for this location, following those in summer 1982 and May 2000. [RJF]

Lanius senator

Lanius excubitor

1539. **JAY**

Very common resident.

The highest counts in the first winter period were seven at the University of Sussex on 23 Feb, eight at Pulborough Brooks on 24 Mar and seven at Tabell Ghyll (Ashdown Forest) on 28 Mar.

Ten at Brighton Wild Park on 8 Apr and ten at Patcham (Brighton) on 20 Apr were both good spring numbers and there were numerous reports of urban sightings during the summer months. A total of 67 was counted in 44 of the 105 *BBS* 1-km squares surveyed. Counts of common breeding birds in defined areas are shown on pages 196 - 198.

Maximum counts during the autumn and second winter period were ten at Pulborough Brooks on 14 Oct, five at Rackham Woods on 20 Nov and six at Hanlye (Cuckfield) on 22 Nov. [PNP]

1549. **MAGPIE**

Very common resident.

The largest roosts counted in the first winter period were of only 20 at Pulborough Brooks on 18 Jan, Scotney Court GP on 13 Mar, the Ouse Estuary Project (Newhaven) on 20 Mar and at Cuckmere Haven on 27 Mar. There were over 20 double figure counts from other sites across the county. The peak count of 49 at Whitbread Hollow (Beachy Head) on 18 Sep was a big reduction from the 255 seen at Brighton Wild Park in Feb 2004.

There were reports of confirmed or probable breeding from sites throughout the county. A total of 434 was counted in 91 of the 105 *BBS* 1-km squares surveyed. The highest count was of 40 pairs at Brighton Wild Park, the same as last year. Counts of common breeding birds in defined areas are shown on pages 196 - 198.

There were no autumn or winter counts from Brighton Wild Park where traditionally the highest concentrations have been found. Good numbers were seen in the Beachy Head area with 31 at Whitbread Hollow on 11 Sep, increasing to 49 on 18 Sep, and 40 at Cow Gap on 9 Oct. Thirty at the Ouse Estuary Project (Newhaven) on 11 Sep was also a good number, as was the 32 seen at Halsey's Fm (Sidlesham) on 24 Nov. Elsewhere, there were several double figure counts the best being 18 at High Salvington (Worthing) on 26 Sep, 20 at Warnham LNR on 8 Oct, 17 at Thorney Island on 13 Dec and 18 at Sefter Fm (Pagham) on 27 Dec. [PNP]

1560. JACKDAW Verv common resident.

Throughout the year there were reports of pre-roost gatherings but no estimates of roost sizes were received. The largest gathering was a flock of 1000 at Beeding Brooks which was presumed to be part of the roost at Longlands/Tottington Woods (Small Dole).

The highest counts in the first quarter were 500 at Rye Hbr LNR on 30 Jan, 250 at Harbour Fm (Rye Hbr SSSI) on 3 Feb, 227 at Pagham Hbr on 13 Feb and 250 at North Barnham on 7 Mar.

Breeding was reported from sites across the whole county. A total of 778 was counted in 80 of the 105 *BBS* 1-km squares surveyed. There were three reports of breeding in owl

Garrulus glandarius

Pica pica

Corvus monedula

nest boxes. Counts of common breeding birds in defined areas can be found on pages 196 - 198.

In the second half of the year there were 200 at Halsey's Fm (Pagham) on 11 Sep, with a similar number at Crutches Fm (Winchelsea) on 10 Nov, increasing to 250 on 26 Nov, 400 at Bewl Water on 2 Dec and 250 at Wisborough Green on 29 Dec. There was an interesting report of 27 birds arriving at Telscombe Cliffs on 13 Nov, having first been seen $1\frac{1}{2}$ miles out at sea. [PNP]

1563. ROOK Very common resident.

The highest counts in the first winter period were 200 at Rye Harbour Fm (Rye Hbr SSSI) on 18 Jan, increasing to 300 on 3, 8 and 28 Feb, 137 at Sefter Fm (Pagham) on 23 Jan, 150 at Pannel Valley NR on 30 Jan and 150 at Highdown (Worthing) on 20 Feb.

The first record of nest building was at High Cross Fm (Uckfield) on 22 Feb with several other similar records before the month's end. There were several rookery counts of over 40 nests but the highest counts were of over 50 nests at Wyckham Wood (Henfield), 66 at Stantons Fm (East Chiltington), 56 at Plumpton Place (Plumpton) and 60 at Court House Fm (Offham). The decline in the size of the rookeries at Findon continued with only 102 nests compared to 136 in 2004, possibly due to tree felling activities.

In the *BBS* the highest count was of 323 birds at Compton and the sum of the counts from 55 of the 105 1-km squares surveyed was 1498. Other high summer counts were 200 at Pulborough Brooks on 8 May, with 650 there on 12 Aug, and 300 at West Dean Woods on 12 June.

In the second winter period, 200 were recorded at Halsey's Fm (Sidlesham) on 27 Oct and 300 at Crutches Fm (Winchelsea) on 10 Nov, increasing to 400 on 26 Nov. [PNP]

1567. CARRION CROW

Corvus corone

Very common resident.

By far the largest concentration in the first winter period was 700 roosting at Chingley Wood (Bewl Water) on 20 Jan. More normal size gatherings included 71 at Hotham Park (Bognor) on 19 Jan, 42 at Pagham Hbr on 9 Feb, 60 at Forest Mere (Liphook) on 18 Feb and 73 at Hotham Park on 9 Mar. At Birling Gap (Beachy Head) two birds flew out to sea on 4 Mar, while three came in off the sea on 12 Mar and four on 26 Mar.

During the spring and summer months, the number and size of large concentrations reduced with 40 at Hotham Park on 6 and 18 Jun and 50 at Wickstreet (Arlington) on 8 Jun being the biggest. During the *BBS* the highest count was 82 at Heyshott and the sum of the counts in 99 of the 105 1-km squares surveyed was 1116. Counts of common breeding birds in defined areas are given on pages 196 - 198.

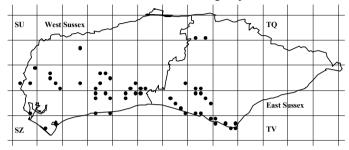
During the second winter period there were 82 at Camber Shore SSSI on 12 Nov (increasing to 135 on 14 Nov and 198 on 10 Dec) and 100 at Bewl Water on 2 Dec. [PNP]

Corvus frugilegus

1572. RAVEN

Scarce resident.

While birds can appear almost anywhere in Sussex (particularly along the South Downs), it is apparent that there were fewer records than last year in the far east of the county but a notable increase along the coast in the west. All the records were of singles or pairs apart from several sightings of four birds in the Beachy Head area during the summer months and were distributed as shown in the following map:



At least one pair bred at Beachy Head and raised two young. Although a pair was seen roosting at Site B, there was no evidence that breeding took place. However, a pair was seen displaying and protecting territory at Site C during February and March although there was no evidence that breeding took place. At Site D, a pair raised two young. [PNP]

1582. STARLING Sturnus vulgaris Common resident, passage migrant and winter visitor. Red listed species of high conservation concern.

Over twice as many records were received for this species compared with the previous year and many more flocks were reported early in the year. The largest counts were of a roost estimated at 9000 at Brighton Palace Pier on 5 Jan and flocks of 2000, 2500, 4000 and 2000 flying west at Hove Lagoon on 17, 19, 21 and 28 Jan respectively, presumably from the Brighton roost. Other four-figure were 1200 at Pagham North Fields on 18 Jan, 1200 at Pett Level on 19 Feb, 1200 at Pulborough Brooks on 22 Feb with 1500 the following day, and 1000 at Iford Brooks on 1 Mar. The highest number noted roosting at Eastbourne Pier was 250-300 on 12 Jan. At Thorney Deeps 400 roosted in the reed beds on 2 Feb.

There were indications of movement in mid-March with ten at Beachy Head on 17 Mar and 50 there the following day, one in off the sea at Birling Gap on 20 Mar and 18 passing through at Selsey Bill the same day.

Information for defined areas show that 20 pairs bred at Brighton Wild Park, double the 2004 figure, a 3-km *WBBS* transect on the R Rother near Petworth held ten pairs and a 95 ha mixed farm at Pagham held two pairs. In the *BBS* a total of 2029 was counted in 80 (76%) of the 105 1-km squares surveyed, an improvement on 2004 but still below the long-term average of 84%. The average number of individuals per square was 25 the same as the long-term average.

Post-breeding flocks began to assemble in May with 150, including 40 juveniles, at the Ouse Estuary Project (Newhaven). On 13 Jul 1200 were at Greatham Bridge and numbers

at Birling Gap reached 1200 on 17 Aug. A flock of 800 on 6 Aug at Harbour Fm (Rye Hbr SSSI) rose to 2500 on 22 Sep.

Possible passage was indicated by 200 counted moving through on 19 Sep at Worthing Beach and, at Beachy Head, observers noted 35 W on 29 Oct, 50 W on 12 Nov and 50 W on 19 Nov. On this last date 210 were also seen to fly southwest towards the sea at Steep Down (Lancing).

Roosts were reported at eight sites. At Thorney Deeps 1000 roosted in the reed bed on 26 Jun and 1500 on 11 Oct and at Rodmell 500 roosted also in reeds on 14 Sep. At Castle Water (Rye Hbr LNR) 5000 were seen to fly east on 18 and 19 Oct, presumably to roost. The only very large roost was at Brighton where the West Pier held 14,500 on 29 Oct and 6500 on 26 Nov while the Palace Pier held 21,000 on 19 Nov, 32,600 on 3 Dec and 44,500 on the last day of the year. [ACG]

1591. HOUSE SPARROW Passer domesticus Very common but possibly declining resident. Red listed species of high conservation concern.

Many more flocks were reported early in the year than in recent years with double figure flocks from 30 sites throughout the county, the largest being 90 in two gardens at Lancing on 20 Feb. The average at this site was 50-60 in 2005 compared with 20-30 the previous year. A winter census on a 67 ha mixed farm at Yapton yielded maxima of 19 in January and 16 in February compared with four in 2004 while a garden at Goring held up to 34, 'similar to last year'. A small garden at Rusper held 29 on 25 Jan. At the University of Sussex monthly maxima of 23 in January, 17 in February (ten in 2004) and 22 in March (17 in 2004) showed an increase. Similarly, numbers at Patcham reached 16 on 19 Mar compared with a maximum of ten the previous year and at Widewater (Lancing), 29 on 5 Jan compared with a maximum of 22 previously.

Breeding was recorded from over 20 sites with a total of 235 nests counted. A 3-km *WBBS* transect on the R Rother near Petworth held 11 nests, up from seven in 2004 whereas, 14 at Brighton Wild Park was similar to the previous year. At Sefter Fm (Pagham) there were four nests against one in 2004. In the *BBS* a total of 1530 was counted in 78 (74%) of 105 1-km squares surveyed, an improvement on 2004 but still below the ten year average, but an average of 19.6 per surveyed square is the highest to date.

A leucistic individual was noted at Henfield on 1 Jun.

There were post-breeding flocks of over 50 at 11 sites but there were fewer very large flocks than in 2004. The largest counts were of 200 in July and August at Newhaven Tide Mills compared with over 400 in 2004, 150 at Goring Gap on 30 Jul, 100 dust-bathing on Seaford Head on 1 Aug and 100 at the Ouse Estuary Project (Newhaven) on 9 Aug. A garden at Goring held a peak count of 25 on 9 Jul, described as 'a huge decrease on 2004 and with very few juveniles'. There were at least 60 at Harbour Fm (Rye Hbr SSSI) on 8 Jul, 80 at Selsey Bill on 30 Jul, 50 at Chyngton Fm (Cuckmere Valley) on 14 Aug, 95 at Hove Lagoon on 17 Aug, 50 at Kirdford on 21 Aug, 90 at Bewl Water on 18 Sep and 60 at High Cross Fm (Uckfield) on 13 Sep.

With the exception of 50 at Newhaven Tide Mills in October there were no late year flocks above 25. A garden in East Grinstead held only two 'showing continued decline

over 11 years'. Two females were noted with nesting material at Newhaven on 18 December. [ACG]

1598. TREE SPARROW

Passer montanus

Scarce resident, passage migrant and winter visitor. Red listed species of high conservation concern.

Reports were received from only 18 sites compared with 32 in 2004 with no reports from many sites, even in the species' stronghold in the east of the county.

In the first winter period, the wintering flock at Pannel Valley NR reached 260 on 2 Mar but had dropped to 80 by the end of the month and to ten by the end of April with the last birds seen on 12 May. Elsewhere, one was found at Kithurst Hill (Storrington) on 1 Jan and five at Tegdown Hill (Brighton) on 6 Mar. Two flying east at Ovingdean on 10 Apr may have indicated spring passage.

During the breeding season reports were received from only five locations. A maximum of 13 was seen at Burgess Hill on 25 May, where one or two had first been noted from 26 Feb, and three were still present on 7 Jul. Castle Water (Rye Hbr LNR) held up to three birds from 15 Apr to 18 May and up to three were at Selsey Bill from 16 Apr to 18 May. At East Rother Levels, two were seen on 28 April and one on 27 May and, on Pevensey Levels, two pairs were noted at Manxey Level on 8 May and two birds at New Bridge on 7 Jun. In the Brede Valley there were 7-10 breeding pairs compared with over 12 pairs which bred there in 2004

Thirty flying west at Beachy Head on 5 Nov and ten seen at Shoreham on the 17th probably indicated autumn passage or dispersal.

At Pannel Valley NR, the wintering flock rose from two on 5 Oct to 40 on 9 Nov and 120 on 5 Dec, less than half the number reached in 2004 but still larger than any flock for over 20 years previously. Given the paucity of breeding records, the timing of the major influx and the movement noted at Beachy Head, is it possible that this flock comprises mainly continental breeders?

A single bird at Lewes Brooks on 17 Sep and a flock of eight on Pevensey Levels on 7 Oct were the only other late year records. [ACG]

1636. CHAFFINCH

Abundant resident, passage migrant and winter visitor.

The 1020 records received was the most for any species this year and exceeded the 853 received for the Wren, suggesting that Chaffinches are the most abundant and widespread species in the county. This was confirmed by the presence of 1279 Chaffinches in 103 of the 105 *BBS* 1-km squares surveyed, whereas only 913 Wrens were recorded in 101 squares.

During the first winter period, most records of numbers over 50 came from Ashdown Forest. In Pippingford Park there were counts of 160 on 1 Jan, 120 on the 16^{th} and 130 on the 20^{th} and 14 additional counts in excess of 50 birds from many areas in the Forest. Elsewhere, the highest counts of the period were 1000 on 23 Jan at Lodge Hill Fm (West Dean) and 400 at nearby Stapleash Fm (Chilgrove) on 3 Mar. The only other counts in

Fringilla coelebs

excess of 50 birds were 110 at Stansted Park on 1 Jan, 150 at Eartham Woods, 70 at Turners Hill on 2 Jan and 72 at the University of Sussex on 4 Mar.

The sole record of spring movement was of 20 N at Cow Gap (Beachy Head) on 17 Mar.

During the breeding season, ten territories were identified at Scobell's Fm (Barcombe), 16 at Rye Hbr SSSI and 29 in 95 ha of mixed farmland at Sefter Fm (Pagham). Forty two pairs bred at Brighton Wild Park and 61 were counted in c.265 ha at Pannel Valley NR. In the *BBS* 1279 were counted in 103 of 105 1-km squares surveyed.

The only significant post-breeding gathering was of 80 birds feeding on blueberry bushes at Durleigh Marshes (Rogate) on 27 Aug. Autumn movements were not recorded until mid-October when 50 E were noted at Climping Gap on the 13th, and 150 E, 40 E and 30 E were counted at Beachy Head on the 14th, 15th and 18th respectively. At Selsey Bill, 106 were noted on the 22nd and 138 the next day, but there was no record of direction.

During the second winter period, although there were 20 records for sites where groups of 20 to 50 were noted, the only larger counts were of 70 and 200 at Willbees Fm (Arlington) on 11 and 27 Dec respectively, 100 and 150 at Lee Fm (Patching) on 28 Nov and 18 Dec respectively and, the highest count of the period, 400 at Stapleash Fm (Chilgrove) on 18 Dec. [JAH]

1638. BRAMBLING

Fringilla montifringilla

Fairly common winter visitor and passage migrant.

Jan Feb Mar Apr Oct Nov Dec No. of birds 278 95 24 200 1606 334 88 No. of sites 12 8 9 8 19 37 20 **Coastal sites** 12 17 2

The approximate monthly totals were as show below:

Numbers in January were comparable with those for the end of 2004. There were 83 records for the first winter period of which over 70% were for less than five birds and all records came from inland sites. The majority of the birds seemed to favour the Chilgrove/West Dean area in the west of the county. The largest groups here were 150 on 1 Jan at Stapleash Fm (Chilgrove), 50 at Lodge Hill Fm (West Dean) on 23 Jan and 1 Feb and 20 at Colworth Down (Chilgrove) on 2 Jan and 21 Feb. Elsewhere, there were counts of 25 at Pippingford Park (Ashdown Forest) on 20 Jan and 1 Mar and 22 at Crowborough on 6 Mar. The last spring record was of a singleton at the Old Lodge LNR (Ashdown Forest) on 16 Apr.

The first returning bird in the autumn was a singleton which flew over Millbrook (Ashdown Forest) on 6 Oct following which numbers built up slowly during the month. However, on the 23rd, there were records from several coastal sites of sizeable numbers on the move including 36 W at Beachy Head, 20 at Birling Gap and 29 at Ovingdean. On the 29th, 70 flew over Sheepcote Valley (Brighton). Birds were noted moving past several coastal sites on 1 Nov with 20 at both Church Norton and Selsey Bill and 40 at Sidlesham Ferry. But it was on the 5th that the county movement record for this species was shattered when no less than 1206 flew west past Beachy Head (DC, RJF), followed later by several smaller groups of less than 100. Significant counts at other sites were of 50 at Lee Fm (Patching) on 28 Nov and 40 there on 18 Dec. By the end of the month,

177

significant numbers were returning to the Chilgrove/West Dean area. There were 60 at Stapleash Fm on 18 Dec and 50 at Monkton Wood (Chilgrove) on the 19th. [JAH]

1640. SERIN

Very scarce passage migrant; has bred. Amber listed species of medium conservation concern.

On 26 Mar a male flew around Cow Gap (Beachy Head) twice before heading off south at 0715 hr (PFM). Later that morning one flew north over Brighton Marina (IJW) while an adult male was seen inland at Edburton (Henfield) on 28 Mar (TJW). Forty-three have been recorded since the beginning of 2000 so, despite exceeding the two recorded in 2004, these three represent a well below average showing. Recent records have been in February (2), March (6), April (11), May (15), June (4), September, October (3) and November. Only three of these have been away from the coast, the others being at Battle in March 2000 and Ninfield in September 2001. 1999 was the last year in which the species was not recorded at Selsey Bill. [RJF]

1649. **GREENFINCH**

Very common resident, scarce passage migrant and winter visitor.

During the first winter period, of 200 records only 17 were for numbers of 20 or more and these were mostly in the west of the county. On 1 Jan the largest count of the period was of 70 at Ferring Rife, a high count for this site. Other significant counts that month were 60 roosting in an evergreen oak on Thorney Island (Chichester Hbr) on the 12^{th} , 45 at Crowborough on the 4^{th} , a monthly maximum, and 37 on the 25^{th} at Friday Street (Rusper) in one small garden. The largest group in the east of the county was 30 at the Ouse Estuary Project (Newhaven) on 20 Feb and 20 Mar.

Breeding was not well recorded even though reported numbers were higher than last year. Breeding was confirmed for c.95 pairs at 15 sites and probable by a further 20 pairs at 17 additional sites. Additional breeding records are shown in the *Summary of Breeding Bird Counts* on pages 196 - 198. A total of 687 birds was counted in 90 of the 105 *BBS* 1-km squares surveyed, confirming the common and widespread nature of this species.

It was not until the second half of August that any sizeable post-breeding groups were noted. On 21 Aug 500 were counted in fields to the west of Selsey, followed by several counts of 30-50 at coastal sites. Several sizeable groups were noted in September, including 80 at Thorney Island and 60 at Climping on the 1st, 40 at Winchelsea on the 6th, 50 at Newhaven Tide Mills on the 7th, 50 at Pulborough Brooks on the 12th and 80 at Sidlesham Ferry on the 24th.

The few records of coastal movement in October comprised counts of 20, 40, 65, 40 and 47 at Beachy Head of birds flying east on the 14th, 15th, 16th, 18th and 29th respectively. During the month counts of 100 or more included 100 at Newhaven Tide Mills on the 1st and 2nd, 150 at Sidlesham Ferry on the 16th, 100 on Pagham Shingle Spit on the 18th and 120-130 at Beachy Head on the 22nd and 23rd. The largest counts, however, occurred from the 24th when 500 were feeding on Shoreham Beach (mostly remaining there through the month with 150 still present on 24 Dec), 400 were noted at Selsey Bill on the 27th (but with no record of flight direction) and there were 550 at Sidlesham Ferry on the 29th.

Carduelis chloris

Serinus serinus

In November, recorded movements were westerly and comprised 55 at Beachy Head on the 5th and 37 on the 12^{th} and 90 W in small groups at Thorney Island on the 7th. The only significant inland record was of 200 at Constantia Manor (Isfield) on 27 Nov and 10 Dec. [JAH]

1653. GOLDFINCH

Carduelis carduelis

Common summer visitor and passage migrant and fairly common winter visitor.

During the first winter period several sizeable flocks of over 20 birds were noted, mainly in the west of the county, with the largest being 200 at Burton MP on 16 Jan and 200 at Stansted Forest on 26 Mar, before birds dispersed to breeding grounds.

The only evidence of spring migration was at Beachy Head where 20 W were recorded on 25 Apr and again on 6 May followed by 30 W the next day.

Breeding was confirmed at ten sites by 18 pairs, was probable at a further five sites by 16 pairs and an estimated 162 possible territories were identified at 75 other sites including 222 birds counted in 63 of the 105 BBS 1-km squares surveyed.

The first post-breeding charms of notable size were 30 feeding on thistles at Findon on 6 July, 24 on Thorney Island (Chichester Hbr) on the 22nd, 40 at Pannel Valley NR on the 28th and 100 at Weir Wood Res on the 31st. From mid-August onwards flocks of 100 or more became more frequent with 200 at Pagham Hbr on the 20th and 100 at Troutbeck (Eridge) on the 25th. At Constantia Manor (Isfield), 200 on the 27th increased to at least 300 by the 29th feeding on dead thistles in a wild bird crop. The largest flocks in September, before the onset of visible migration in October, were 200 at Beachy Head on the 9th, 250 at Pagham Hbr on the 10th and 300 at Pannel Valley on the 29th.

Autumn movement, predominantly eastwards as usual, was first noted at Climping on 3 Oct when 720 birds moved east in a steady flow and is summarised for coastal sites below:

	Oct	Nov	Peak mo	vement
			Number	Date
Selsey Bill & Church Norton	630 (*)	215 (**)	300	27 Oct
Climping	2060 E	-	850 E	13 Oct
Worthing & Goring Beaches	1489 E	10 E	510 E	14 Oct
	7 W	-	-	-
Beachy Head	11065 E	103 E	2500 E	14 Oct
	2150 W	194 W	2150 W	29 Oct
Eastbourne	515 SW	-	300 SW	26 Oct
Rye Hbr	1000 NE	-	1000 NE	18 Oct

(*) direction stated for only 200 E; (**) direction not stated

Peak movement occurred in the period 14-18 Oct. Significant counts additional to those in the above table included 1000 at Sidlesham and 2050 at Beachy Head on the 16th. The last significant count involved 570 birds at Beachy Head on 5 Nov following which numbers tailed off.

During the second winter period charms of over 20, noted at 15 inland sites split equally east and west, included 100 at Weir Wood Res on 21 Sep, 80 at both Steep Down (Lancing) and Stoughton Down on 13 Oct, 60 at Rackham Hill on the 18th and 120 at Houghton Hill on 20 Nov. The charm of 200 remained at Constantia Manor feeding in the wild bird crop to at least 10 Dec. [JAH]

1653. SISKIN

Carduelis spinus

Common winter visitor and passage migrant; very scarce breeder.

The following table gives approximate maximum numbers of recorded sightings throughout the year, and the numbers of different 1-km squares in which these sightings were made:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of birds	48	68	114	10	8	2	-	4	1978	2375	227	352
Number of sites	10	8	13	3	3	2	-	2	42	46	30	19

Numbers in the first four months of the year were very significantly lower than those recorded in the same period in any of the previous four years. Many observers noted the extreme scarcity of this species during this first winter period of the year. Most sightings were of single birds or very small groups, the only exceptions being groups of 25 birds at Pippingford Park (Ashdown Forest) on 6 Feb, 25 at Millbrook (Ashdown Forest) on 14 Feb, 50 at Forestside (Rowland's Castle) on 18 Mar, and 20 at Pannel Valley NR on 18 Mar.

Numbers during the summer months were comparable with those recorded in recent years. Breeding was confirmed at two sites. A single pair bred at Lavington Common for the third consecutive year and two pairs bred at a site near Balcombe.

In contrast with the very low numbers recorded early in the year, numbers in the second winter period were very significantly higher than those recorded in the same period in recent years. The exceptionally large autumn influx began in early September, with a total of 1978 birds recorded in September compared with only six birds in 2004. During the month there were many sightings at coastal sites of large numbers flying predominantly eastwards, particularly 350 at Sheepcote Valley (Brighton) on the 17th and 100 at Birling Gap on the 24th. The total of 2375 birds recorded in October compared with only 83 birds in 2004, and again these were mainly flying eastwards at coastal sites, the most notable counts being at Climping with 240 on the 7th and another 380 on the 13th. Inland, there were 100 at Chesworth Fm (Horsham) on 18 Oct and 40 at Warnham LNR on 22 Oct. Numbers declined in November and December, but there were notable counts of 30 at Weir Wood Res on 13 Nov, 50 at Barcombe Res on 4 Dec and 40 at Bewl Water on 25 Dec. [HC]

1660. LINNET Carduelis cannabina Common but decreasing resident and partial migrant. Red listed species of high conservation concern.

During the first winter period, flocks in excess of 20 birds were noted at 18 sites. The largest numbers were 350 at Patching on 9 Jan, 200 at West Dean on the 23rd, 216 at Rye Hbr LNR on 27 Mar and 150 at Beachy Head on the 31st. These last two records were probably associated with spring movement as the first small influx of spring noted at Pannel Valley NR was of 15 birds on 23 Mar. Otherwise, the only records of spring passage were as follows:

	Mar	Apr	May	Pea	k movement
		-	-	No.	Date
Selsey Bill	25 (*)	30 (*)	-	30	4 Apr
Worthing Beach	4 E	85 E	12 E	45 E	24 Apr
		5 W	2 W		
Splash Point (Seaford)	-	9 (*)	-	6	28 Apr

(*) = direction not stated

Breeding was confirmed at 32 1-km sites by at least 103 pairs and was probable at 17 further sites by 41 pairs. An estimated 212 territories were identified in 79 1-km squares, including 296 birds recorded in 48 of the 105 *BBS* 1-km squares surveyed.

The first signs of post-breeding flocking were noted on 16 Jul, when 40 were counted in fields on the western side of Selsey Bill, followed by a count of 25 at Pulborough Brooks on the 17th and the first 100 at Beachy Head on the 23rd. Thereafter, counts of 100 or more became more common through August. There were 115 at Newhaven Tide Mills on the 1st, 100 at Thorney Island (Chichester Hbr) on the 8th, 120 at Beachy Head on the 9th and 100 at Sidlesham SF on the 19th. Counts of over 50 birds occurred with increasing frequency during September across the county but most often at coastal sites.

Quite unlike previous years, autumn movements at coastal sites during daylight hours appeared to be non-existent. The only records received were as follows:

	Oct	No. records	Peak mo	ovement
			No. birds	Date
Church Norton	80 E	1		14 Oct
Climping	350 E	2	200 E	31 Oct
Beachy Head	1270 E	5	700 E	14 Oct

As with other migrant passerines, the peak date was in mid-October. Notable counts during the month, where direction was not stated, included 150 at Climping on the 3^{rd} , 450 at Rye Hbr LNR on the 7th, 200 at East Head (West Wittering) on the 15th, 400 at Sidlesham SF and 150 at Bewl Water on the 16th (when peak movements were occurring) and 450 at Beachy Head on the 22^{nd} , where there were smaller numbers later.

In the last two months of the year there were 15 counts of ten or more birds including 350 at Bewl Water on 6 Nov (and smaller numbers there to the year's end), 155 at Weir Wood Res on 8 Nov and 250 at Chantry Hill (Storrington) on 18 Dec. [JAH]

1662. **TWITE** Carduelis flavirostris Very scarce winter visitor. Red listed species of high conservation concern.

At least one of the two present at East Head (West Wittering) from 3 Nov 2004 (*SxBR* 57:173) remained until 27 Jan (DIS *et al*). One was on the cliff edge at Peacehaven from 16 Feb to at least 14 Mar (CJRB *et al*) (see Plate 14) and one put in a brief appearance at the edge of Widewater (Lancing) on 1 Mar (JLy). With only 14 seen since 2000 this species' rapid and worrying decline shows no sign of reversing. As recently as October-November 1994 records included flocks of six to nine at East Head, Pagham Hbr, Pulborough Brooks and Shoreham-by-Sea but such an influx would be considered exceptional now. [RJF]

1663. LESSER REDPOLL

Carduelis cabaret

Scarce breeder and fairly common passage migrant and winter visitor. Amber listed species of medium conservation concern.

The following table gives approximate maximum numbers of recorded sightings throughout the year, and the number of different 1-km squares in which these sightings were made.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of birds	320	434	929	469	118	68	23	11	87	1056	385	146
Number of sites	18	23	33	37	29	25	12	4	12	42	36	9

Numbers in the first four months of the year were significantly higher than those recorded in the same period in 2004 and there were many reports of large wintering groups. In the Ashdown Forest area in particular, these included 80 at Millbrook on 16 Jan and 14 Feb and, at Pippingford Park/Millbrook, 260 on 1 Mar and 100 on several later dates in March. Away from the Ashdown Forest area, there were reports of 20 at Coates Common on 30 Jan, 22 at Iping Common on 11 Feb, up to 25 at West Dean Woods in late February, 40 at Lavington Common on 25 Feb, 30 at Burton Mill Pond on 31 Mar and 30 at Duncton Common on 4 Apr.

Numbers in the summer months were similar to those recorded in the three previous years, and almost all sightings were in the Ashdown Forest area. The exceptions included *BBS* records of eight birds at Tilgate Forest and 15 at Furnace Green (Crawley) in May, 16 birds at Pulborough Brooks on 25 May, and single birds at Darwell Woods in June.

Breeding was confirmed at only three sites by five pairs. Of these, two sites were at Ashdown Forest, involving a total of four pairs, and the third site was at Ambersham Common, involving one pair. Breeding was probable at a further eight sites across the Ashdown Forest area, but there were no reports of probable breeding at other sites in the county. In the *BBS* 27 were counted in only four of 105 1-km squares surveyed.

Numbers in the later months of the year were similar to those recorded in previous years, although the total for October was particularly high. This reflects considerable migratory movement of this species from breeding areas further north. The first autumn passage migrants were reported earlier than in previous years, with a single bird reported at Pagham Hbr on 7 Sep. This was followed by a group of 29 birds flying over Pannel Valley NR on 24 Sep, eight over Beachy Head on 24 Sep, eight at Church Norton on 28 Sep and single birds reported at several other coastal sites during the month. During October, large groups of passage migrants were reported, including 200 birds over Pannel Valley NR on 14 Oct, 120 over Sheepcote Valley (Brighton) on 18 Oct and 120 over Whitbread Hollow (Beachy Head) on 29 Oct. A further group of 120 birds was reported over Whitbread Hollow on 4 Nov. [HC]

1660. COMMON CROSSBILL

Loxia curvirostra

Scarce visitor occurring in large numbers in irruption years; breeds occasionally.

The very low numbers of this species reported during the first five months of the year were a continuation of the pattern reported during the latter months of 2004; there were no sightings at all during November and December 2004.

The approximate monthly totals were as follows:

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of birds	3	7	2	12	40	64	185	89	-	47	58	120
Number of sites	2	1	2	3	5	9	13	6	-	6	6	9

Later in the year, numbers of sightings were generally significantly higher than in the same period in 2004, but were still much lower than the numbers reported during the irruption which occurred at the beginning of 2003.

The majority of sightings throughout the year were reported from Ashdown Forest (see Plate 15) and the West Sussex Commons. Ashdown Forest was the only area where two probable breeding territories were identified. Reports of large groups at inland sites included up to 22 birds at Old Lodge LNR (Ashdown Forest) throughout June, up to 50 birds at Stansted Forest throughout July and the first part of August, 25 birds at Lavington Common from October until the end of the year, and 20 birds at Heyshott Common during the second half of December.

Movements at coastal sites in July involved flocks of 30 W and 15 W over Southwick on the 8th and 20 W at Hollingdean (Brighton) on the 9th. During the first half of August single figure numbers were seen at both Whitbread Hollow (Beachy Head) and Pannel Valley NR and 7 SW were counted amongst other finches passing Holywell (Eastbourne) on 26 Oct. [HC]

1679. COMMON ROSEFINCH Rare vagrant.

A first summer bird seen briefly at Goring Gap on 11 Jun (DIS) before flying off west was the first to be recorded in the county since 1999. It is the 27^{th} county record and the tenth in June. The others have been in May (5), July, August, September (5) and October (5). It is only the third record from the coast between Beachy Head and Pagham Hbr, the others being from near Brighton (1869, first British record) and Littlehampton West Beach (1992), although the 1999 record, the only inland one, was at Weir Wood Res. [RJF]

1710. BULLFINCH

Fairly common resident. Red listed species of high conservation concern.

The following table gives the approximate monthly totals of birds seen throughout the year and the numbers of different 1-km squares in which they were seen:

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of birds	160	79	104	121	135	86	36	50	34	59	155	146
Number of sites	50	31	49	44	71	35	18	23	16	18	33	39

Of the 121 birds recorded in April, 28 were received from the *Scarce Woodland Bird Survey* (*SWBS*). More significantly, of the 135 birds recorded in May, 22 were from the *SWBS* and 62 from the *BBS*, more than doubling the number of records received in both May 2003 and May 2004. This indicates that this species is generally being significantly under-recorded.

The species was recorded in 32 of the 105 1-km *BBS* squares surveyed, compared with 18 of only 46 squares surveyed in 2004. For adequate population monitoring of a species by the *BBS*, that species must be recorded over several years in at least 40 1-km squares, so

Carpodacus erythrinus

Pyrrhula pyrrhula

Regular sites in recent years have been West Dean Woods, Eartham Woods and

This species remains scarce and very elusive. Consequently, known locations tend to attract observers and the majority of the 58 records received were from only six sites, with

Pulborough Brooks. This year, there were multiple sightings at Stapleash Fm (Chilgrove) and other parts of West Dean Woods, between 23 Jan and 20 Mar, and again between 27 Nov and 27 Dec. These sightings were mainly of single birds, although several groups were recorded, with the largest numbering 20 birds at Stapleash Fm on 19 Dec. Single birds were reported at Eartham Woods on 26 Jan, and at Pulborough Brooks between 2 Jan and 14 Feb and during December.

that even with the expansion of the BBS in Sussex in 2005, it is unlikely that it will be

There were reports of confirmed breeding by 22 pairs at 14 sites and of probable breeding by a further 26 pairs at 20 additional sites. Many fledged juveniles were seen. Outside the breeding season, there were frequent double-figure counts at Pulborough Brooks and Eartham Woods, and occasional double-figure counts at other sites, most

There were reports of single birds or pairs, at Powdermill Res on 31 Mar, Darwell Woods on 24 Apr, Guestling Wood on 19 Jun, Pannel Valley NR on 5 Nov, Burgess Hill on 24 Dec and Balneath Fm (S Chailey) on 27 Dec. Groups of five birds were reported at Darwell Res on 7 Nov and 7 Dec.

The number of records received this year was much higher than the average in recent years, but this species undoubtedly remains under-recorded, and all sightings should be reported. [HC]

1847. LAPLAND BUNTING

properly monitored (see pages 238 - 247).

HAWFINCH

medium conservation concern.

1717

notably of 40 birds on 5 Nov at Whitbread Hollow. [HC]

chance sightings of 12 birds reported from ten others.

Very scarce passage migrant and winter visitor.

One flew east, calling, over Thorney Airfield on 30 Nov (CBC). It is the first county record since 2002 and only the fifth since the beginning of 2000. Records have declined dramatically from the 38 recorded in the 1990s. During that period all records were between 18 September (in 1993) and 17 February (in 1991), but all those since 2000 have been in November or December. [RJF]

1850. SNOW BUNTING

Scarce passage migrant and winter visitor.

During January and February, only small numbers were recorded, as in recent years. Three birds were at East Head from 3 Jan until 1 Feb and there were singletons reported at Ferring, Goring Beach and Pett Level during the same period. Single birds were also reported during the rest of February at Seaford Head GC and Pett Level, with the last record of the winter on 19 Feb at Pett Level.

183

Calcarius lapponicus

Coccothraustes coccothraustes Scarce breeding resident and very scarce passage migrant. Amber listed species of

Plectrophenax nivalis

The first record of the second winter period was a single bird at Ditchling Beacon on 7 Nov. During the rest of November there were sightings of singletons at Pett Level, Shoreham Fort, Church Norton and East Head (West Wittering). More noteworthy, however, were groups of eight birds at Camber Sands SSSI on 16 Nov, three birds at Rye Hbr LNR on 18 Nov, and seven birds at Pett Level on 19 Nov.

During December there was a flock of 16 birds at Camber Sands SSSI on the 5th and on the same day a singleton at Church Norton which remained for the next four days. There were reports of two birds at East Head on 2 Dec and six at Pett Level on 18 Dec. Inland, a group of four was seen at Firle Beacon on 9 Dec. [HC]

1857. YELLOWHAMMER

Emberiza citrinella

Fairly common resident. Red listed species of high conservation concern.

Numbers early in the year were low. Double figure counts were reported from only 12 sites, none from east of the R Ouse. On the Downs these included 20 at Ashcombe Bottom (Lewes) on 23 Jan, a maximum of 23 on 4 Mar at the University of Sussex, monthly maxima at Tegdown Hill (Brighton) of 22 on 7 Jan and 24 on 6 Mar, and ten seen at Beeding Hill on 16 Jan.

In the north of the county, the largest flocks found were 30 at Faygate on 16 Jan, ten there on 27 Feb and two flocks totalling 38 at Pease Pottage on 6 Feb. Elsewhere there were 11 at West Dean Woods on 19 Feb and 25 at Stapleash Fm (Chilgrove) on the 25th. Twenty associated with a large flock of Reed Buntings on a maize game crop at Rookwood (West Wittering) on 7 Mar and there were 12 at Sidlesham two days later while ten were with Reed Buntings and Chaffinches at Steyning the following day

The first song was noted on 15 Feb at Lavington. In March four males at Barnham on the 20^{th} , a single bird on Seaford Head on the 26^{th} , seven at Cuckmere Haven the following day and one which 'dropped in out of the sky' at Beachy Head the day after may indicate passage.

In the breeding season the number of territories/singing males reported was the highest for many years at around 500 from over 160 sites. There were almost 200 territories in Ashdown Forest compared with only 50 in 2004 and proportionate increases in numbers of territories were noted at several Forest sites. Elsewhere, there was no clear evidence of any similar increase. Farmland on the Knepp Estate (Shipley) held up to 14 pairs in six 1-km squares and there were eight to 12 territories at Pulborough Brooks. Brighton Wild Park held nine pairs, eight pairs were found in a 5 km transect near Steyning Round Hill on 29 May and in the upper Ems valley at Stoughton six males were singing in 3 km on 20 Jun. Comparisons with 2004 were mixed on several heathlands, some counts for which can be found in the *Summary of Heathland Breeding Birds Counts* on page 199.

A total of 126 was counted in 45 (42%) of the 105 *BBS* 1-km squares surveyed, the lowest figure since 1994. At 2.8 per occupied square the density was slightly higher than the 12-year average.

An apparent female was singing on two dates in June and July at the Old Airstrip (Ashdown Forest), c.2 km from a similar event in the Millbrook area the previous year.

In the latter part of the year reported numbers were higher than in recent years. Double figure flocks were recorded at 20 sites, mainly on the Downs in the autumn and throughout the county in the early winter period. The largest autumn flocks were 25 at Cissbury Ring

on 7 Sep. 35 at Kithurst Hill (Storrington) on 13 Sep and 29 at Tegdown Hill (Brighton) on 18 Sep. The highest winter flock recorded was 100 mainly on wild bird crop at Constantia Manor (Isfield) on 10 Dec. Other significant December flocks were 30 at Alciston on the 18th, 35 at Horsham on the 22nd and 60 at Edburton on the 29th. [ACG]

1874 LITTLE BUNTING

Very rare vagrant.

Two were trapped at Pannel Valley NR, a juvenile on 8 Oct and one, considered to be a female, on 17 Nov (RBRG). They take the county total to just eleven and include the latest county record by two weeks. Three have been trapped at this site, while no other location accounts for more than one record. Previous occurrences have been in January (to March 1994), March (and April 1996), September (20th, 1998), October (3, in 1964, 1987) and 2003) and early November (1864, 1995). That in 1864 was the first for Britain while the 1995 record, on the 3rd, had been the latest in the county. [RJF]

1877. REED BUNTING

Emberiza schoeniclus Fairly common resident, passage migrant and winter visitor. Red listed species of high conservation concern.

In the early part of the year higher numbers were recorded from fewer sites than in 2004 with double figure flocks at 17 sites. At Pannel Valley NR a flock feeding in setaside had monthly maxima of 400 on 19 Jan, 300 on 17 Feb and 500 on 2 Mar, possibly the largest flock ever recorded in the county, with up to 15 present in May and June. Also in the east, 50 were at Rye Hbr on 17 Feb and 60 on 10 Mar while a small flock was noted at East Rother Levels. Other notable flocks were 64 at Fishbourne on 13 Jan, 50 at Patching the following day and 100 with Yellowhammers on maize at Rookwood (West Wittering) on 7 Mar. At Iping Common 70 fed in burnt gorse on 23 Jan and 20 fed on Molinia grass on 28 Feb. A flock of 12 was noted in Ashdown Forest on 14 Mar. The highest count at Pulborough Brooks was seven on 17 Apr.

There was no evidence of spring movement.

In the breeding season almost 300 singing males/breeding pairs were reported from almost 80 sites, a slight increase on 2004. A comparison of individual sites shows an increase from 22 to 40 pairs at Pulborough Brooks, from 20 to 33 at Amberley and from four to ten at Sefter Farm (Pagham) with a reduction from 66 to 50 at Rye Hbr, and from nine to seven at both Newhaven and Thorney Island. Song was last reported in Ashdown Forest on 10 Jul. In the BBS a total of 35 was counted in only 12 of the 105 1-km squares counted.

The only records of observed movement were of one to three birds flying east at Beachy Head on four dates in October and 6 W on 13 Nov and 1 W on 19 Nov. Double figure autumn and winter flocks were reported from 22 sites, the largest being at Pannel Valley NR with 120 on 17 Oct and 22 Dec and 500 to equal the March figure on 28 Dec. On the Downs 100 were present on 18 Dec at Lee Farm (Patching) and 35 above Alciston on 18 Dec. In the Weald, 35 were at Weir Wood Res on 2 Oct while in Ashdown Forest 40 were at Wren's Warren on 14 Nov and 14 at Broadstone Warren on 30 Nov. A flock of 15 associated with Meadow Pipits at Iping Common on 15 and 20 Oct. Around Chichester and Pagham Harbours 40 were in a maize game crop at Rookwood (West Wittering) on 4

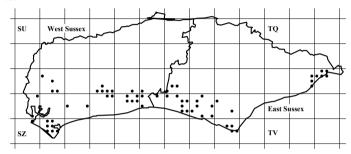
Emberiza pusilla

Dec and flocks of 10-20 were at seven other sites throughout the period. The maximum count at Newhaven was 25 on 20 Nov and at Rye Hbr was 20 at Rye Hbr LNR on 27 Dec. In addition lower numbers were reported from numerous locations throughout the county. [ACG]

1882. CORN BUNTING Emberiza calandra Fairly common but decreasing resident. Red listed species of high conservation Emberiza calandra

concern.

The following map illustrates the distribution of the 263 records received for c.96 1-km squares:



Major flocks were present in the early part of the year in the Rye area reaching a maximum of over 360 perched on wires at Harbour Fm (Rye Hbr SSSI) on 11 Feb, the largest flock recorded in the county since 1991. Sixty were present at Beeding Hill on 16 Jan with possibly a different flock of 90 at Beeding Cement Works on the same date. Double figure flocks were seen in the Beeding area until 3 Feb with the first song noted amongst a flock of 30 at Beeding Hill on 30 Jan. Elsewhere 40 were counted on the Downs in the Kithurst Hill (Storrington) area on 8 Jan and 60 close by in the Rackham Hill/Amberley Mount area on 31 Mar, and 12 were at Ditchling Beacon on 5 Mar while 11 were at Tegdown Hill (Brighton) on 6 Mar and 11 Apr. Further west, 33 were at Chilgrove on 10 Mar but, on the coastal plain, 14 at Pilsey Island (Chichester Hbr) on 12 Jan was the only flock recorded.

From March to July at least 74 singing males were located at 30 sites. This represents an increase on 2004's low figures. Numbers along the coast from Beachy Head to Telscombe (see Plate 16) seem roughly stable but there were no breeding reports further inland on the Downs from Eastbourne to the Cuckmere. The retreat from the Brighton area seems to have continued with breeding not confirmed at Ovingdean in 2005 following low numbers in 2004. There were no breeding season records on the Downs west of Ditchling Beacon until the Adur Valley where good numbers are still found: at least 12 singing males at Steep Down (Lancing) on 2 Jun and three pairs at Steyning Round Hill on 29 May. From the A24 west to the Arun approximately 20 singing males were found at five sites where none were recorded in 2004 although they were assumed to be present. West of this the only downland breeding season records were a maximum of two birds near the Trundle at Goodwood in May and June.

Away from the Downs in the east of the county substantial flocks persisted at Rye until well into May. Two singing males were at Harbour Fm (Rye Hbr SSSI) which held five singing males in 2004. Single males were singing at eight sites on the Selsey peninsula, a

welcome increase on 2004, and one was singing on Thorney Island on 24 Apr but was then absent from 27 Apr to 1 Nov. On the coastal plain between Chichester and Bognor Regis there was a single singing male at Oving compared with six at five sites in 2004. An unexpected discovery was a singing male in May and June at Racton. Where reported, barley was the crop associated with breeding Corn Buntings.

The first autumn flock was 130 in ripe corn at Steyning Round Hill on 6 Aug which would seem to indicate immigration into the area to supplement the local population, particularly as no further sightings of this substantial flock were reported. Up to 19 were at Tegdown Hill (Brighton) in September and the Southease/Rodmell area held 16 on 21 Sep, 40 on 16 Oct, 10 on 24 Nov and 27, including some singing males, on 20 Dec and a flock of 50 was at Alciston on 18 Dec. As usual, the largest flocks were at Rye with high numbers not being reached until mid-November. Monthly maxima in this area were 37 on 10 Sep, 53 on 22 Oct, 120 on 14 Nov and 250 on 27 Dec. Overall the late year distribution was similar to 2004. [ACG]

ESCAPES and FERAL BIRDS

All records of BOU Category D species, of apparently feral individuals of other species and of probable or certain escapes from captivity, will be welcomed by the Hon. Recorder for this annual feature. Notes on age/sex, plumage, behaviour, and, where known, status, will be of particular interest. Such records should be submitted in the normal way but on separate recording forms from the main records.

The following escaped or feral birds, other than those Category C species in the main list, were recorded in the county in 2005 (unless stated otherwise). It should be noted that the identity of these birds is largely unchecked. *In order to track records, particularly those involving wildfowl which are prone to wander between sites, observers are requested to include the age, sex and where appropriate colour morph of individuals when submitting records.* Birds that can not be ascribed to species, or group of species are excluded. Systematic order, nomenclature and taxonomy follow Dickinson (2003). Useful references are Madge & Burn (1988) (wildfowl), Juniper & Parr (1998) (parrots), Clement *et al* (1993) (finches) and Vriends (1988) (cage birds). List compiled by Richard Fairbank unless indicated otherwise.

Clement P, Harris A & Davis J 1993. Finches & Sparrows: an identification guide. Helm.

Dickinson, E C (Ed) 2003. *The Howard Moore Complete Checklist of the Birds of the World* (3rd Edition). Christopher Helm.

Juniper, T & Parr, M 1998. Parrots: A Guide to the Parrots of the World. Pica Press.

Madge S & Burn H 1988. *Wildfowl: an identification guide to the ducks, geese and swans of the world.* Helm.

Ogilvie, M A *et al* 2004. Non-native birds breeding in the United Kingdom in 2002. *British Birds* 97:633-637.

Vriends, M M 1988. The MacDonald Encyclopaedia of Cage and Aviary Birds. MacDonald Orbis.

SILVER PHEASANT

Lophura nycthemera

Resident in montane forests of China and SE Asia. Fifteen races occur, the most stunning are understandably popular in captivity.

A male was seen in a ploughed field near the edge of a game crop on Cocking Down on 30 Mar. This is the third year running that a male, presumably the same individual, has been seen in this general area (SxBR 56:187 & 57:181).

- ...

Wild birds are restricted to the Indian subcontinent. A traditional, and spectacular, favourite in ornamental gardens.

An adult with young was seen in Markwells Wood (Rowland's Castle) on 29 May.

BAR-HEADED GOOSE

Breeds central Asia, migrates south to northern India for winter. A favourite bird at wildfowl collections, individuals or even small groups wander on occasions. Up to five escaped pairs bred in UK in 2002 (Ogilvie *et al* (2004)).

One seen at Warnham LNR on 16 Jan was possibly that present there the previous autumn (SxBR 57:182) while in spring two were present in the Rye Hbr/Pett Level area between 18 Apr-8 May, 3 flew E then W off Selsey Bill on 30 Apr, one flew E at Birling Gap and Brighton Marina on 15 May, with four E at the former on 16th, and two were seen at Thorney deeps on 2 and 13 Jun. In August one arrived at Pulborough Brooks on 22nd, remaining to 6 Sep, while another was at Darwell Res on 23-25th. Five were counted in Chichester Hbr on 17 Sep, one was present at Partridge Green SF from 8 Oct-15 Dec with three at Thorney Deeps on 30 Oct, three on Ivy Lake (Chichester) on 11 Dec, one at Pulborough Brooks on 21st and three in Fishbourne Channel on 31 Dec although some duplication is likely amongst these records. Unlike in previous years no juveniles were reported.

EMPEROR GOOSE

Breeding mainly confined to Alaska, winters Aleutian Islands. Present in many wildfowl collections.

Four hybrid geese superficially resembling this species were seen at Scotney Court GP on 6 Feb.

SNOW GOOSE

Breeds arctic North America, winters southern USA and Mexico. Presumed vagrants in UK most winters but greatly outnumbered by escapes. Three or four escaped pairs bred in the UK in 2002 (Ogilvie *et al* (2004)).

Most records during the year were from Scotney Court GP where one was present all year, up to four (three blue morphs and one white morph) from 6 Jan-7 Mar, four on 21 Aug, three on 7 Nov and two (a white morph and a blue morph) with an apparent hybrid on 14 Dec. As not all records included details of the colour phase of the birds involved, something which should be obvious to even the most incompetent observer, it is

REEVES'S PHEASANT

Resident in hill forests of central and East China. Introduced into parts of Europe and breeding ferally in France.

A male was seen at Lickfold (Lurgashall) on 23 and 28 Apr while what was possibly the same individual, although it was unsexed and had damaged feet, was at nearby Bexleyhill (Lodsworth) on 18 May.

INDIAN PEAFOWL

Anser canagicus

Pavo cristatus spectacular,

Anser indicus

Svrmaticus reevesii

Anser caerulescens

impossible to draw conclusions as to the amount of duplication that might be involved in these records. Had, for example, the three blue morph individuals arrived in January and departed in early March their credentials would have been enhanced.

Away from Scotney Court GP, but not very far, three (one colour ringed) were seen in Tillingham Valley (Rve) on 28 Feb, three were at Rve Hbr on 5 and 10 Sep and one was at Pulborough Brooks on 27 Nov.

ROSS'S GOOSE

Breeds arctic North America, winters western USA. Range is more restricted than the preceding species. One or two presumed escapes have been present in the UK in wild goose flocks in recent winters.

A presumed hybrid Snow x Barnacle Goose, resembling the very rare blue morph of this species, was present with presumed feral Barnacle Geese at Barcombe Mills Res on 27 Nov.

BLACK SWAN

Common resident throughout much of Australia and New Zealand. Commonly kept in wildfowl collections, full-winged birds are liable to wander. Only two escaped pairs bred in UK in 2002 (Ogilvie et al (2004)), c.f. nine in 2001.

One was seen on Swanbourne Lake (Arundel) during 3 Feb-14 Mar with presumably the same at Ofham on 11 Apr, River Arun at Littlehampton on 12 Jun, Wick (Littlehampton) on 21 Jun and Climping on 28 July. It might have originated from Arundel Castle. Two pairs with four cygnets were seen at Leonards Lee in June, the fourth year out of five with successful breeding noted in the county. Other records were of singles on Benbow Pond (Midhurst) on 10 Aug, Bewl Water on 21 Aug, Ifield Mill Pond on 16 Oct and Partridge Green SF on 16 Dec while two were present on Benbow Pond on 14 Dec. The summering individual that had been present on the River Adur at Shoreham during 2002-2004 was not seen in 2005.

RUDDY SHELDUCK

Breeds from Turkey across central Asia, generally wintering further south. There are isolated populations in North Africa. Perhaps controversially there have been no acceptable British records of this species since 1940. Records during 2002-03 were erroneously omitted from previous reports (and none were recorded in 2001). The similar South African Shelduck, which is also prone to escape from collections, should be considered when identifying this species.

2004: The record from Rye Hbr LNR on 12-14 Apr (*SxBR* 57:183) was most probably a South African Shelduck and should be deleted (see below).

2005: A female seen on a farmyard pond at Furner's Green (Danehill) on 20 Feb was unlikely to draw any comment regarding its origin, unlike a group of five on Sidlesham Ferry on 5 Aug. These were followed by one, with a yellow colour ring, at Rye Hbr on 13 Aug which remained in the area until 18 Sep. Singles were then seen at Pagham Hbr on 4 Nov, Pulborough Brooks on 7-9th and Amberley Wild Brooks on 5 Dec although it is possible these last three records related to the same individual. The record of five in

Tadorna ferruginea

Cygnus atratus

Anser rossii

early August recalls events in 1996 when four were seen at Pagham Hbr and five at Weir Wood Res at a similar time of year. It seems clear that many of the autumn groups seen in the UK (and Sussex) are of continental origin although debate continues as to how far they are coming from and modern records of the species stubbornly remain excluded from the British List.

SOUTH AFRICAN SHELDUCK

Common resident in South Africa and Namibia.

2004: One at Rye Hbr LNR from 12-14 Apr was also reported as a similar Ruddy Shelduck. This account was omitted from the 2004 Report in error.

MUSCOVY DUCK

Locally common resident in forest lakes of Central and South America. Widespread in its domesticated form. Two escapes bred in UK in 2002 (Ogilvie at al (2004)).

Four birds were seen at Swanbourne Lake (Arundel) on 3 Feb and a singleton at Falmer on several dates from 23 Feb to 23 Sep.

WOOD DUCK

Breeds N USA, winters S USA. Common in wildfowl collections. Not recorded in the UK as a vagrant although some individuals seen in SW might conceivably be. Two escaped pairs bred in UK in 2002 (Ogilvie *et al* (2004)).

A pair was present at Parham Estate on 16 Jan with two males and a female there on 9 Feb. A male was seen at Kneppmill Pond on 11 Mar while one, unsexed, was reported from Darwell Res on 14 Mar and 14 May.

CHILOE WIGEON

Common resident in southern South America. Commonly kept in wildfowl collections.

A male seen in January, at Emsworth on 19th and Fishbourne on 25th, was possibly that recorded at Pagham Hbr and Chichester GP in November 2004 (SxBR 57:184).

LANNER FALCON

Mainly resident in southeast Europe, Africa and west Asia.

A first-winter was seen at Rackham on 8 Feb and over nearby Amberley Wild Brooks on 9^{th} , the male at Beachy Head very irregularly since 2003 (*SxBR* 56:190 & 57:184) was seen there or at Crowlink intermittently between 14 Mar-18 May while an adult in West Dean Woods on 24 Nov and 6 Dec might have been the first-winter present in December 2004 (*SxBR* 57:184). All were considered to be of the North African race *erlangeri*.

Tadorna cana

Anas sibilatrix

Falco biarmicus

Cairina moschata

Aix sponsa

HARRIS'S HAWK

Widespread but patchily distributed from the southern USA to Patagonia. Popular with falconers and often flown at public displays.

One with jesses was seen at North Barnham on 21 Mar while another, seen attempting to catch a pheasant, at Deanlane End (Rowland's Castle) on 18 Nov is likely to have been the individual recorded at the same site in October 2004 (SxBR 57:185).

RED-TAILED HAWK

Commonly breeds throughout much of N America and the Caribbean, some move S in winter as far as Central America. Perhaps the most commonly kept Buteo in captivity.

One seen at Guestling Wood during Apr-Jun was reported to have been around for about 10 years although it last featured in the Bird Report in 2002 (SxBR 55:175).

CRIMSON ROSELLA

Common resident in coastal eastern Australia. Apparently partial to feeding its young on earthworms.

One was seen in St. Leonards-on-Sea on 14 Apr.

BUDGERIGAR

Common Australian nomad. One of the commonest of all cage birds. Wild birds are invariable green (& yellow)

A blue morph female was present in a garden in Rusper from 28 May-5 Jun.

GREY PARROT

Common in West and Central Africa where large tracts of forest remain. Birds in captivity are apparently talented mimics and usually very affectionate.

A large grevish parrot seen in Hotham Park (Bognor) during Apr-July was possibly this species.

EAGLE OWL

Widespread resident across Europe and Asia. Several pairs are breeding in the UK. Although possibly of escaped origin, they are fully protected under EU law.

SAKER FALCON

Mainly scarce resident from central Europe to N India, common on the Tibetan plateau. Popular with falconers.

For the third year running three were reported, at Bewl Water on 19 Jan, Pagham Hbr on 8 Feb and Wilmington on 2 Sep. The first was seen chasing a Wigeon while the second took and ate an unfortunate Lapwing.

Parabuteo unicinctus

Platycercus elegans

Melopsittacus undulatus

Psittacus erithacus

Ruho huho

192

Falco cherrug

Buteo jamaicensis

One was seen at Bently (Halland) on 1 Dec with what was likely to have been a different individual at Alfriston on 8 Dec. The latter was in the car park of The Star, but was seen in the morning and not at 'chucking out time' as one might be tempted to assume.

WHITE-COLLARED YUHINA

Common montane resident, occurring from northern Burma to central China.

2004: One was seen and heard in Bewbush Water Garden (Crawley) between 16 Oct-4 Nov but disappeared with the onset of colder weather. This account was omitted from the 2004 report in error.

2005: One seen in a garden in Crawley from 16 Jun into Aug was initially mistaken for a Waxwing. It was probably the individual recorded in Bewbush in 2004, having survived the winter nearby.

PURPLE GLOSSY STARLING

Common in the more open areas of West Africa.

One was seen and photographed in Goring during 20-23 Jun and follows a similar record from Southwick in February 2004 (SxBR 57:186).

ZEBRA FINCH

Common resident or nomad in E Indonesia and Australia. One of the commonest cage birds and a prolific breeder.

One was recorded at Brantridge Park (Balcombe) on 7-8 May.

YELLOW-FRONTED CANARY

Common and widespread across much of sub-Saharan Africa. A popular cage bird, it apparently has much to recommend it – longevity, hardiness and a pleasant song.

One was seen at Birling Gap on 31 Aug with presumably the same in the 'old trapping area' at Beachy Head on 2 Sep. This is the fifth year in succession that the species has been recorded in the county.

Yuhina diademata

Taeniovgia guttata

Lamprotornis purpureus

Serinus mozambicus

		First recorde		L	ast recorde	d date
	2005	Prior to	10yr average	2005	Prior to	10yr average
		2005	(± SD in days)		2005	(±SD in days)
Garganey	16 Mar	02 Feb	28 Feb (± 16)	21 Sep	13 Dec	30 Sep (± 13)
Quail	10 May	08 Feb	14 May (± 23)	15 Sep	31 Oct	18 Sep (± 32)
Osprey	24 Mar	07 Mar	24 Mar (± 11)	04 Nov	09 Dec	19 Oct (± 15)
Hobby	10 Apr	21 Mar	10 Apr (± 9)	09 Nov1	06 Nov	21 Oct (± 14)
Little Ringed Plover	20 Mar	06 Mar	18 Mar (±4)	04 Oct	08 Oct	21 Sep (± 11)
Wood Sandpiper	01 Jul	10 Apr	24 Apr (± 11)	08 Oct	16 Nov	29 Sep (± 23)
Pomarine Skua	14 Apr	10 Mar	22 Apr (±18)	30 Oct	31 Dec	21 Sep (± 85)
Roseate Tern	22 Apr	17 Apr	30 Apr (± 9)	03 Sep	30 Sep	31 Jul (± 27)
Common Tern	17 Mar ²	21 Mar	28 Mar (± 5)	09 Nov	26 Nov`	30 Oct (± 14)
Arctic Tern	02 Apr ²	05 Apr	11 Apr (± 4)	15 Nov	23 Nov	29 Oct (± 19)
Common/Arctic Tern	01 Apr	10 Mar	31 Mar (± 12)	22 Oct	31 Dec	26 Oct (± 20)
Little Tern	05 Apr	02 Apr	10 Apr (± 5)	06 Oct	04 Nov	29 Sep (± 15)
Black Tern	19 Apr	02 Apr	13 Apr (± 7)	13 Nov	21 Nov	06 Oct (± 10)
Turtle Dove	17 Apr	08 Mar	08 Apr (± 15)	24 Sep	18 Dec	12 Oct (± 8)
Cuckoo	31 Mar	15 Mar	03 Apr (± 6)	27 Sep	11 Nov	26 Sep (± 15)
Nightjar	03 May	08 Apr	28 Apr (± 9)	28 Sep	05 Nov	22 Sep (± 20)
Swift	11 Apr	07 Apr	14 Apr (± 5)	18 Oct	24 Nov	15 Oct (± 21)
Wryneck	22 May	09 Mar	10 Apr (± 15)	01 Oct	02 Nov	05 Oct (± 12)
Sand Martin	10 Mar	04 Mar	10 Mar (± 5)	12 Oct	05 Dec	27 Oct (± 15)
Swallow	19 Mar	04 Feb	07 Mar (± 15)	24 Nov	28 Dec	30 Nov (± 9)
House Martin	18 Mar	01 Feb	14 Mar (± 16)	21 Nov	18 Dec	13 Nov (± 9)
Tree Pipit	01 Apr	17 Mar	29 Mar (± 5)	28 Sep	09 Nov	21 Oct (± 7)
Yellow Wagtail	13 Mar	10 Mar	22 Mar (± 8)	15 Oct	23 Nov	03 Nov (± 15)
Nightingale	25 Mar	21 Mar	05 Apr (± 5)	19 Sep	19 Oct	14 Sep (± 9)
Redstart	16 Mar	13 Mar	27 Mar (± 6)	08 Nov	11 Dec	26 Oct (± 18)
Whinchat	07 Apr	18 Feb	27 Mar (± 23)	26 Oct	02 Dec	05 Nov (± 6)
Wheatear	10 Mar	13 Feb	02 Mar (± 7)	23 Nov	19 Dec	12 Nov (± 15)
Ring Ouzel	19 Mar	02 Feb	15 Mar (± 16)	19 Nov	26 Dec	17 Nov (± 10)
Grasshopper Warbler	13 Apr	02 Apr	10 Apr (± 6)	22 Oct	01 Nov	17 Oct (± 10)
Sedge Warbler	25 Mar	23 Mar	30 Mar (± 5)	16 Oct	29 Oct	12 Oct (± 13)
Reed Warbler	09 Apr	04 Apr	08 Apr (± 3)	18 Nov ¹	13 Nov	31 Oct (± 9)
Garden Warbler	28 Mar ²	30 Mar	06 Apr (± 7)	02 Oct	16 Nov	20 Oct (± 13)
Lesser Whitethroat	17 Apr	04 Apr	12 Apr (± 7)	10 Oct ³	21 Nov	14 Oct (± 13)
Whitethroat	23 Mar	19 Mar	01 Apr (± 5)	19 Nov	17 Dec	18 Oct (± 15)
Wood Warbler	16 Apr	07 Apr	20 Apr (± 7)	29 Aug	07 Oct	08 Sep (± 14)
Willow Warbler	23 Mar	04 Mar	14 Mar (± 6)	05 Nov	26 Dec	26 Oct (± 15)
Spotted Flycatcher	19 Apr	08 Apr	23 Apr (± 10)	26 Oct	18 Nov	13 Oct (± 8)
Pied Flycatcher	11 Apr	01 Apr	08 Apr (± 6)	07 Oct	01 Nov	03 Oct (± 8)

Arrival and departure dates of summer visitors, 2005

		Last recorde	d date		First recorde	ed date
	2005	Prior to	10 yr average	2005	Prior to	10 yr average
		2005	(± SD) in days		2005	(± SD) in days
Bewick's Swan	18 Mar	26 Apr	10 Mar (± 8)	19 Nov	15 Oct	06 Nov (± 12)
White-fronted Goose	05 Apr	17 Apr	18 Mar (± 19)	15 Oct	12 Sep	13 Oct (± 48)
Long-tailed Duck	22 May	14 Jun	07 May (± 34)	23 Oct	23 Aug	23 Oct (± 24)
Velvet Scoter	16 May	15 Jun	16 May (± 14)	22 Oct	12 Aug	16 Oct (± 20)
Goldeneye	29 Apr	23 May	22 Apr (± 19)	06 Nov	06 Aug	07 Oct (± 18)
Smew	13 Mar	24 Apr	10 Mar (± 23)	12 Dec	03 Nov	02 Dec (± 23)
Goosander	01 Apr	22 May	03 Apr (± 35)	22 Oct	12 Sep	05 Nov (± 25)
Black-throated Diver	20 May	21 Jun	30 May (± 12)	02 Nov	03 Aug	15 Oct (± 28)
Great Northern Diver	28 May	21 Jun	12 May (± 24)	05 Nov	16 Sep	25 Oct (± 25)
Red-necked Grebe	26 Mar	19 Jun	04 May (± 14)	14 Sep	18 Aug	08 Sep (± 10)
Hen Harrier	22 Apr	19 Jun	15 May (± 18)	31 Aug	04 Aug	04 Sep (± 19)
Purple Sandpiper	13 May	26 May	11 May (± 8)	19 Jul	01 Jul	27 Jul (± 33)
Jack Snipe	12 Apr	19 May	29 Apr (± 14)	19 Sep	24 Aug	19 Sep (± 17)
Water Pipit	31 Mar	28 May	05 Apr (± 22)	04 Nov	01 Sep	26 Oct (± 8)
Fieldfare	01 May	05 Jun	27 Apr (± 12)	04 Oct	13 Aug	24 Sep (± 20)
Redwing	17 Apr	26 May	14 Apr (± 17)	30 Sep	06 Aug	19 Sep (± 15)
Great Grey Shrike	27 Apr	14 May	03 Apr (± 20)	23 Oct	26 Sep	18 Oct (± 7)
Brambling	16 Apr	12 May	21 Apr (± 6)	06 Oct	13 Sep	30 Sep (± 7)

Departure and arrival dates of winter visitors, 2005

Arrival and Departure Dates

To make a clear cut-off between arrival and departure dates all January records have been omitted from the table of summer visitors and from the calculation of mean dates and all July dates from the table of winter visitors with the exception of Purple Sandpipers, which regularly return to their winter grounds in July. Any January and July dates are to be found as footnotes. The large numbers of terns seen at seawatches to which a specific identification could not be ascribed have been included as Common/Arctic Tern. The early dates are most likely to refer to Common Tern and the later ones could be either Common or Arctic.

The ten year average is included to indicate if the date quoted is unusual and is calculated from the 10 years prior to the current one. The standard deviation gives an indication of the reliability of the average (64% of values fall within one standard deviation). For example, a standard deviation of ± 7 means that 64% of the dates fall within 7 days of that average.

- 1. Latest county record.
- 2. Earliest county record.
- 3. A Lesser Whitethroat overwintered in a Burgess Hill Garden.

SUMMARY OF SOME COMMON BREEDING BIRD COUNTS.

Figures relate to pairs or territories. The use of a small hyphen (-) does not necessarily mean that the species was absent. nc = breeding confirmed but no count made. @ = present during the breeding season but no territories identified. <math>np = confirmed as not present. + indicates a minimum count. p = probable breeding.

SPECIES	AL	AN	AW	AY	BC	BP	DR	HC	HP	PB	PV	RH	SF	SP	WP
Mute Swan	1					1				2	3	3		4	
Mallard			nc		1	1	2+	1	1	6	15	39+		14	
Gr Partridge														2	
Kestrel			1		R		1	R		1	2	®		р	2
Pheasant			nc		1		1+	R			6	nc		9	2
Moorhen	1	nc	nc		2		2+	3		nc	30	49		14	
Coot		nc				nc	1				20	43		14	
Stock Dove		2+	р	1	®			1	2	4	2	®		®	1
Woodpigeon		®	nc		3		nc	®	26	nc	®	nc	®	6	71
Col Dove		®			®		1	1	5	®	8	®	®	3	28
Tawny Owl			р				1+				3		1		
Grn Wdpcker			3		р		5	1	1	5	9	р	1	4	2
G S Wdpcker			3+		р		4	3	1	5	6	р	1	р	2
Sky Lark			32+		®		®			31+		32+		13	16
Meadow Pipit			40+							24+		7		®	
Pied Wagtail								®		3+	4		1	3	1
Wren			nc	1	14		23	16	6	nc	84	43	10	35	89
Dunnock			nc		1		3	2	2	nc	55	50	5	11	49
Robin			nc		16		35	23	5	nc	76	5+	10	17	61
Blackbird			7		3		16	11	10	8+	47	41+	6	21	110
Song Thrush			6		2	R	3+	3	3	10+	19	6	2	2	15
Mistle Thrush					®		2	1		3	5		1		1
Goldcrest			6+		®		2	2	1				®		1
L-tailed Tit			4		R		3	1	®	nc	10	2+		2	7
Marsh Tit			2	1	R		3			5					
Coal Tit			5+				1	®	®		_				
Blue Tit		6	10+	33	10		25	13	13	nc	37	р	4		67
Great Tit		3	10+	13	5		25	16	2	nc	38	р	9	17	49
Nuthatch			1+	1	2		5	3	1	4			1	9	
Treecreeper			3+				3	®		3+	3	р	1		
Jay			nc		рр		nc	1	<u> </u>	nc	3				3
Magpie			nc		1		5	®	1	6+		р	_	6	40
Jackdaw		R	nc					®		nc	3		R	®	2
Carrion Crow			4+		2		5	®	4	7+		2		6	16
Starling			3+					1		4	13	3		2	20
Hse Sparrow		2						®	<u> </u>		8	1	<u> </u>	4	14
Chaffinch			8+		7		32	5	1		53	16	10	29	42

SPECIES	AL	AN	AW	AY	BC	BP	DR	HC	HP	PB	PV	RH	SF	SP	WP
Greenfinch			nc		р		1	2	3	8	18	11	3	16	36
Goldfinch			nc				nc	nc		nc	6	®	®		2
Linnet			12+				3			6+	15			2	16
Bullfinch		R	nc	R	1		4	1		6+	6		2		3
Yell-hammer			nc		1		3			8+			1	4	9
Reed Bunting			33+				1			36+	14	77		10	

Key to Sites:

- AL Aldingbourne & Lidsey Rife (Bognor). 4 km Water Bird Survey.
- AN Arlington Reservoir.
- AW Amberley SWT Reserve
- AY Ardingly Reservoir.
- BC Barns Copse (Binstead). 16.1 ha mixed deciduous woodland.
- BP Brooklands Park (Worthing).
- DR Darwell Reservoir.
- HC High Chimneys Estate (Battle). 24 ha deciduous woodland with some grassland.
- HP Hotham Park (Bognor). 7 ha town park.
- PB Pulborough Brooks RSPB Reserve.
- PV Pannel Valley NR. 243 ha mixed habitat reserve, particularly reedbed, open water and farmland.
- RH Rye Harbour LNR & SSSI recording area.
- SF Scobell's Farm (Barcombe). 10.4 ha grass farm with some woodland.
- SP Sefter Farm (Pagham). 95 ha mixed farm.
- WP Brighton Wild Park (including Hollingbury Camp and Golf Course and parts of nature reserve). Downland scrub, farmland and setaside.

The following sites were not surveyed in 2005:

- HO Three Corner Copse & Hove Park (Hove).
- MF Marsh Farm (Binstead). 67 ha mixed farmland.

Details of breeding bird surveys were from: PR Belchamber, C Bentley, RG Harris, JC & CA Holt, PE Jones, L & R Knight, RT Pepper, S Smith, PJ Whitcomb, Dr. AB Watson, Dr. BJ Yates.,

SUMMARY OF SOME MIGRATORY BREEDING BIRD COUNTS.

Figures relate to pairs or territories. The use of a small hyphen (-) does not necessarily mean that the species was absent. nc = breeding confirmed but no count made. @ = present during the breeding season but no territories identified. <math>np = confirmed as not present. + indicates a minimum count. p = probable breeding.

SPECIES	AL	AN	AW	AY	BC	BP	DR	HC	HP	PB	PV	RH	SF	SP	WP
Turtle Dove			np	®				®		р	14	6+	1		
Cuckoo		R	2p	R			R			2p	2	3р			
Swallow		R					1	1		2	5			5	
Nightingale		®	3+				3			6+					
Sedge Wblr	®		38+							21+	20+	48			
Reed Warbler	®	®	5+				2			5	43+	206		46	
L Whitethroat		R	р				1			5	6	11			1
Whitethroat		®	5+		1		3			17+	16	58	2	7	21
Garden Wblr			р				5			4+	2				2
Blackcap			6+		4		6	2	1	9+	19	р	6	4	15
Chiffchaff			6+		4		9	3	1	12+	24	nc	7	4	15
Willow Wblr			8+		R		5			6+			1		
Spotted Fly								1							

Key to Sites:

- AL Aldingbourne & Lidsey Rife (Bognor). 4 km Water Bird Survey.
- AN Arlington Reservoir.
- AW Amberley SWT Reserve
- AY Ardingly Reservoir.
- BC Barns Copse (Binstead). 16.1 ha mixed deciduous woodland.
- BP Brooklands Park (Worthing).
- DR Darwell Reservoir.
- HC High Chimneys Estate (Battle). 24 ha deciduous woodland with some grassland.
- HP Hotham Park (Bognor). 7 ha town park.
- PB Pulborough Brooks RSPB Reserve.
- PV Pannel Valley NR. 243 ha mixed habitat reserve, particularly reedbed, open water and farmland.
- RH Rye Harbour LNR & SSSI recording area.
- SF Scobell's Farm (Barcombe). 10.4 ha grass farm with some woodland.
- SP Sefter Farm (Pagham). 95 ha mixed farm.
- WP Brighton Wild Park (including Hollingbury Camp and Golf Course and parts of nature reserve). Downland scrub, farmland and setaside.

The following sites were not surveyed in 2005:

- HO Three Corner Copse & Hove Park (Hove).
- MF Marsh Farm (Binstead). 67 ha mixed farmland.

Details of breeding bird surveys were from: PR Belchamber, C Bentley, RG Harris, JC & CA Holt, PE Jones, L & R Knight, RT Pepper, S Smith, PJ Whitcomb, Dr. AB Watson, Dr. BJ Yates.,

SUMMARY OF HEATHLAND BREEDING BIRD COUNTS.

Thames Basin & Wealden Heaths Breeding Bird Survey 2005 – West Sussex.

SPECIES Site	AC	BD	CC	CL	DG	HC	IC	LS	SC	WC	WD	WH
Hobby	1	-	-	-	1	-	-	1	-	-	-	-
Woodcock	-	1	-	-	-	-	4	4	3	-	1	-
Stock Dove	1	-	-	1	-	-	-	2	1	-	2	-
Turtle Dove	2	-	1	-	-	-	-	-	-	1	-	-
Nightjar	-	2	1	1	•	•	8	3	1	1	2	1
Green Woodpecker	4	I	-	2	4	3	3	2	3	4	3	1
Great Sp. Woodpecker	7	I	-	2	7	4	3	5	3	5	4	1
Wood Lark	5	2	4	3	4	ı	5	4	2	3	4	
Sky Lark	-	I	-	I	ŀ	ŀ	ŀ	ŀ	ı	1	4	1
Tree pipit	10	8	7	1	5	1	5	16	2	8	2	-
Redstart	-	2	2	-	-	-	-	6	-	-	1	-
Stonechat	8	1	5	1	ა	1	6	1	3	7	4	-
Dartford Warbler	23	1	5	1	5	ı	9	ı	6	5	10	-
Whitethroat	1	1	4	ı	ŀ	ŀ	ŀ	1	•	12	3	1
Siskin	-	1	-	ŀ	1	ŀ	ŀ	ŀ	1	I	I	-
Linnet	11	1	17	1	4	•	10	•	1	5	7	6
Lesser Redpoll	1	•	-	•	-	•	•	•	-	•	•	-
Crossbill	-	-	-	•	•	•	•	•	•	•	-	-
Yellowhammer	11	•	5	3	10	3	5	•	2	9	8	5
Reed Bunting	1	-	-	-	-	-	1	-	-	-	-	-

Figures relate to pairs or territories. The small hyphen (-) indicates that no territories were identified or no survey was made for these species.

Key to Sites:

- AC Ambersham & Heyshott Commons.
- BD Blackdown.
- CC Chapel Common (Liphook)
- CL Coates Common & Lords Piece (Fittleworth).
- DG Duncton & Graffham Commons (Lavington)
- HC Hesworth Common.
- IC Iping Common.
- LS Linchmere & Stanley Commons.
- SC Stedham Common
- WC Woolbeding Common.
- WD Weavers Down (Liss).
- WH West Heath.

Details of breeding bird surveys were from: JTA Bagley, D. Hollow, P James, HJA Lee, JL Nobbs, A Perry, Dr. BM Rogers.

CONTRIBUTORS AND ACKNOWLEDGEMENTS, 2005

We are grateful to the following observers for records for the 2005 Sussex Bird Report.

H Adams	W Bartle	MR Buchanan	GA Cockburn w
R Allan	PH Bateup	PA Bucket	S Cocker ^w
PG Allen	S Bayley H (SB)	D Buckingham ^H	MA Cole
R Allen	N Bayly (NB)	J Bujok	C Coleman
SD Allen	R Beal	PW Bulfield	CB Collins ^{B W}
SR Allen	PA Beckett	J Burchell-Collins	CF Collins
AE Almeida	PR Belchamber	H Burgess ^B	M Collins ^B
J Anstice	AS Bennett	M Burnside	MA Collins
A Appleby	P Bennett	IM Burrell	HM Colmer
J Apps	I Bennison	AF Burtenshaw	D Compton (DCo)
AC Armitage	C Bentley	SJ Burtenshaw	E Compton (ECo)
B Atkey w	G Bentley W	RA Butler	C Cook ^w
P Atkey ^w	J Bentley w	TN Buttle ^B	DC Cooke
R Atkins	VP Bentley ^B		MR Cooke
J Atkinson	K Benyon-Tinker w	T Callaway w	BE Cooper
W Attridge	G Beynon	P Callis	C Cooper
MF Austin	N Biddulph ^B	D Carey W	D Cooper
S Austin	PJ Biggs	J Carey	DR Cooper
	D Billings	A Carter	G Cooper
JWP Bacon	R Billingsley	BJ Carter G	I Cooper w
J Badley ^w	LR Bird	HM Carter ^B	J Cooper
JTA Bagley ^E	RF Bird	PM Carter	JF Cooper
M Baggs ^H	JM Birdsey	SJC Carter	KA Cooper
GR Bagnell	T Blackman	R Carver w (RC)	TE Cooper
J Bailey	M Blencowe ^B	M Casemore	M Coote
P Baker	D Boddington	A Caulkett	GW Corfield
C Ball	R Borwick	M Cavie	C Corrigan ^B
CF Ball	JF Boulcott [⊤]	N Chadwick	MJ Coumbe
D Ball ^w	AL Bowley	GL Champion	P Coward
JL Ballantyne	PS Bowley	B Chapman	JR Cowser ^{B W S}
BC Baltera	HR Bown ^B	J Chapman ^w	B Cox
PC Bance ^w	RC Bradbury	R Chapple	BR Cox
MI Banks	CLG Brand ^s	RH Charlwood	P Cox
S Banks	K Brandwood	J Chattaway ^B	P Coyston
DG Barber ^B	MN Brayshaw	K Chinn ^B	H Crabtree ^B
W Barber	PM Brayshaw	FC Clark	TPR Crane ^B
CJR Barfield ^{B W H}	D Bridges [⊤]	RT Clark	A Cranston
G Barker	C Brooks ^{B W}	BR Clay [⊤]	AD Crawford
MG Barker ^B	M Brooks	PJ Clay	DE Crawley
IT Barnard	P Brown	J Clements	J Crix
J Barnard ^w	PM Brown	T Clements w	A Crowe
N Barnes	SJ Brown	D Cload	FE Crowe
RG Barnett	D Browne	M Coath	PR Cullen
ID Barthorpe	S Bryson	C Cockburn	J Curson (JC)

NB: For an explanation of the superscripts, see the footnote below the table.

SPM Curson	TJ Edwards	G Geoghegan	R Hartfree
	K Eels	A Giacomelli	WG Harvey ^B
R Dales	J Ellel	TE Gibson-Poole	P Haskell ^B
RC Dalrymple	R Elston	DL Gifford	W Hatton
T Dalrymple ^w	M Emberson ^B	S Gilbert ^{B W}	JR Havers
P Davies	L English	AG Gillham	M Hawkins
C Davis ^B	D Errey	JKC Gillingham	MJ Hawkins
EP Davis	P Erridge	BR Gilmore	J Hawtree
J Davis ^B	P Etheridge	CW Glanfield	KC Hearne
M Davis	C Evans	J Glover ^w	R Henning H
P Davis	GD Evans ^B	DJ Golds W	N Henson
R Davison ^w	GM Evans	DJ Goldsmith	JL Herring ^w
J Day	M Evans	SM Goodsall	J Heyes
A de Potier ^w	RD Evans	H Gordon ^B	AP Hibberd
CH Dean ^w	S Evans ^w	DE Gourd	G Hickling
Y Delauney	M Eveleigh	J Gowen ^w	BP Hill
A Deleiros (ADe)	PJ Everitt	JS Gowers s	CA Hill
MN Denness	FJLVenill	GW Gowlett	
B Dickeson	RJ Fairbank	MA Grech	Al Hillman
A Dinsdale	M Farmer	D Green ^B	DA Hilton ^w
S Diserens J Dodds	D Fawcett JA Feest	P Green W Green	SR Hilton ^w D Hilson
	BJ Fellows ^{B W}		RS Hitchen ^B
K Downer		NM Greenaway w	
RJ Downes	C Fentiman	RR Greenhalf w	JA Hobson ^B
M RK Dray	J Ferguson	G Griffin ^w	R Hodge
C Drew	D Fletcher	DW Gritt	AJ Holcombe
NA Driver	G Flinn	AJ Guest ^{B S}	BJ Holcombe ^B
M Duncan	BF Forbes	S Guest	AM Holden
DP Dunk	T Forbes ^B	AC Gutteridge ^{B S}	R Hollins
SA Dunn	A Ford	TJ Guy	D Hollow E
S Dunsmore-Rouse	W Fordham		LG Holloway
G Durey ^w	P Forsdick	K Hackett	M Holmes w
J Durnell	TJ Forward	PRJ Hadland ^B	RG Holmes ^{B H}
	CJ Fox	RK Haggar	JC Holt
M Eade	J Franklin	I Haigh ^B	R Hook
R Eade	MG Freeman w	AH Hall	C Hooker
R Eagles	R French w	CP Hall	P Hopcroft
AR Eales ^w	PG Friston ^B	MP Hall	CE Hope ^B
B Easlea	D Fry ^w	N Hallam	H Horne
J Eastwood	M Funnell	CH Hamilton	RW Horne
DJ Eaton		SG Hamilton	N Horter
A Eccles	J Gallop	M Hampton	A Horton
SD Eden	MA Galtry	J Harding	C Horton [⊤]
RDM Edgar	SM Gamble	R Harman (RH)	J Houlden w
PJ Edmonds	S Gardiner	DGC Harper	A House ^B (AH)
K Edney	RDJ Gardner w	NG Harris	M Howard ^B (MHo)
R Edney	DT Gasson ^s	RG Harris ^{w s}	SM Howard
P Edwards W	R Gasson	M Harriyot	T Howard-Jones

DH Howey	M King	SE Malcolm	K Murphy ^B
R Howorth	RJ King	A Malone ^B	R Musselle (RM)
DG Hughes	J Kirk	L Manns ^s	D Mutters
P Hughes W (PH)	M Kirk	J Mansell	
BJ Humphrey B	RM Kirk	JM Mansell ^B	A Needham
N Humphrys	A Kirkwood w	JH Marchant	M Netherwood
J Hunt	AR Kitson	MJ Marchant	DK Newnham
J Hunt	D Knight ^B	S Mariner	JA Newnham B T W H
J Hunt	L Knight	BAE Marr	C Niall
M Hunt	M Knight	C Marrable	RC Nixon
NL Huston ^B	R Knight (Rex)	PC Marston	JL Nobbs BES
AM Hutson	R Knight W H (RK)	PF Marten	K Noble (KN)
	M Kohn	A Martin ^B (AM)	K Noble (Ken)
R Iredale		J Martin	P Norton
RA lves	C Lambert	R Martin	
	M Lambert ^B	JM Maskell	JF O Driscoll
RA Jackson	MP Lanaway	SP Maskell	M O Nion
RJB Jackson	DC Lang W H	DR Mason	M O Shea
B James ^w	IM Lang	MJ Mason	M Oram ^H
P James E	CD Law	PH Massini	G Osborne
RL James B G T	B Leach	C McCarron H	LW Osborne
CR Janman	J Leanev	SE Mckenzie	G Osbourne
K Jarosinski	HJA Lee BTWE	PAF McKenzie Lloyd	E Outhwaite
G Jarvis	SR Lee	M Mead	RA Owen
GG Jenner	P Lees W	P Mears	RC Owen
DJ Jode	E Levett T	S Mears	
A Johnson ^B	J Lewin	CW Melgar	MI Page
PJ Johnson	G Lewis	R Menhenett	R Papworth
RJ Johnson	TJ Lincoln	N Merchant	A Parfitt ^w
KM Johnston	DJ Ling	P Meredith	JC Parish
A Johnston ^B	SH Linington	B Metcalfe	A Parker
K Jones	PL Lister ^B	B Middleton B	D Parker
PE Jones W	AH Lloyd	A Millar	J Parker
R Jones	KA Lloyd	AM Miller	TW Parmenter
RJ Jones	M Love ^{B W}	D Mitchell	RA Pask
T Jordan	S Love	N Mitchell W	J Patterson
J Julyarski	RE Lowe	NB Mitchell ^B	JAS Patterson
oouyuroki	CD Lowmass ^w	O Mitchell	R Pattimore ^B
Z Karpowicz	JC Luck	C Moore	PT Patton
RS Kelly	PJ Luffingham ^H	J Moore	S Patton ^w
D Kelson	J Luther (JLu)	G Morgan	PN Paul
RJL Kemp	C Lutman	R Morris ^w	M Payne
T Kendall	J Lyes (Jly)	D Morrison	B Peacock
G Kennett		BM Mortlock WH	A Peckover
R Kent ^w	M Mackie	DC Mortlock	CJ Pennells ^B
DE Killick	A MacPherson ^B	SD Morton	B Pennock
D King	D Madgin H	MF Mullen ^B	RF Penticost ^B
JW King	P Mair	D Munday	A Pepper

RT Pepper ^{B W}	GCM Roberts	A Simpson ^w	C Sutton
A Perrett	GR Roberts	D Simpson	S Sutton H
A Perry E	H Roberts w	IM Simpson w	
DM Perry	D Robinson	K Simpson G	WIE Tagg
H Perryman	P Robinson	RN Simpson	B Taylor
CB Peverett	R Robinson B T W S	E Sinclair [⊤]	BJ Taylor
A Phillips	S Robinson w	S Sinton	CA Taylor ^s
J Phillips ^w	SJ Robinson	C Skinner ^w	R Taylor
MJ Phillips ^w	A Roffey	N Skinner	R Taylor
SM Phillips	BM Rogers E	R Slater (RS)	SR Taylor B T W
J Pinder	M Rolfe	M Small	CR Tazzyman
PJ Plant ^B	GK Roper	S Smart	A Thomas ^B
D Pledge	G Rowe	D Smith	K Thomas
A Podmore	P Rowe	DI Smith ^w	T Thomas
M Pooley	C Rowney	DJ Smith	JFW Thompson
NJN Pope	R Rownsby	M Smith w	PP Thompson
DA Potter	J Rowsby	PA Smith ^w	RP Thompson
B Poulter	MG Russell	RJ Smith	D Thurgood
RJ Poulter	MJ Russell	S Smith (StS)	JE Tilbury
R Powell	A Ryle	S Smith ^w (SSm)	S Tillman
TL Pratt		AC Smithen ^B	GA Tocher
HDV Prendergast	D Sadler (DS)	D Sneller	R Tofts [⊤]
P Price	JJ Sampson	MA Snelling ^B	S Trenerry (ST)
R Price	RF Sanderson	F Southgate	CE Trollope
MG Prince	RJ Sandison	M Spalding	JE Trowell ^w
D Pritty (DP)	R Satchell w	P Spiers	WH Truckle
M Pugh	J Scates	S Spiers	M Tucker
RHA Putnam	RE Scott	J Spinks	M Turner ^{B H}
B Puttock w	RJ Scott (RJS)	B Stacey	S Turner
RJ Pyrah	M Scott-ham H S (MSH)	D Stainton	P Twine ^w
	CA Searle	M Stanbridge	WM Twitchett
T Quittenden w	CM Seaton	E Standing (ES)	
	RN Simpson	I Standivan G T W H	ST Underdown w
BJ Rackstraw	R Seber	M Stapleton	M Unwin
P Robinson	P Selby ^w	JC Steedman	MC Upstone
TK Rackstraw	V Selby	JM Steedman	C Upton
P Ramsey ^w	BJ Senior	NJ Steer	ED Urquhart ^w
S Randall	RJ Senior	MJ Stenning ^B	
PJ Raynor	MV Sennitt ^B	P Stent	ATC Vile ^B
SG Reeds ^B	M Shaft	M Stevens	C Vince w
R Rees	RJ Shanks ^B	P Stevens	
RH Relph	J Sharpe ^w	RA Stevens	P Waghorn
JE Richardson	CR Shawyer	P Stokes ^B	JE Wakeling
S Richardson w	O Shepard	PJ Strangeman	CA Walker
SB Rix	R Ship	PJ Stroud	D Walker w
SI Robathan	C Shurman	TH Stuart	W Wallis
ET Roberts	MJ Silk	F Sugg	S Walters G
G Roberts	J Simons	KJ Summerfield	L Walther

IL Walton	DR West ^B	DC Williams	l Woodburn
JC Walton	JD Weston w	JA Williams	J Woodward
LA Ward	A Whitbread	RLC Williamson w	C Woollard
N Ward	P Whitby	S Williamson	RJ Woollard ^B
N Warne ^B	AD Whitcomb	R Willows	J Worrall ^B
J Warner	IJ Whitcomb	J Willshire w	C Wright (CW)
B Warren	PJ Whitcomb (PJWh)	HMV Wilsdon	CMV Wright ^B
Warricker	C White	AR Wilson	E Wright
AB Watson H	GC White	KD Wilson	J Wright w
RF Watson	P White	PJ Wilson ^w (PJWi)	K Wright ^w
LJ Way	CA Whiteman	TJ Wilson	P Wright
B Webb	AM Whitman	I Wiltshire	
P Webster	JH Whitman	R Wingfield ^w	BJ Yates W
P Welch	S Whittaker	H Wingfield-Hayew	M Yates
M Welcome w	B Whyman	LF Winter	S Young
CD Welland	M Wilkinson	A Witts	S Younger W
AJ Wende	B Williams w	V Wood ^B	

The superscripts in the above table indicate the particular survey(s) in which contributors participated, as follows:

- B Breeding Birds Survey (*BBS*)
- E Thames Basin and Wealden Heaths Breeding Bird Survey
- G Winter Gull Roost Survey (*WinGS*)
- H Heronry Census
- S Scarce Woodland Bird Survey
- T Tawny Owl Survey 2005
- W Wetland Bird Survey (*WeBS*)



SURVEYS:

Society members again gave a great deal of their time during the year to a wide range of national, county and local surveys. Their invaluable support and contributions are acknowledged with grateful thanks. Details of the surveys and the Sussex organisers follow.

Heronry Census: This long-standing census is organised in Sussex by Dr AB Watson, 83 Buckingham Road, Shoreham-by-sea, West Sussex, BN43 5UD. Counts of known heronries are given in the systematic list. Thanks are due to the 19 contributors who are indicated by ^H in the above table.

Wetland Bird Survey (*WeBS*): Monthly counts were carried out for this BTO/WWT/RSPB/JNCC survey and organised by CD Lowmass, 33 Barn Close, Seaford, East Sussex, BN25 3EW. Counts for Chichester Harbour were organised by Ms A de Potier, Harbour Office, Chichester Harbour Conservancy, Itchenor, Chichester, West Sussex. Thanks are due to the two survey organisers and to the 105 counters who are indicated by ^W in the list of contributors.

Winter Gull Roost Survey (WinGS): The organisation of this national survey was arranged by Dr JA Cocks. Thanks are due to the five participants who are indicated by ^G in the above table.

Tawny Owl Survey 2005. This sample, national survey was organised in Sussex by Dr JA Cocks. Thanks are due to the 13 participants who are indicated by T in the above table.

Scarce Woodland Bird Survey. The first year of this national survey was organised in Sussex by Dr JA Cocks. Thanks for due to the 12 participants who are indicated by $^{\rm S}$ in the list of contributors.

Breeding Bird Survey (BBS): This BTO annual national breeding survey, based on selected one km squares, was organised in Sussex for 2005 by Dr Helen Crabtree, 3 Myrtle Cottages, Ardingly Road, Cuckfield, West Sussex, RH17 5HD. Thanks are due to the 85 observers involved who are indicated by ^B in the above table.

Thames Basin and Wealden Heaths Breeding Bird Survey: This continuing survey of heaths and heath woodlands is undertaken in collaboration with the RSPB and the bird clubs of Berkshire, Hampshire and Surrey. The Sussex organiser is A Perry, Edgehill Barn, Byworth near Petworth West Sussex, GU28 0HR. Thanks are due to the seven observers involved who are indicated by ^E in the list of contributors.

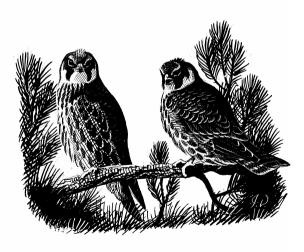
Co-ordination of Spring Sea-watching records: The annual co-ordination of these records for the Society is carried out by Dr JA Newnham, 61 Grand Avenue, Worthing, West Sussex, BN11 5BA.

Cormorant roost counts: Counts were carried out monthly from September to March at Chichester Gravel Pits and South Stoke, West Sussex, by R Knight for the Cormorant Research Group.

We are grateful for summaries of detailed observations at Chichester Harbour from Ms A de Potier; Thorney and Pilsey Islands from CB and Mrs MA Collins; Selsey Bill from BJ Carter and O Mitchell; Pagham Harbour from IM Lang; Pulborough Brooks from P Hughes; Worthing from Dr JA Newnham; Weir Wood Reservoir from Mrs BM Mortlock; Ashdown Forest from D King; Telscombe Cliffs from DH Howey, Barcombe Res from RT Pepper, Splash Point (Seaford) from BR Gilmore; Beachy Head from D Cooper and RDM Edgar; Filsham & Combe Haven from KM Johnston, Pannel Valley NR from PE Jones and Rye Harbour from Dr BJ Yates. We also thank the Sussex Biodiversity Records Centre for ornithological records and the British Trust for Ornithology for providing the Sussex records from *BirdTrack* and the *Breeding Bird Survey*.

Thanks are due to RDM Edgar for maintaining detailed records of ringing in the county and to all ringers who contributed data.

The Recorder is especially grateful to Dr JA Newnham and the following team of helpers for coding and inputting the records onto the computer:, CJR Barfield, IT Barnard, PM Brayshaw, Ms J Chattaway, BR Clay, C Cockburn, CB Collins, D Cooper, JR Cowser, J Curson, DE Crawley, Ms A de Potier, RDM Edgar, RJ Fairbank, BR Gilmore, AC Gutteridge, Ms H Gordon, JS Gowers, P Hadland, JA Hobson, AM Holden, CE Hope, A House, T Howard-Jones, DH Howey, P Hughes, RA Ives, P James, PE Jones, G Kennett, D King, R Knight, IM Lang, J Lewin, L Manns, O Mitchell, Mrs BM Mortlock, RT Pepper, A Perry, GCM Roberts, M Scott-ham, MV Sennitt, Mrs IM Simpson, DI Smith, JC Steedman, TH Stuart, Dr AB Watson, AJ Wende, IJ Whitcomb, JH Whitman, and Dr BJ Yates.



THE SUSSEX RINGING REPORT FOR 2005

Robert Edgar and Sarah McKenzie 32 Hartfield Road, Seaford, East Sussex BN25 4PW

Introduction

The total number of birds ringed in Sussex was 58,739. This was an increase of 1,201 (2%) on the 57,538 ringed in 2004 and was the highest since 1996 when 63,676 birds were ringed. Reports were received from 20 individual active ringers or groups (Table 1), an increase of two on last year. The Rye Bay Ringing Group (RBRG) ringed 37,564 birds, which was 64% of the Sussex total. One hundred and twenty four species were ringed in the county in 2005 compared to 119 in 2004. Unfortunately, no national figures were available this year for comparison at the time of compiling this Report.

Ringing Source	Number Ringed		
			Totals
Individuals			
K. Arthur	0	457	457
W. Attridge	275	3	278
D.Crawley	82	0	82
A.M. Davis	508	99	607
J.A.G. Dunlop	3583	15	3598
R.D.M. Edgar	15	3	18
C. Hamilton	431	0	431
J.& A Hillman, C.Shawyer	14	138	152
D. King	1480	278	1758
R. Lanaway	1414	850	2264
D.M. Love	247	54	301
A. Martin	274	69	343
J.A. Newnham	1178	1	1179
G.C.M. Roberts	41	60	101
R. Sanderson	2006	20	2026
A.B. Watson	855	1026	1881
Groups			
Beachy Head Ringing Station	2380	17	2397
Cuckmere Ringing Group	852	0	852
Farlington Ringing Group	184	0	184
Rye Bay Ringing Group	36932	632	37564
Steyning Ringing Group	2195	71	2266
County Total	54946	3793	58739

Table 1. A summary of Ringing Activity in Sussex. Individuals named are those responsible for the rings issued and may not be those who actually ringed the birds. A Ringing Group may comprise a number of individuals.

County rarities ringed were one Spotted Crake, one Waxwing, one Water Pipit, five Aquatic Warblers, four Marsh Warblers, one Yellow-browed Warbler, one Radde's Warbler, one Penduline Tit and two Little Buntings (all at Pannel Valley) and three Wrynecks, with one at Pannel Valley, one at Beachy Head and one at Charleston Reedbed.

The new species ringed in the county were Little Egret and Waxwing, bringing the species total to 202 since 1979. Other unusual ringing results include one Great Crested Grebe (only five had been ringed in Sussex before), one Quail (only eight ringed

previously in the county), one Curlew Sandpiper (11 ringed before), 24 Black-tailed Godwits (only one ringed before), two Buzzards (10 ringed before) and one Merlin (only two ringed before). One hundred and twenty two Cetti's Warblers were ringed which is a 48% increase on the cumulative total from 1979 to 2004 and 75 Common Redshank, a 35% increase on the 1979 to 2004 total. Particularly welcome was the 189 Tree Sparrows ringed at the eastern end of the county. Of concern, only two Yellow Wagtails, one Mistle Thrush, four Pied Flycatchers and one Willow Tit were ringed in 2005, reflecting a decrease in the occurrence of these species.

Ringing Totals

Table 2 lists the 20 most regularly trapped species during 2005 in descending order of magnitude compared with similar data from 2004 and including the totals for RBRG to demonstrate the considerable contribution this group makes to Sussex ringing.

	2004	2005			2004	20	05
	Total	Total	RBRG		Total	Total	RBRG
Sedge Warbler	9282	6587	6217	Lesser Redpoll*	486	1450	1040
Blackcap	6290	6048	4015	Goldfinch	551	1345	447
Barn Swallow*	3336	5962	5655	Common Whitethroat	1556	1208	813
Eurasian Reed Warbler	6451	5487	4769	House Martin*	1219	1181	839
Blue Tit	3188	4294	687	Robin	1004	1096	358
Common Chiffchaff	5074	3418	1949	Blackbird	778	999	302
Sand Martin *	2810	3067	3067	Greenfinch	1077	735	51
Great Tit	1521	2188	304	Wren	576	703	247
Willow Warbler *	1729	2028	1215	Dunnock	565	668	194
Reed Bunting**	1712	1760	1673	Chaffinch	632	652	150

Table 2. Sussex Ringing Totals for the 20 most ringed species in 2005. Birds of Conservation Concern (Gregory et al, 2002: ** Red listed, * Amber listed.

The 20 species listed in Table 2 account for 87% of all birds ringed in Sussex during 2005 compared to 88% of birds ringed in 2004. The first 10 species are much the same as last year with the order little changed but Lesser Redpoll has newly appeared in the list, Dunnock last featured in this list in 2002 and Goldfinch in 2003. The 'top ten' (five warblers, two hirundines, two tits and one bunting) accounted for 70% of all birds ringed. RBRG ringed 64% of the county total (65% in 2004) and a high proportion of 10 of the species in Table 2. Their highest proportions were 100% of the Sand Martins, 95% Barn Swallows and Reed Buntings, and 94% of the Sedge Warblers. Although these figures demonstrate how important the contribution of RBRG is to Sussex ringing, it in no way belittles the significance of the work of the other ringers.

Despite the usual caveat that weather, opportunity and ringing effort may be as much responsible for a difference in numbers ringed as a genuine population change, tentative conclusions can be drawn from the ringing totals. Numbers ringed of both Blue Tit and Great Tit increased markedly. An increase in the number of Willow Warblers caught was most welcome and, hopefully, is indicative of some recovery in the species' fortunes. However, decreases in a number of summer visiting warblers is of concern with Sedge Warbler decreasing from the 2004 total by 29%, Reed Warbler 15%, Whitethroat 22% and Common Chiffchaff 31%. Although very large increases occurred in captures of Barn Swallow, Lesser Redpoll and Goldfinch, this is probably as a result of targeted catching. Similarly the large increase in ringed Pied Wagtails (from 59 in 2003 to 209 in 2004) is a result of special efforts.

An increase in populations may, perhaps, be deduced by Great Spotted Woodpecker ringing totals increasing from 54 last year to 81 in 2005, Cetti's Warbler from 97 to 125, Spotted Flycatcher from 26 to 50, Marsh Tit from 37 to 61, Eurasian Treecreeper from 49 to 75 and, spectacularly, Bullfinch from 170 to 369 this year. On the debit side only 13 Common Nightingales were ringed in 2005 compared with 21 in 2004 and only a single Willow Tit was ringed in 2005. Other notable decreases included Grasshopper Warbler down to 585 this year from 781 in 2004 and Goldcrest to 409 from 819.

Nestlings

The 3,793 nestlings ringed in 2005 is a very welcome increase on the 2,785 ringed in 2004 and represented 7% of the birds ringed during the year.

	Total Ringed	Total Nestlings	% Nestlings		Total Ringed	Total Nestlings	% Nestlings
Common Tern	104	104	100	Linnet**	67	47	70
Tawny Owl	11	11	100	Stock Dove*	43	27	63
Peregrine Falcon*	6	6	100	Tree Pipit*	50	26	52
Ringed Plover*	5	5	100	Common Swift	8	4	50
Wood Lark**	4	4	100	Nuthatch	104	50	48
Barn Owl*	464	427	92	Grey Wagtail*	17	8	47
Black-headed Gull*	55	50	91	Northern Lapwing*	63	28	44
Common Kestrel*	55	62	89	Common Redstart*	27	12	44

Table 3. Nestlings ringed in Sussex during 2005,

 where they number more than 40% of the total ringed.

Birds of Conservation Concern (Gregory et al, 2002): ** Red listed, * Amber listed.

Eleven species had over 40% of their total ringed as nestlings (Table 3) compared with 21 in 2004, and 12 of these species were of Conservation Concern (Gregory *et al*, 2002). The number of Barn Owl nestlings ringed greatly increased to a remarkable 427, from last year's 187 and 119 in 2003. Common Kestrel (also a species of Conservation Concern) showed a welcome increase to 55 from 19 in 2004.

Particularly notable individual efforts include the 132 nestling Barn Swallows, 49 nestling Blackcaps, and 38 Common Chiffchaff nestlings ringed by R. Lanaway and the 47 nestling Linnets ringed by D. King. No less than 233 nestling Barn Owls were ringed by Dr A. B. Watson and his helpers.

Recoveries

A wide range of recoveries was reported and a selection of the more interesting ones is presented below. Once again there have been many reports of colour marked birds, which clearly demonstrate how non-ringers can contribute to our knowledge of bird movements.

The colour ringed **Bewick's Swan** mentioned in the last report (Edgar and McKenzie 2005) was seen again, for a second winter, in the Arun Valley on 27 December 2005 (and into 2006). It was originally ringed as an adult in Arctic Russia in summer 2003.

A colour ringed **Great Cormorant** sitting on a post off Selsey Bill on 1 July 2005 had been ringed on 9 May 2002 at the Chausey archipelago, La Baie du Mont Saint-Michel (France). Such a movement is not unusual but a bird, presumably of the race *carbo*, would not be expected to disperse from its breeding ground so early. Perhaps this individual now breeds in England?

An exciting sighting of a colour marked bird was of a wing-tagged **Hen Harrier** at Park Brow near Cissbury, between 16 October and 1 November 2005. This female had been marked at the RSPB Geltsdale Reserve (Cumbria) on 25 July 2002.

An excellent recovery is of a **Common Snipe** ringed at Pannel Valley on 24 September 2004 and killed at Medvezhegorsk (Karelia, northwest Russia) on 27 August 2005. Sub-arctic and boreal Common Snipe populations are highly migratory, moving to southern and western Europe with the approach of harsh winter weather (Wernham *et al*, 2002).

As predicted in the last report (Edgar and McKenzie, 2005) there has been another report of a colour marked **Bar-tailed Godwit.** One of a flock of 284 birds on Pilsey Sands (Chichester Harbour) on 31 January 2005 had been marked on 26 April 2001 at Schiermonnikoog (Waddensee, Netherlands) on its return journey to its breeding grounds in Fennoscandia or western Siberia (Wernham *et al*, 2002). This individual had been seen eleven times in the Netherlands in 2003 and 2004 in spring and autumn, but the Sussex sighting was the first time it had been identified on its wintering grounds.

Sightings of colour ringed **Mediterranean Gulls** are now regular. This year a bird ringed as a chick near Antwerp (Belgium) on 7 July 2002 was sighted at Thorney Deeps (Chichester Hbr) on 4 April 2005. After fledging it was sighted 10 times in 2002 in northern France through the autumn. In autumn 2003 it was in Essex and then moved back to France. In April 2004 it was at Hayling Island (Hampshire) and only a short distance from Thorney Island where it was recorded on three dates. In July and August 2004 it was back in northern France and then in late March 2005 it moved to Mill Rythe on the Hayling Island side of Chichester Harbour and then to Thorney Deeps. This story shows the value of colour ringing, the peripatetic nature of Mediterranean Gulls and how difficult it can be to establish how many different individuals of any given species are at one site.

A colour ringed **Great Black-backed Gull** is a most unusual sighting. One was seen on 23 April 2005 at Selsey Bill (and the following month at Sandy Point on the Hampshire side of Chichester Hbr). It had been ringed as a chick on 21 June 2003 near Farsund (Vest-Agder, southern Norway). These gulls are normally ringed as nestlings and of the foreign ringed birds encountered in Britain and Ireland since 1979; most were ringed in Norway, although by far the majority are encountered on our east coast (Wernham *et al*, 2002).

At Widewater Lagoon (Lancing) a colour ringed **Black-headed Gull** on 6 January 2005 had been ringed, as an adult, on 17 March 2001 at Hellerup Havn (Denmark, just north of Copenhagen). In February 2002 it was seen in Ipswich (Suffolk) and returned to Denmark for that summer. In October 2002 it was back in Ipswich and then Denmark again in March and April 2003 and from March to May 2004. Rather less fortunate was a **Black-headed Gull** that was found dying in Worthing on 15 March 2005 that had been ringed as a first year at East Worthing on 30 December 1979, but it had lived for nearly 26 years. This is a very good age as the British and Irish record is 26 years 8 months and 24 days (the European record is 30 years and 7 months (Staav and Fransson 2006))

The ring of a **Sandwich Tern**, which had been ringed as a chick at Griend (Netherlands) on 1 June 1997, was recovered on 21 January 2005 amongst the prey remains in the nest of the Peregrine on Chichester Cathedral. Presumably the tern had been killed the previous summer. Although this might seem surprising prey Walpole-Bond (1938) does record Common and Black Terns as having been taken in Sussex.

A more fortunate **Common Tern** ringed as a chick at Chichester GP on 20 June 1994 was trapped alive and released at West-Vlaanderen (Belgium) on 9 April 2005.

The work of the dedicated band of **Barn Owl** ringers in the County leads to many recoveries. In 2005 26 recoveries of ringed owls were made of which, sadly 50% were dead. Many of these were in their first autumn and winter demonstrating how difficult that period can be for these beautiful birds.

One of the highlights of 2005 was the invasion of **Waxwings.** One recorded on 17 March 2005 at Langley Green (Crawley) had been colour ringed as a young male on 6 November 2004 at Inverurie (Scotland). Two colour-ringed birds were seen at Southwater on 31 January. One was ringed also at Inverurie on 31 October 2004 and the other on 11th or 12 December 2004 at Kittybrewster (Aberdeen) (the report of the colour combination was not quite accurate enough to distinguish between the two birds).

A nice example of a bird returning to winter at the same site is a **Fieldfare** ringed at Ockford Fruit Farm (Northiam) on 3 January 2005 and recaught there on 26 December 2005.

With so many **Sedge Warblers** ringed in the county it is not surprising that many interesting recoveries are generated. Some birds that pass through Sussex are certainly not local as is shown by one that was ringed at Pannel Valley on 9 August 2003 on its southward passage and found dead at Stornoway (Western Isles) on 10 July 2005. After fattening in our southern reed beds, Sedge Warblers undertake rapid long-haul flights across Iberia, North Africa and the Sahara Desert without significant further fattening and relatively few have been recovered in Iberia during autumn migration (Wernham *et al*, 2002). One that had been ringed at Pannel Valley on 3 August 2004 was recaught near Oviedo (Spain) on 14 August 2005. On return from their wintering sites Sedge Warblers that have crossed the Sahara need to replenish their fat reserves in either North Africa or Spain, as did one that had been ringed at Filsham on 7 August 2004 and recaught near Valencia (Spain) on 8 April 2005. Sedge Warblers from Fennoscandia normally migrate south through Italy, so one ringed at Pannel Valley, on 6 September 2004 and recaught near Novara (Italy) on 24 May 2005 had, apparently successfully, reorientated.

Despite their diminutive size **Goldcrests** travel considerable distances, as evidenced by one ringed at Pannel Valley on 15 October 2004 and recaught at Bardsey Island (Gwynedd, Wales) on 29 March 2005.

A tendency for an easterly coastal movement towards a short channel crossing is shown by two female **Blackcaps** both ringed at Beachy Head, one on 28 August 2005 and the other on 10 September 2005 and both recaught at Pannel Valley on 2nd and 23 September 2005 respectively. The same direction of movement is shown by a **Common Chiffchaff** ringed at Beachy Head on 18 September 2005 and recaught at Pannel Valley three days later. Not all warbler movements are so easy to explain. A **Garden Warbler** ringed at Beachy Head on 29 August 2005 was recovered on 12 September that year at Richmond (Greater London). This would seem to be very much in the wrong direction.

It is always interesting to know where migrants seen in the county may be breeding. A **Common Whitethroat**, ringed at Beachy Head as a first year on 11 August 2001 was recaught and identified as a female with a brood patch on 25 May 2005 at Staveley (Derbyshire).

The **Blue Tit** might not spring to mind as a species likely to produce an interesting pair of recoveries. Well, how about two nestlings ringed on 16 May 2005 in Burgess Hill and both recaught at Beddington SF (Greater London)? One was trapped on the 14 September

and the other on 11 December 2005 but both surely must have travelled the 50 km together.

We have only just learnt of a female colour ringed **Penduline Tit** at Filsham on 9 April 2004. It was accompanied by two unringed males. The female had been ringed in Scania (Sweden). This mirrors one ringed in Sussex in autumn 1988 and recaught in Sweden in May 1989 and another ringed in Sweden in July 1997 and recaptured in Sussex in October 1997.

Siskins have less need to move south in years when there is a successful spruce cone crop. This probably explains why one that had been ringed in East Grinstead on 6 February 2003 was recaught at Ballchraggan (Highland, Scotland) exactly two years later to the day.

Bullfinches that breed in Britain and Ireland, of the race *pileata*, are non-migratory and normally extremely sedentary (Wernham *et al*, 2002). It is tempting to wonder if one ringed at Pannel Valley on 29 October 2005 and recaught at Sandwich Bay (Kent) on 7 November 2005 could just possibly have been of continental origin although that race, *europoea*, is not officially on the British List (Pennington and Meek, 2006).

Longevity

Notified too late for last year's Report was a **Goldfinch** ringed as a first year bird in Steyning and found freshly dead in the same village on 12 April 2004. This bird had been ringed on 8 August 1995 and was a longevity record for Britain and Ireland of 8 years, 8 months and 4 days. The European longevity record for this species is 11 years 9 months (Staav and Fransson 2006).

Other longevity records demonstrated by ringing that involve Sussex are as follows:-

A **Mew Gull/Common Gull** ringed as an adult on 6 December 1980 at Worthing beach and found freshly dead in Finland on 1 July 2003, 22 years, 6 months and 25 days later (The European record is 33 years and 8 months (Staav and Fransson 2006)).

Black Redstart ringed as a male nestling on 3 July 1947 at Pett and found nesting at Dover (Kent) on 21 June 1952, 4 years, 11 months and 18 days later. (The European record is 10 years and 2 months (Staav and Fransson 2006))

Mistle Thrush ringed as an adult on 26 May 1971 at Hodcombe (Beachy Head) and found dead in Eastbourne on 5 October 1982, 11 years 4 months and 9 days later. (The European record is 21 years and 3 months (Staav and Fransson 2006)).

Blackcap ringed as a first year male on 22 September 1977 at Beachy Head and killed in Spain on 6 June 1988, 10 years 8 months and 15 days later. (The European record is 11 years and 7 months (Staav and Fransson 2006)).

Wood Warbler ringed as a nestling on 9 June 1988 at Marley Common and breeding at Hindhead Common (Surrey) on 2 June 1995, 6 years 11 months and 24 days later. (The European record is 10 years 3 months (Staav and Fransson 2006)).

Spotted Flycatcher ringed as a nestling on 21 July 1955 at High Wycombe (Buckinghamshire) and found dead at Crowborough on 28 May 1963, 7 years 10 months and 7 days later. (The European record is 11 years 0 months (Staav and Fransson 2006))

Marsh Tit ringed as having been hatched the previous year on 24 March 1984 at Fairlight and seen at the same locality on 20 May 1994, 10 years 1 month and 26 days later (European record 11 year 11 months (Staav and Fransson 2006)).

Brambling ringed as a female having been hatched the previous year on 28 March 1975 at Ashcombe Farm (Lewes) and killed in Italy on 13 November 1983, 8 years 7 months and 16 days later (The European record is 14 years 8 months (Staav and Fransson 2006)).

All British and Irish longevity records can be viewed at: http://www.bto.org/ringing/ringinginfo/longevity.htm

Acknowledgements

Our grateful thanks to the Secretaries of the Groups and the individual ringers named in Table 1 for submitting information and to the observers who reported colour-ringed birds, all of which make this Report possible.

References

- Edgar, R. & McKenzie, S. 2005. The Sussex Ringing Report for 2004. Sussex Bird Report 57: 198-204
- Gregory, R.D., Wilkinson, N.I., Noble, D.G., Robinson, J.A., Brown, A.F., Hughes, J., Procter, D.A., Gibbons, D.W. & Galbraith, C.A. 2002. The population status of birds in the United Kingdom, Channel Islands and Isle of Man: an analysis of conservation concern 2002-2007. *British Birds* 95: 410-450.
- Pennington, M.G. & Meek, E.R. 2006. The 'Northern Bullfinch' invasion of autumn 2004. British Birds 99: 2-24.
- Staav, R. & Fransson, T. 2006. EURING list of longevity records for European birds (<u>http://www.euring.org/data_and_codes/longevity.htm</u>).
- Wernham, C.V., Toms, M.P., Marchant, J.H., Clark, J.A., Siriwardena, G.M. & Baillie, S.R. (eds). 2002. The Migration Atlas: movements of the birds of Britain and Ireland. T. & A.D. Poyser, London.

Walpole-Bond, J. 1938. A History of Sussex Birds. Witherby. London.



Ivory Gulls in Sussex: An Historical Review

Richard Fairbank 19 Crown Road, Shoreham-by-Sea, West Sussex, BN43 6GB

Introduction

When Walpole-Bond's *The History of Sussex Birds* was published in 1938 the position of Ivory Gull *Pagophila eburnea* on the county list was secure with 'about a dozen' records spanning a period of almost 100 years. *A Guide to the Birds of Sussex* (des Forges and Harber 1963) listed two subsequent records although by then three of the earlier ones had been deleted as part of the review of the infamous Hastings Rarities. A record in 1961 was overturned by the British Birds Rarities Committee (BBRC) immediately prior to the publication of *Birds of Sussex* (James 1996) where concerns about the species status were expressed in print with the contestation that "*The species continued place on the county list is at best decidedly tenuous*". A recent national review of rarities recorded between 1950-57 (Wallace, Bradshaw & Rogers 2006) has removed the next most recent record, that of 1954, leaving an adult seen at Rye Harbour in January 1931 as the county's most recent record. The published details of this, and earlier occurrences in the county, are far from satisfactory and with no national mechanism for re-examining older records a local review has been undertaken.

Published Records of Ivory Gull in Sussex

Thirteen records of Ivory Gull have been published in the county (Table 1), although it is not clear whether the two obtained near Brighton prior to 1849 were together or separate, while two other records may relate to the same occurrence.

Record No.	Details	Source References (see Appendix A)
1	One obtained near Worthing in about 1845	3, 4, 6, 13, 14
2	One obtained at Hastings in August 1848	1, 4, 6, 13, 14
3	One obtained at Rye in winter 1848	2, 4, 6, 13, 14
4	Two obtained near Brighton prior to 1849	2, 4, 6, 13
5	One obtained at St. Leonards-on-Sea prior to 1849	2, 4, 6, 13
6	One shot near Lewes on 16 January 1875	6, 14
7	One shot at Beachy Head in February or March 1882	6, 14
8	A juvenile female shot at Ecclesbourne Glen (Hastings) on 7 February 1910 [specimen in Booth Museum, BoMNH 204019]	6, 8, 14
9	A juvenile male shot at Ecclesbourne Glen (Hastings) on 11 February 1910 [specimen in Booth Museum, BoMNH 204020]	6, 8, 14
10	A female showing signs of immaturity shot at St. Leonards-on-Sea on 15 January 1914	6, 8, 14
11	An adult at the mouth of the River Rother at Rye Harbour on 6 January 1931	5, 6, 13, 14
12	An adult in the lower Cuckmere Valley on 19 November 1954	7, 10, 11, 13, 14, 16
13	An adult at Portobello (Brighton) on 19 November 1961	9, 10, 11, 12, 13, 15

Table 1. Records of Ivory Gull in Sussex from 1845 to 1961

Methods

As much detail as is available on all Sussex Ivory Gull records has been assembled and is presented in Appendix A. It is immediately apparent that none of the early records are at all well documented and Walpole-Bond's statement that "*Evidently bird-chroniclers of the past did not always count carefulness amongst their virtues*" is apposite. An assessment of each record is made and a recommendation given, with the main concern being whether one had sufficient confidence that a correct identification had been made. These assessments were then adjudicated on by the Sussex Ornithological Society Records Committee (SOSRC) and the comments of some previous Sussex Recorders were also sought.

General observations

None of the Sussex records could be remotely described as being well documented, although many perfectly good historical records come nowhere near to meeting today's standards. Most concerning perhaps is how few of them seem to have been aged. This is easy to do with current knowledge, although how well the juvenile¹ plumage of Ivory Gull was known in the 1840s in uncertain. It must be assumed that unaged birds were believed to be adults, and this is a major concern due to both the greater chance of an incorrect identification and their increased rarity.

The species is an extreme rarity in southern England with adults even more so. Since 1950 there have been only four records in the counties from Dorset to Norfolk and all of these were juveniles (see Appendix B). Prior to 1950 it was not recorded at all in East Anglia, there is one unconvincing record of an adult in Kent (it was away from the coast in late April and had some orange or red on its bill) and six records from Dorset (presumably all adults, appearing of a similar standard to those in Sussex).

Confusion species

Few would question the identity of a juvenile Ivory Gull but an adult is a very different matter. Albinism is rare but regular in gulls (Olsen and Larsson 2004) with true albinos being all white with pink eyes. An albino of the similar sized Common Gull *Larus canus* is perhaps most likely to be mistaken for an adult Ivory Gull and such confusion occurs even in recent times. Albinos of other gull species and even exceptionally worn or bleached first-winter Iceland Gulls *L. glaucoides* could also provide a pitfall for the unwary (e.g. plate 265 in Olsen and Larsson 2004). The effect of wear is most obvious in spring and summer and is most extreme in first-year birds in which the feather quality is poorer than adults (Olsen and Larsson 2004). In Iceland Gull an already pale first-winter plumage becomes bleached as the season progresses, sometimes exceptionally so, with feathers fading due to prolonged exposure to sunlight (sun-bleaching). In contrast, albinism is due to a lack of colour pigment in feathers, skin and eyes and is evident at all ages and seasons.

Four of the last five Sussex Bird Reports (2000-2004) include records of albino Common Gulls: in February and December 2000, March 2002, March 2003 and March 2004 (the last three possibly being the same individual). During this period albino Black-

¹ A bird's first full plumage is referred to as 'juvenile' and in Ivory Gull this is retained throughout its first year until it moults into adult plumage. Iceland Gull has a limited post-juvenile head and body moult in autumn when first-winter plumage is attained and moults into second-winter plumage when about a year old (*Olsen and Larssen 2004*).

headed Gulls *L. ridibundus* were also recorded in four of the five years: in March and November 2000, December 2001, March 2003 and June 2004. Walpole-Bond was obviously aware of the existence of albino gulls but no reference to this phenomenon is made in his Common or Black-headed Gull accounts.

Several members of SOSRC also suggested the possibility of confusion with adult winter Mediterranean Gulls *L. melanocephalus*, which was also a rare species in Sussex a century ago. This might too explain some of the bill colours reported.

Analysis of the records

Each record is considered individually. Where relevant the source references are given, the numbers referring to Appendix A. A recommendation is made about every record that hasn't been previously reviewed at a national level.

- **Record 1. Worthing, about 1845.** (Source references 3, 4, 6, 13 and 14). This record is unaged, although it was presumably an adult, and undated, with even the year somewhat uncertain. It was shot but there is no reference to the existence of the specimen. The ability of Mr Wilson is unknown and it is not even clear if he shot the bird, saw the specimen or heard about it at second (or third) hand. With so little to go on, particularly as it was not aged, it is difficult to be confident about this record. *The recommendation that this record should be deleted was unanimously accepted by SOSRC.*
- **Record 2. Hastings, August 1848.** (Source references 1, 4, 6, 13 and 14). This record is unaged, although it was presumably an adult. In its favour the specimen was seen by Mr Ellman who reported it, against it is that there is no reference to the existence of the specimen and that it was probably collected in August, a very unlikely date. It could have been an Ivory Gull but at that time of year is much more likely to have been a misidentification. It is difficult to be confident about this record, particularly given the time of year and that it was not aged. *The recommendation that this record should be deleted was unanimously accepted by SOSRC.*
- **Record 3.** Rye, winter 1848. (Source references 2, 4, 6, 13 and 14). This record is unaged, although it was presumably an adult. It is not clear if it was obtained, although one assumes that it was. If so there is no reference to the existence of the specimen. In its favour it was in winter (although it is not dated further), against it is that it seems to be a second hand account. It is difficult to be confident about this record, particularly without knowing its age or the ability of whoever reported it. *The recommendation that this record should be deleted was unanimously accepted by SOSRC*.
- **Record 4. Brighton prior to 1849.** (Source references 2, 4, 6 and 13). It is uncertain if this is one record of two individuals or two different records. Neither was aged, although presumably they were adults. They were obtained but there is no reference to the existence of the specimens. Neither was dated and they would appear to have been at least second hand accounts. It is difficult to be confident about these records, particularly without further details as to when they were, their ages or the ability of whoever reported them. *The recommendation that this record should be deleted was unanimously accepted by SOSRC.*
- **Record 5. St. Leonards-on-Sea, prior to 1849.** (Source references 2, 4, 6 and 13). It is not aged, although presumably it was an adult. It is not dated although Knox did see the specimen, but there is no reference to the existence of it. It is not certain that this

isn't in fact Record 2 from a different source reference. It could have been an Ivory Gull but is likely to have been a misidentification. It is difficult to be confident about this record, especially without knowing its age or the date it was found. *The recommendation that this record should be deleted was unanimously accepted by SOSRC.*

- **Record 6. Lewes, January 1875.** (Source references 6 and 14). According to Walpole-Bond this was reported originally as a Little Gull *L. minutus* but, presumably, was described as being all white leading him to conclude it was Ivory Gull, although he does recognise the albino possibility. This record was not included by des Forges and Harber (source reference 10) who state that all records were from the coast or its vicinity and, in any event, an occurrence some miles from the sea would be exceptional. This record is very likely to have been an albino, as first reported. *The recommendation that this record should be deleted (if it has any official recognition) was unanimously accepted by SOSRC.*
- **Record 7. Beachy Head, February or March 1882.** (Source references 6 and 14). This seems to have been a second hand report. It is not aged, but it was presumably an adult, and the date is imprecise although better than many records of this vintage. The bird was shot but there is no reference to the existence of the specimen. The ability of Mr Wise is unknown and it is of slight concern that Walpole-Bond generally tends to give the benefit of the doubt to records that were reported to him. This record was not included in Arnold (1936), who is perhaps more discerning, although he may have been unaware of it. Neither is it included in Quinn and Clement (1972). It could have been a misidentification. It is difficult to be confident about this record without further details, especially as to its age. *The recommendation that this record should be deleted was unanimously accepted by SOSRC*.
- Records 8, 9 & 10. Ecclesbourne, 7 and 11 February 1910 and St. Leonards-on-Sea, 15 January 1914. (Source references 6, 8 and 14). These were juveniles, and specimens of the two from Ecclesbourne can be seen at the Booth Museum in Brighton, so there is no doubt about their correct identification. The irony is that being part of the Hastings Rarities fraud the only county records to be aged as juveniles, and where the specimens survive, they were almost certainly not collected where they were purported to have been. In many ways the first two records sum up what is most suspicious about the Hastings Rarities, a juvenile female and then a juvenile male, collected from the same location within a few days of each other. Multiple records were a regular feature of the Hastings Rarities, but have happened incredibly infrequently before or since. Along with all other Hastings Rarities, these records are no longer acceptable (Nicholson & Ferguson-Lees 1962).
- **Record 11. Rye Harbour, 6 January 1931.** (Source references 5, 6, 13 and 14). This record appears to have little credence, although very dark legs and a greenish-black bill were noted. Its behaviour appears unusual in that one would not expect an Ivory Gull to roost amongst other gulls, its age counts against it, the bill should have a paler yellow tip, and being pedantic, the legs should be black not very dark, and, the prominent black eye is not mentioned. The minor plumage concerns may be explained by poor optics or the range at which it was seen, but equally poor views may have given a misleading impression of the bird anyway. In many ways this record is less satisfactory than the Cuckmere individual (Record 12). As that one has been rejected in a national review (Wallace, Bradshaw & Rogers 2006) the acceptability of this one is seriously called into question. While it could have been an Ivory Gull, being

identified as an adult makes it more likely to have been a misidentification. Given the minor concerns about its bare part colours, its atypical behaviour and the fact that it is an adult it is difficult to be at all confident about this record. *The recommendation that this record should be deleted was unanimously accepted by SOSRC.*

- Record 12. Lower Cuckmere Valley, 19 November 1954. (Source references 7A/B, 10, 11, 13, 14 and 16). To bring BBRC into line with a 1950 starting point of other European Records Committees, selected records during 1950-1957 have recently been re-evaluated (i.e. those prior to the formation of BBRC in 1958). The Cuckmere individual, another adult, was part of this review and its behaviour was considered 'impossibly atypical' making the outcome inevitable (M.J. Rogers *in litt*). It is no longer considered to be acceptable and has been deleted (Wallace, Bradshaw & Rogers 2006, source reference 16). In addition the described puffed out appearance does not ring true for this species.
- **Record 13.** Portobello, 19 November 1961. (Source references 9A/B, 10, 11, 12, 13 and 14). Concerns were raised about this record, yet another adult, during the preparation of species texts for the *Birds of Sussex* (James 1996). BBRC were asked to review it and after due process it was considered to be insufficiently documented and was deleted (Rogers *et al* 1997). As well as being reported on the same date as the previous record, its apparent fluffed out appearance was perhaps a coincidence too far.

Conclusions

All currently recognised records of Ivory Gull in the county date from 1931 or before. All records relate to adults, or are assumed to have been adults. Many of the records are undated and, although most were obtained, no specimens are known to survive. Even making allowances for greatly changing recording standards over the years none of the records are documented well enough to be able to say with any degree of confidence that they definitely relate to an Ivory Gull. Without demeaning the original observers in any way, the strong likelihood must be that most, if not all records, relate to genuine mistaken identifications involving either albinos of another gull species (e.g. Common Gull, which has occurred in the county in four of the last five years), bleached Iceland Gulls or adult winter Mediterranean Gulls (which would have been poorly known at that time).

While Ivory Gull may have occurred in the county, the recommendation that all records should be deleted has been accepted unanimously, but with regret, by SOSRC. This decision has been endorsed by the Society's Scientific Committee and Council and Ivory Gull is removed from the Sussex List forthwith. Hopefully Ivory Gull will one day soon reclaim its place there, and if it does it is very likely to involve a juvenile, as has been the case with the four incontrovertible records (Appendix B) in southeast England.

Acknowledgements

Tim Parmenter kindly helped in finding most of the old references while Paul James, John Cooper and Tony Cocks provided helpful comments on drafts of the paper. The records were assessed with care and due consideration by SOSRC, namely Ian Barnard, David Cooper, Bernie Forbes, Kevin Johnson, Owen Mitchell and Julian Thomas. All were in agreement with the paper's recommendations.

References

Arnold, E.C. 1936. Birds of Eastbourne. Strange. Eastbourne.

- [†]Borrer, W. 1891. The Birds of Sussex. Porter. London.
- Clark, J.M. and Eyre, J.A. 1993. Birds of Hampshire. Hampshire Ornithological Society.
- †des Forges, G. and Harber, D.D. 1963. A *Guide to the Birds of Sussex*. Oliver & Boyd. Edinburgh.
- [†]Evans, L.G.R. 1994. Rare Birds in Britain 1800-1990. Amersham.
- Green G. 2004. The Birds of Dorset. Helm. London.
- ⁺Harber, D.D. 1955a. Ivory Gull in Sussex. British Birds 48:546.
- [†]Harber, D.D. 1955b. Ivory Gull in Sussex. Sussex Bird Report 7:15.
- [†]Harber, D.D. 1962. Classified Records for 1961. Sussex Bird Report 14:10.
- [†]James, P. 1996. Birds of Sussex. Sussex Ornithological Society.
- *Knox, A.E. 1849. Ornithological Rambles in Sussex (First Edition). London.
- [†]Naylor, K.A. 1996. A reference manual of rare birds in Great Britain and Ireland. Nottingham.
- *Nicholson, E.M. and Ferguson-Lees, I.J. 1962. The Hastings Rarities. *British Birds* 55:299-384.
- Olsen, K.M. and Larsson, H. 2004. *Gulls of Europe, Asia and North America*. Christopher Helm, London.
- Piotrowski, S. 2003. The Birds of Suffolk. Christopher Helm, London.
- Quinn, A. and Clement, P. 1972. Beachy Head Bird Report 1960-1970. Eastbourne.
- [†]Rogers, M.J. and the Rarities Committee. 1997. Report on rare birds in Great Britain in 1996. *British Birds* 90:453-522.
- [†]Shrubb, M. 1979. The Birds of Sussex, their present status. Phillmore, Chichester.
- [†]Swaine, C.M. and the Rarities Committee. 1962. Report on rare birds in Great Britain in 1961. *British Birds* 55:562-584.
- Taylor, D.W., Davenport, D.L. and Flegg, J.J.M. 1984. *Birds of Kent*. Kent Ornithological Society.
- Taylor, M., Seago, M., Allard, P. and Dorling, D. 1999. *The Birds of Norfolk*. Pica. Robertsbridge.
- Wallace, D.I.M., Bradshaw, C. and Rogers, M.J. A review of the 1950-57 British rarities. British Birds 99:460-464.
- [†]Walpole-Bond, J. 1938. *A History of Sussex Birds*. Witherby. London.

†Williams, R.P. 1931. Ivory Gull in Sussex. British Birds 24:299.

† relevant details are reproduced in Appendix A.

APPENDIX A.

SUSSEX IVORY GULLS IN PRINT: AN ANNOTATED BIBLIOGRAPHY

The following publications are listed chronologically and relate to the numbered source references cited in the Analysis of the records. Some comments are in italics. Minor amendments have been made to the extracts reproduced below for consistency (e.g. date formats) and to reflect current usage (e.g. place names and age terminology).

1. Ellman, J.B. Zoologist 23 September 1848. p 2304.

"Occurrence of the Ivory Gull at Hastings. I saw a specimen of this rare bird at Hastings, a few weeks ago, in the possession of a bird stuffer, who informed me that it was shot near that place not long since"

2. Knox, A.E. 1849. *Ornithological Rambles in Sussex* (First Edition). London. p 246.

"Ivory Gull. Has been occasionally obtained in Sussex. Twice near Brighton. There is a specimen, which I have seen, in the possession of Mr Johnson, a chemist at St. Leonards-on-Sea, which was found on the beach in a dying state; and during the winter of 1848 an example occurred near Rye."

3. Wilson. Zoologist. 1859. p 6606.

Reference not seen, but Borrer (source reference 4) suggests it is no more than "Mr Wilson in a list of birds shot near Worthing includes 'Ivory Gull, 1845' without further notice". It would be interesting to know what other species were included in the list.

4. Borrer, W. 1891. The Birds of Sussex. Porter. London. p 274-275.

"Ivory Gull. Mr Knox (O.R.[†]) states that it has been obtained twice near Brighton, and that he had seen a specimen at Mr Johnson's, chemist, St. Leonards-on-Sea, which was found on the beach in a dying state; and mentions that during the winter of 1848 an example occurred near Rye.

Mr Wilson (in Zoologist, source reference 3) in a list of birds shot near Worthing includes 'Ivory Gull, 1845' without further notice, and Mr Ellman, writing in the same journal on 23 September 1848, says that he saw at a bird-stuffer's at Hastings a few weeks before an Ivory Gull which he told him was shot in that neighbourhood a short time previously (p 2304)."

†O.R. relates to Knox's Ornithological Rambles, source reference 2, but the Second Edition, p 253, 254.

5. Williams, R.P. 1931. Ivory Gull in Sussex. British Birds 24:299.

"Among a crowd of Herring Gulls *L. argentatus* and Black-headed Gulls at the mouth of the Rother, near Rye, on 6 January 1931, I identified a single Ivory Gull. The bird, an adult, was especially conspicuous among its companions by reason of its pure white mantle. Its very dark legs and greenish-black bill were also noticed."

6. Walpole-Bond, J. 1938. *A History of Sussex Birds*. Witherby. London. Vol III, p 294-295.

"Were it not a considerably smaller bird and, in addition, the possessor of darkcoloured legs and bill, the adult 'Ivory', being white all over, could conceivably, when at large, be confounded with 'Glaucous' and 'Iceland' in certain stages of apparel. The juvenile, however, size apart, may instantly be recognised by the dark grey (face and chin) and black spotting (upper-parts) on its snowy habiliment – a garb without parallel in any other species of gull.

Eburnea is essentially an Arctic breeding-species, though for the winter it goes south. None-the-less its known appearances in this country, always assignable to coast-areas, nearly always between autumn and early spring, inclusive (though principally in winter), and chiefly traceable to northern latitudes, number well under a hundred. Of these we can claim the sensible proportion of about a dozen, though a good many of the records suffer from incompleteness of detail. Evidently bird-chroniclers of the past did not always count carefulness amongst their virtues. Thus of the six Ivory Gulls secured in Sussex prior to 1849, three¹, a couple from near Brighton and the third from St. Leonards-on-Sea are not dated at all, whilst to the rest, specimens from Worthing way², Rye¹ and Hastings³, are accorded loose

dates, viz., 1845; winter 1848; and (it seems) August 1848, respectively. Is the last bird by any chance the one from St. Leonards-on-Sea? St. Leonards-on-Sea, remember, adjoins Hastings.

Putting aside the possibility of the wholly white gull shot near Lewes during the week preceding 16 January 1875, having been an adult Ivory, in any case it could not have been a Little Gull, as recorded⁴, unless, indeed it was an albino, and a bird shot at Beachy Head by Mr F. Wise⁵ during February or March 1882 nothing more is heard of this species in Sussex until 1910. That year, on 7 February, a juvenile female was killed at Ecclesbourne, near Hastings, and four days later a juvenile male at the same place. The first victim was examined in the flesh by Mr W.R. Butterfield and the second by Mr L.A.C. Edwards. Both birds are now in the Booth Museum, Brighton, from the Nichols collection. Much about the same time I heard of another specimen having been obtained, also near Hastings, but this requires verification before it can be allowed to stand as a good record.

On 15 January 1914 a female 'Ivory', showing signs of immaturity, was shot at West St. Leonards-on-Sea, subsequently being presented to the Hastings Museum by Mr W.H. Mullens, whilst on 6 January 1931 an adult was identified by Mr R.P. (really G.) Williams⁶ at the mouth of the Rother at Rye."

¹ Knox (source reference 2); ² Wilson (source reference 3); ³ Ellman (source reference 1); ⁴ *Field* 16 January 1875; ⁵ *in litt.*; ⁶ *British Birds* (source reference 5).

Walpole-Bond tended to include many records which were perhaps rather fanciful (including his own Great Black-headed Gull L. ichthyaetus and White-winged Larks Melanocorypha leucoptera). The Lewes record would seem a good example of this even if the others are not!

7A. Harber, D.D. 1955a. Ivory Gull in Sussex. British Birds 48:546.

"On 19 November 1954, I saw an adult Ivory Gull in the lower Cuckmere Valley, Sussex. The bird was first noted on mud by the river with other gulls. On being put up it joined a flock of gulls in a field by the old channel of the river. Eventually it flew off alone up the valley and was not seen again. Compared with Black-headed Gull and Common Gull it was about the size of the latter. On the ground it had a rather peculiar puffed out appearance. The whole plumage was pure white. The legs were short and black and the bill also seemed rather short. The colour of the latter was not fully made out, as when I had my nearest view (across the width of the river) the bird had its back towards me. I was, however, able to see some yellow on it. The eye appeared blackish. There had been several days of variable wind with fog at night, and many gulls were present."

7B. Harber, D.D. 1955b. Ivory Gull in Sussex. Sussex Bird Report 7:15.

"Compared with Black-headed Gull and Common Gull it was about the size of the latter. On the ground it had a rather peculiar puffed-out appearance. Whole plumage pure white. Legs short and black. Bill also seemed rather short. Its colour was not fully made but there was some yellow on it. The eye appeared blackish. Eventually it left the other gulls and flew off alone up the valley and was not seen again. There had been several days of variable wind with fog at night and many gulls were present."

8. Nicholson, E.M. and Ferguson-Lees, I.J. 1962. The Hastings Rarities. *British Birds* 55:299-384.

A list of 'Hastings Rarities' records no longer considered acceptable on p 358-359 included:

 223 Ivory Gull
 7 February 1910
 Ecclesbourne
 Juvenile female
 (BB 5:49)*

 224 Ivory Gull
 11 February 1910
 Ecclesbourne
 Juvenile male
 (BB 5:49)*

 225 Ivory Gull
 15 January 1914
 St Leonards-on-Sea
 Juvenile female
 (HESN 2:174)*

* BB = British Birds; HESN = Hastings and East Sussex Naturalist

9A. Harber, D.D. 1962. Classified Records for 1961. Sussex Bird Report 14:10.

"An adult was watched for circa half hour at Portobello, Brighton on 19 November."

9B. Swaine, C.M. *et al.* 1962. Report on rare birds in Great Britain in 1961. *British Birds* 55:562-584.

"Sussex: Portobello, Brighton, 19 November."

The full account of this bird was not published but the following was submitted to British Birds: "An adult Ivory Gull was present at Portobello, Brighton, Sussex on 19 November 1961.

I had arrived at Portobello at 12:30 GMT, to see what gulls were present feeding off the sewerage outfall. The tide was falling and besides the circa 1,000 gulls off the pipe or on the sea, another circa 1,500 were resting on the foreshore. Seven species were present including a single Mediterranean Gull and an Ivory Gull.

The Ivory Gull was resting on the foreshore with Black-headed Gulls and was larger than these, about Common Gull size. It appeared rather fluffed out and squat in appearance. The pure white plumage attracting immediate attention. After a time it flew and settled near Common Gulls, appearing the same size with slightly shorter wings and a slightly smaller bill. It was then watched on and off for the next half hour at ranges down to circa 40 yds at rest and in flight. The flight was noticeably buoyant, the wings appearing long and pointed. The following details were noted :-

Plumage pure white all over, but primaries showed slight off white in parts, distribution could not be made out. Bill greenish yellow shading to an orange-yellow tip. Legs and feet black. Eye prominent and dark appearing black.

At one stage the gull pitched on the water amongst some small rocks, just exposed by the receding tide, which were attracting many other gulls. On the water it looked rather squat and was notably aggressive towards the other gulls nearby, once threatening a Herring Gull which tried to pitch right by it. After a few moments it flew out to the end of the pipe and was lost amongst the great mass of gulls, the sun making observation difficult."

10. des Forges, G. and Harber, D.D. 1963. A *Guide to the Birds of Sussex*. Oliver and Boyd. Edinburgh. p 92

"Vagrant, chiefly in winter. There are about eleven records, all for the coast or its vicinity. None have been recorded west of Worthing. There is one for August (1848) and two for November, and the rest, so far as they are precisely dated, are for January and February. The only acceptable records in recent years are both for 19 November (1954, lower Cuckmere Valley and 1961, Portobello, Brighton)."

des Forges and Harber would seem to include all records apart from that near Lewes (not in the vicinity of the coast) and the Hastings Rarities, although they total ten rather than eleven.

11. Shrubb, M. 1979. The Birds of Sussex, their present status. Phillmore, Chichester. p182.

"There are about 11 records; all, except for one in August 1848, for the period November to February. Only three of the records are for the last 50 years: 6 January 1931 at Rye, 19 November 1954 in the lower Cuckmere Valley, and 19 November 1961, at Portobello, Brighton."

Shrubb adds nothing to des Forges and Harber, other than the assumption that all undated birds were during November to February.

12. Evans, L.G.R. 1994. Rare Birds in Britain 1800-1990. Amersham. p 241-244.

The only Sussex record considered acceptable by Evans (before BBRC overturned it) was, on p 244, "an adult reported at Portobello outfall, Brighton (East Sussex) on 19 November 1961."

13. James, P. 1996. Birds of Sussex. Sussex Ornithological Society. pp331-332.

"des Forges and Harber give about ten records up to 1962, although two or three have not been traced. Seven or eight records have been found, five or six relating to specimens reported to have been obtained during the 1800s. Two were at Brighton and one at St. Leonards-on-Sea prior to 1849, one at Worthing circa 1845, one at Rye in winter 1848 and one at Hastings in August 1848 (a very unusual date), although this may have been the individual obtained at St. Leonards-on-Sea (Walpole-Bond 1938). Single adults were also reported from the mouth of the River Rother at Rye Harbour on 6 January 1931 (Williams 1931) and in the lower Cuckmere Valley on 19 November 1954 (Harber 1955a, b), the latter departing north up the Cuckmere Valley. Published accounts of both these adults are unconvincing and as none of the earlier specimens survive or appear to have been aged, they too must be regarded as somewhat suspect. None of the above records are recognised as valid by Evans (1994). A record of an adult at Portobello, Brighton on 19 November 1961 has recently been reviewed and is considered to be inadequately documented (M. J. Rogers *in litt.*).

Although this species has undoubtedly become rarer in recent times, the occurrence of adults as far south as southern England is very considerably less likely than juveniles. While juveniles can be readily identified, there is a very real danger that albinos of other gull species, or even Iceland or Mediterranean Gulls, have been mistaken for adult Ivory Gulls in the past. The species continued place on the county list is at best decidedly tenuous."

The Beachy Head bird was excluded from Birds of Sussex (1996) as it had not been included by Arnold (1936) or Quinn and Clement (1972).

14. Naylor, K.A. 1996. A reference manual of rare birds in Great Britain and Ireland. Nottingham. p 96-97.

The list of British Ivory Gull records up to 1958 included the following Sussex records;

1845	Sussex, West	Worthing, no date
1848	Sussex, East	Hastings, August; Rye, winter
1875	Sussex, East	Near Lewes, 16 January
1882	Sussex, East	Beachy Head, February or March
[1910	Sussex, East	Ecclesbourne, juvenile female, 7 February;
		juvenile male, 11 February]
[1914	Sussex, East	St. Leonards-on-Sea, juvenile male, 15 January]
1931	Sussex, East	River Rother at Rye. Adult, 6 January
1954	Sussex, East	Cuckmere Valley, adult, 19 November

The Brighton and first St. Leonards-on-Sea records were not included, possibly due to uncertainties about their years of occurrence. The Hastings Rarities records are included in square brackets.

15. Rogers, M.J. *et al* 1997. Report on rare birds in Great Britain in 1996. *British Birds* 90:453-522.

"Ivory Gull 1961 Sussex, East: Portobello, Brighton, 19 November (*British Birds* 55:574), now considered inadequately documented."

16. Wallace, D.I.M., Bradshaw, C. and Rogers, M.J. 2006. A review of the 1950-57 British rarities. *British Birds* 99:460-464.

"Appendix 2. Other species with records assessed during the 1950-57 review and now considered unacceptable. Ivory Gull. Cuckmere Valley, East Sussex, adult, 19 November 1954."

APPENDIX B.

IVORY GULL RECORDS FROM SOUTHEAST COUNTIES

The following are currently recognised records of Ivory Gull in southeast England taken from Evans (1994), Naylor (1996), county avifaunas (where stated) and BBRC Reports. The four most recent records (emboldened) are perhaps not coincidentally the only ones to be aged as juveniles.

NORFOLK (see Taylor, Seago, Allard and Dorling 1999)

1978 Brancaster, juvenile, 5 to 9 January.

SUFFOLK (see Piotrowski 2003)

1999 Southwold, juvenile, 5 to 31 December.

ESSEX none

KENT (see Taylor, Davenport and Flegg 1984)

1947 Walland Marsh, adult, 27 April (*British Birds* 41:159). Not at all convincing as it was not on the coast and had some orange or red on its bill.

1951 Pegwell Bay, juvenile, 21 January, same, Sandwich Bay, 17 February.

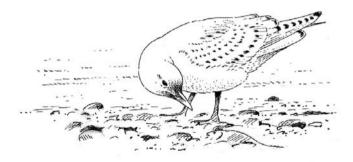
HAMPSHIRE (see Clark and Eyre 1993) none

DORSET (see Green 2004)

1843 shot off Weymouth.

- 1850 shot at Lodmoor in winter.
- 1857 shot from amongst a flock of Herring Gulls in Portland Roads. *Being amongst a flock of Herring Gulls makes this an unlikely occurrence.*
- 1860 killed in Weymouth Bay in November.
- 1884 caught in a trap on the fleet at Abbotsbury.
- 1931 Weymouth, adult, 6 June. *An unusual date, while adults are more confusable and unlikely.*
- 1980 Portland, juvenile, 22 January to 10 February.

This paper is dedicated to the memory of Kevin M. Johnson



Diseases of Garden Birds.

Robin Pepper

Scobells Farm, Barcombe, Lewes, East Sussex, BN8 5DY

Introduction.

The large quantities of feed provided for garden birds must improve winter survival as well as breeding success for a number of the species which make use of the artificial habitat surrounding our houses. Readily available feed inevitably attracts large numbers of birds and leads to high concentrations in a relatively small area. Although the benefits must be considerable there is also a downside; feeding stations provide ideal conditions for the transmission of parasites, be they protozoa or helminths, and bacterial, viral or fungal infections.

A literature search reveals that diseases of garden birds are both widespread and varied. However, the available information is limited due to a paucity of research which, by necessity comes from *post mortem* studies. It is a field that has not attracted a great deal of funding, especially in the UK and the material available is restricted for a number of reasons. Wild birds affected by disease do not exhibit specific signs that would aid diagnosis, therefore research has to be conducted mainly on cadavers. Sick birds are not easy to obtain, many of them being easy prey for predators, and not many of those found are submitted for laboratory examination. Although reported mortality rates are high in some instances, the effect on population numbers does not appear to be significant, except perhaps very locally, but infected birds may act as vectors of disease to other species, including man.

When any animal is exposed to disease agents there are several possible outcomes:

- the infection may be completely eliminated.
- the infection may become established but few or slight signs of disease develop and the animal becomes a symptomless carrier.
- the infection may become established, the animal develops a disease from which it may recover or it may develop chronic illness or it may die either from the disease or by becoming more susceptible to predation.

The extent to which disease manifests itself will depend on the following circumstances:

- the virulence of the infective agent.
- the dose of the infective agent.
- the resistance of the host.

The resistance of the host depends, in turn, on many further circumstances including:

- its age.
- its physical condition, in particular its state of nutrition.
- stress.
- its history of previous exposure to the same infection.
- concurrent infections.
- the susceptibility of the species to that infection.

Signs of disease in affected birds include lethargy, a hunched-up appearance and fluffed-up feathers. They often spend a lot of time on the ground near feeders.

A survey by members of the Wisconsin Society for Ornithology (Brittingham and Temple, 1988) revealed that four factors were associated with disease outbreaks at garden feeders; the species using the feeders, the number of birds using the feeders, the habitat around the feeders and the type of feeder. The causes of death were not investigated but cases thought to be due to predation or trauma were eliminated from the analysis. The prevalence was not high: 16% of 624 feeder-sites had experienced at least one case of mortality but 12% of these had experienced recurring problems. Deaths were more frequent at rural feeding sites but this may have been due to the increased number of species and the higher number of individuals at these sites, both of which had a positive correlation with the number of deaths. The species affected in this American survey were mostly different to those encountered in the UK although the House Sparrow Passer *domesticus* topped the list. Those most commonly affected fed or roosted in large flocks. There was a significant difference detected according to the type of feeders used. Platform feeders came out worst with 61 mortalities per 1000 feeder-years, followed by porthole feeders (58 mortalities) with fat feeders and hoppers fairing best with 48 and 49 mortalities, respectively.

A number of infections have been isolated from garden birds, the most important being salmonella spp and *Escherichia coli*. Disease outbreaks have also been reported in other species, in particular waterfowl, but these will not be dealt with here.

Salmonellosis

Bacteria of the genus Salmonella have been recovered from wild birds since at least 1939. The species of Salmonella bacteria occur in over 1000 serotypes, identified by phage typing and indicated by letters (e.g. PT or DT) and numbers. This helps in tracing the origin of outbreaks especially when man or domestic animals are involved. Several species of garden birds have been implicated including Greenfinches *Chloris chloris*, House Sparrows, Feral Pigeons *Columba livia* and Woodpigeons *Columba palumbus*.

Four outbreaks were investigated by the Ministry of Agriculture, Fisheries and Food Veterinary Laboratory at Lasswade (Wilson & Macdonald, 1967). An epidemic in Greenfinches at Fife lasted for six weeks and, at its peak, 20 to 30 birds out of a flock of 1000 died daily for ten days. A feature of this outbreak was blindness in affected birds caused by suppuration in the orbit from which S. typhimurium was isolated. House Sparrows, Chaffinches Fringilla coelebs and Bramblings Fringilla montifringilla, which were feeding alongside the Greenfinches, were not visibly affected. The birds were attracted to the area by large quantities of hemp and other seeds put out for them. An outbreak in Derbyshire was also confined to Greenfinches. At least 25 birds from which S. typhimurium was isolated were picked up from 12 large old established gardens surrounded by high trees. After four months the birds dispersed for breeding and no more cases were found. Blindness was again a feature with lethargy and intense thirst. On a farm in Buckinghamshire an epidemic lasted for a month and was again confined to a single species. Two or three House Sparrows were found dead each day until very few were left on the farm. Deaths were reported from six other neighbouring farms. S. typhimurium was isolated from House Sparrows on the only farms investigated but no information was available from four of them. In a fourth outbreak in a rural garden in Surrey five Greenfinches had been found dead over a five week period but it was thought that many more had been removed by predators, probably badgers and foxes. In this instance, generous quantities of sunflower seeds and peanuts were offered and had attracted a flock of 200 Greenfinches. *S. typhimurium* was isolated from a perforated ulcer of the mucosa of the oesophagus and from other internal organs.

In 1995 disease incidents in populations fed at bird tables or feeders from Derbyshire, Kent, London, Shropshire and Yorkshire were investigated by the Institute of Zoology, London (Kirkwood *et al*, 1995). The number of birds found dead varied from three to 30 per incident and *S. typhimurium* was isolated from Greenfinches and House Sparrows. Deaths of Siskins *Carduelis spinus*, Tree Sparrows *Passer montanus* and Blue Tits *Parus caeruleus* were also reported. In some cases the numbers of the species affected were reported to have markedly declined during the time when deaths were occurring.

Causes of death in finches were investigated in Scotland by Pennycott *et al*, (1998). In the Grampian region in 1997 they received reports of ill and dead finches from nine sites. In all, 56 carcases were received (49 of them from three of the sites) the great majority of which were Greenfinches. Fifty two were received between January and April, the remainder in May, June and July. Gross *post mortem* lesions consistent with salmonellosis were found in 48 Greenfinches and, where cultures were made, *S. typhimurium* PT 40 was isolated.

Outbreaks of salmonellosis have been reported from Canada and New Zealand. During the winter-summer of 1997-98 salmonellosis was confirmed in a total of 73 songbirds of which 49 were Common Redpolls *Carduelis flammea* and 12 were Siskins (Daoust *et al*, 2000). The majority of these were identified as *S. typhimurium* PT 40. Forty-eight reports of unconfirmed but suspected cases of salmonellosis, amounting to 263 birds, were received during this period. During the winter of 2000, large numbers of House Sparrow deaths were recorded in both the North and South Islands of New Zealand (Alley *et al*, 2002). Mass mortalities of up to 400 birds were reported from rural locations, particularly around grain silos, with smaller numbers in rural localities. *S. typhimurium* DT160 was isolated from all cases examined. During this outbreak, the same strain was isolated from humans.

An outbreak of salmonellosis occurred in cats and humans in Sweden in 1999 (Tauni & Osterlund 2000). Of 62 affected cats, 25 were sampled bacteriologically, 20 of which were positive for *S. typhimurium*. Eight of the isolates were of phage type 40 (PT40) and 12 of phage type NST. The authors hypothesized that the cats had acquired the infection from infected birds (there was an influx of Common Redpolls and Siskins that year) and then passed it on to their owners. The isolates from the human cases were of the same phage types as were found in the cats. No wild birds were examined but these were the phage types found in wild birds in Sweden.

There have been only four incidents reported in Sussex in recent years. In January 2003, *S. typhimurium* PT 40 was isolated from three Greenfinches from Ardingly and *S. typhimurium* PT 56 was isolated from a Greenfinch from Hartfield in December 2004. In February 2005, two Greenfinches were found in a garden at Barcombe and there was another incident in the county for which details are not known. *S. typhimurium* was isolated from both incidents but the phage types were not determined.

Colibacillosis.

E. coli O86 has been isolated from dead birds on a number of occasions. This organism was implicated in outbreaks in the Highland Region of Scotland in 1994 (27 birds) and in 1995 (14 birds) and in the Strathclyde Region in 1995/96 winter in four birds

(Pennycott et al, 1998). In the former case the birds were mainly Siskins and Greenfinches and in the latter, two Greenfinches and two Chaffinches. This organism is associated with outbreaks of diarrhoea in man, being particularly severe in infants.

Chlamydiosis.

The disease is caused by Chlamydia psittaci, which can also cause severe disease in man (psittacosis or ornithosis). Pigeons are highly susceptible to this disease and outbreaks occur in pigeon lofts. Cadavers of nine Collared Doves Streptopelia decaocto found adjacent to the Central Veterinary Laboratory at Weybridge in Surrey were all infected with this organism (Gough & Bevan 1983). Apparently healthy Collared Doves, Feral Pigeons and Woodpigeons were collected and examined. Of 17 serum samples from Collared Doves, twelve had chlamydial antibodies and 17 Feral Pigeons all tested positive. Chlamydial organisms were isolated from pooled cloacal swab samples from the Collared Doves and Wood Pigeons but not from the Feral Pigeons. Cases of chlamydiosis have also been reported from one Collared Dove found dead in Kent and from two in Sussex (de Gruchy 1983). An outbreak of disease in garden birds in Cornwall was thought to have been due to the same organism (Simpson & Bevan 1989). Over a period of a week bodies of four Robins Erithacus rubecula, eight Dunnocks Prunella modularis, a Great Tit Parus major and a Coal Tit Parus ater were found. At the same time, the 17 resident Collared Doves were reduced to five, although no bodies were found. When a further two Robins died, they were submitted for laboratory tests and chlamydiosis was diagnosed. It was considered likely that all the deaths were due to this organism and that the Collared Doves provided a focus that infected the other birds.

Other infections.

Several other infections have been diagnosed in garden birds but they are mostly of a sporadic nature. Pasteurellosis, caused by Pasteurella multocida, has been isolated from a number of cases from animal rescue centres (Macdonald et al. 1981). In most cases death has been fairly rapid and associated with dog or cat bites. Both these species are known to be carriers of this organism in their nasopharynx without showing signs of ill health. The infection is transmissible to man. Trichomoniasis, caused by a single cell, motile parasite Trichomonas gallinae, causes canker in pigeons. Garden birds can be affected but Collared Doves are particularly susceptible. Affected birds develop necrotic plaques in the mouth and pharynx, which lead to difficulties in feeding. The disease can be fatal but mild Affected birds are more susceptible to other diseases, particularly cases recover. Yersiniosis is an enteritis of garden birds caused by Yersinia chlamydiosis. pseudotuberculosis and Y. enterocolotica. Deaths in garden birds are usually localized. Aspergillosis is caused by a widespread fungus Aspergillus fumigatus, which usually attacks birds that are already in poor condition from other causes. Aspergillus spores are found in high concentrations around mouldy foods. The yellow mycelia of Aspergillus *flavus*, which produces the mycotoxin Aflotoxin, a hepatotoxin and carcinogen, may be seen in mouldy peanuts. An outbreak of human enteritis due to Campylobacter jejuni in South Wales was thought to be due to contamination of milk bottles attacked by Magpies Pica pica and Jackdaws Corvus monedula (Southern et al, 1990). However, the evidence was purely circumstantial and no birds were examined.

Infection with helminths (worms) and coccidia (protozoa) are commonly found at *post* mortem examinations but are rarely associated with overt disease. For example, an outbreak of encephalitis in Starlings Sturnus vulgaris was investigated in Scotland

(Pennycott *et al*, 2002a). The cause of the disease was not determined but small to moderate infestations of unidentified cestodes (tapeworms), roundworms (*Porrocaecum ensicaudatum*), gapeworms (*Syngamus trachea*) and coccidia (*Isospora*) were found in some of the birds but were not considered to be significant.

Disease Prevention.

Although many of the infections are susceptible to antibiotics, treatment is not an option for several reasons. Even if the sick birds could be identified and caught, the stress involved would probably hasten their death. Methods to minimise the risk in the first place are the better alternatives.

The first thing to remember is that many of the diseases of garden birds are zoonoses (transmissible to man) and that personal hygiene is important. Feeders should not be cleaned anywhere near areas where human food is prepared, separate cleaning brushes and cloths should be used and rubber gloves used or hands washed thoroughly every time a feeder is touched. However, it is important not to overstate the case. It is safe to feed garden birds if these elementary precautions are taken. Infection is only likely if the infective dose is very high or if the person's immunity is compromised. It would be unwise to let very young children, who might put things in their mouths, play in the area where birds are being fed.

Wherever possible, feeders should be moved regularly to prevent gross contamination of the ground or, if the surface is suitable, it should be brushed clean regularly. If this is not possible, feeding should be stopped for a period of a few months during the summer to allow natural recovery. Where space is limited, the amount fed should be restricted to prevent overcrowding and excessive contamination. Feeders should be cleaned regularly. To do this effectively they need to be taken to pieces to remove all traces of stale feed, washed in detergent and then rinsed in clean water. Flat feeders should be cleaned daily and, if feed is spread on the ground, it should not be put in the same place every day. Feeders can be disinfected with a 5% sodium hypochlorite solution (household bleach) but cleanliness is important: disinfectants do not work well in the presence of organic matter and they must be given time to act; they do not work instantaneously. Hypochlorite solution can be allowed to dry in air but other disinfectants will need to be rinsed away thoroughly to prevent tainting.

If the worst should happen and dead birds are found they should be sent to a laboratory for examination. Your local veterinary surgeon may help or contact Wildlife Epidemiology, Institute of Zoology, Regent's Park, London (tel: 0207 449 6685). Do not send any specimens before contacting them. Do not handle carcases directly. Invert a plastic bag over your hand, pick up the bird and pull the bag over it. Ideally the carcase should be refrigerated, not frozen, but do not use a domestic refrigerator that is used for food. It can be stored for a few days on a bed of ice cubes, which will need renewing about twice daily.

Discussion.

The benefits of providing food for garden birds are difficult to quantify. Likewise the impact of disease on population numbers is unknown but is unlikely to be significant as the main incidence is in the winter months when losses from other causes, such as starvation, are likely to be highest. Sick birds are easy prey for predators so will be taken in

preference, thus saving the fitter ones. Nevertheless, steps should be taken to minimise the risks.

The epidemiology of diseases of garden birds has not been thoroughly investigated. Enteric diseases, such as salmonellosis and colibacillosis, are spread via contamination of feed by faeces and saliva from infected birds. It is known from studies of domestic species that recovered animals may become carriers and that excretion of the infective agents is intermittent but that the rate of excretion is increased during periods of stress. Pennycott et al (2002b) investigated two garden feeding stations in some detail. Site A was a garden of one acre with several different feeding stations where an estimated 1 to 2 kg of a seed mixture were put onto bird tables daily, 2 to 3 kg of peanuts were put into hanging feeders each week and 2 to 3 kg of feed was put into fat ball feeders. Household scraps were also provided. Large numbers of birds were attracted, including up to 84 House Sparrows, 60 Chaffinches and 27 Blackbirds Turdus merula plus smaller numbers of tits and other species. More than 75 Jackdaws visited the garden but seldom used the feeding stations. At this site there was a history of sporadic losses from S. typhimurium. Site B was a small garden with a single feeder which was provisioned with about 300 g of peanuts daily. The site was visited by House Sparrows (up to 15), Chaffinches (up to 5) and the same number of Blue Tits. Other species were seen occasionally. Here there was no history of disease. Faecal samples were collected from both sites and examined for salmonella. At site A, 72 out of 163 samples (44%) were positive whilst at site B only one sample out of 77 was positive.

Most deaths occur during the winter months – in Scotland 95% from salmonellosis were between January and April and 94% from colibacillosis between March and May (Pennycott *et al* 2002b). Ninety-two percent of the deaths from salmonellosis were of Greenfinches, 4% were House Sparrows and 2% Chaffinches. During the winter months, Greenfinches feed mainly from feeders, with a predilection for sunflower seed, and only rarely feed on the ground, whereas Chaffinches habitually feed on seed spilled onto the ground by other species and only occasionally visit the feeders (*personal observation*). As most faecal contamination is likely to be on the ground it is reasonable to conclude that Greenfinches are more susceptible to salmonella infections and that Chaffinches have an inbuilt immunity, but they may be carriers of the disease. Infection of Greenfinches may be transmitted via contamination of the feed by saliva but there is no history of the disease in the other species, e.g. tits *Paridae*, which regularly use the feeders.

It is unlikely that a great deal of time and money will be directed towards further research into diseases of garden birds. Only general principles can be used to devise control methods, which should include good hygiene and, possibly, restrictions on the amount of feed offered in an attempt to limit numbers of birds visiting a small site.

Acknowlegements

My thanks to David Welchman of the Veterinary Laboratories Agency and to Becki Lawson of the Institute of Zoology for providing details of outbreaks in Sussex. Carole Showell, BTO librarian, helped with the literature search.

References

Alley, M.R., Connolly, J.H., Fenwick, S.G., Mackereth, G.F., Leyland, M.J., Rogers, L.E., Haycock, M., Nicol, C. & Reed, C.E.M. (2002) *New Zealand Veterinary Journal*, **50(5)**, 170-176.

Brittingham, M.C. & Temple, S.A. (1988) The Passenger Pigeon, 50, 195-203.

Daoust, P., Busby, D.G., Ferns, L., Goltz, J., McBurney, S., Poppe, C. & Whitney, H. (2000). *Canadian Veterinary Journal*, **41**, 54-59.

de Gruchy, P.H. (1983) Veterinary Record, 113, 327.

Gough, R.E. & Bevan, B.J., (1983) Veterinary Record, 112, 552.

Kirkwood, J.K., Holmes, J.P. & Macgregor, S. (1995) The Veterinary Record, 136(8), 372.

Macdonald, J.W., Owen, D., Spencer, K.G. & Curtis, P.E., (1981) Veterinary Record, 109, 58.

Pennycott, T.W., Ross, H.M., McLaren, I.M., Park, A., Hopkins, G.F. & Foster, G. (1998) *The Veterinary Record*, **143**, 155-158.

Pennycott, T.W., Gough, R.E., Wood, A.M. & Reid, H.W., (2002)a. Veterinary Record, 151, 213-214.

Pennycott, T.W., Cinderey, R.N., Park, A., Mather, H.A. & Foster, G. (2002)b. Veterinary Record, 151, 563-567.

Simpson, V.R. & Bevan, R., (1989) Veterinary Record, 125, 537.

Southern, J.P., Smith, R.M.M. & Palmer, S.R., (1990) The Lancet, 336, 1425-1427.

Tauni, M.A. & Osterlund, A. (2000). Journal of Small Animal Practice. 41, 339-341.

Wilson, J.E. & Macdonald, J.W. (1967). British Veterinary Journal, 123, 212-218.



The 2004/05 Waxwing Irruption

Adrian Thomas 40 Woodlands Close, Peacehaven, East Sussex, BN10 7SF

Introduction

The Bohemian Waxwing *Bombycilla garrulus* breeds sparsely in generally low-lying spruce and pine forests of northern Fenno-Scandinavia and Siberia as well as in subarctic and boreal North America. Of the Western Palaearctic populations, many are thought not to move far in winter months, or make only partial migrations. However, in many years, there are eruptive movements prompted by complex dynamics in population size and food supply, and not just by a simple failure of the Rowan *Sorbus aucuparia* berry crop as is sometimes assumed. These eruptions involve varying numbers of birds, usually moving west and south, seeking Rowan and other berries.

Relatively small numbers make it annually across the North Sea to Britain, effectively the western 'spearhead' of the larger-scale movements in Fenno-Scandinavia. Very occasionally, this irruption equates to several thousand birds reaching our shores. The timing of these during the calendar year is not consistent, sometimes starting early in the winter while in other years not becoming evident until later in the season. Nor are the locations that the Waxwings occur in the United Kingdom (UK) entirely predictable, although there is usually a strong bias to the eastern seaboard from Norfolk to Scotland, birds then often moving inland to reach areas like the eastern Midlands.

However, even in years when large irruptions may occur in Britain, there is no surety that they will reach Sussex. Of the 47 winters prior to 2004/05, there were just 27 when Waxwings were observed in the county. Of these, there were only four winters where the numbers exceeded ten individuals, with 18 in 1957/58, 200 in 1965/66, 30-50 in 1970/71, and the unprecedented 1200 in 1995/96, showing how irregular and extreme the irruptions are.

An exceptional irruption of Waxwings in Britain in the winter of 2004/05 brought record numbers to Sussex in what was only the fourth major irruption into the county in 48 years. The first bird reached Sussex at the end of November, but the first main pulse of birds arrived in the county between 16-20 Jan, with further pulses of birds arriving through possibly to April.

Despite being east of the main course taken by the irruption, the total numbers of birds that passed through Sussex was thought to be in the order of 1500, with a county record flock of 300 at Southwater on 2 Feb. Exact numbers were however impossible to gauge.

The 2004/05 irruption was quite different in geographical spread and timing from previous irruptions, and historical records do nothing to suggest that further irruptions are any more likely in the near future. In fact, the only thing that seems certain with Waxwing sightings in Sussex is that, when they do appear, most will turn up in suburban and urban environments.

Waxwings are one of the most unpredictable and yet charismatic and sought-after winter visitors to Sussex. This account examines the exceptional influx into the county in the winter of 2004/05, placing it in the national context, and, through comparison with previous invasions, looks to see if there are any patterns that can be drawn to inform future occurrence in the county.

The 2004/05 irruption

The irruption into the UK in 2004 began early, with a scattering of birds seen in Scotland from the 7th October onwards. By the 23rd, Wales had recorded its first sighting, two were in Cumbria on the 27th, but it was the build up late in the month in east Scotland that was astonishing, with 1170 at Forres (Moray) on the 31st.

During November, over 4000 were thought to be in Scotland, including 1800 in Aberdeen on the 21st. Some 2500 were also thought to be in northeast England, including 600 in Corbridge (Northumberland) but, although there were 137 in Norwich, it was clear that there was an unusual northwesterly bias to the records. There were record numbers in Cumbria, an unprecedented 152 on the Isle of Man showing that birds were pushing hard enough westwards to cross open sea, and a trickle of birds had reached Wales, the Welsh borders and right down to Somerset, whereas only a handful of birds were in Lincolnshire. The first bird in Sussex was a single at Lancing on the 30th.

During the first half of December, many of the Scottish birds are thought to have moved south, although 1100+ were still at Aberdeen mid-month. Now 4000 birds were estimated to be in northwest England, with several thousand more in the northeast moving south around Christmas time. The northwesterly bias of many of the early records was reflected further south, with 325 in Cardiff beating the previous Welsh record of 52, including one bird that had been ringed in Aberdeen in late October. However, while there were flocks of 160 in Norwich and Ipswich, the more south and easterly inland counties remained Waxwing-poor, with, for example, only four in London, two in Warwickshire and two in Buckinghamshire. Sussex fared a little better with ten at Falmer Pond on the 27th, six at Stretham Manor on the 11th, and singles at East Grinstead and Holtye Common.

Although good numbers of birds could still be found in Scotland during January, the highest numbers were now in the Midlands, where there were thought to be 14,000 individuals, including single flocks of 1200 in both Staffordshire and the West Midlands. The westerly predominance continued, and Welsh totals were now astonishing, with 650 in Cardiff and flocks in excess of 100 in at least 13 other locations. The western stream of birds had allowed flocks of 500 to form in Bristol on the 22nd and 460 in Dorset on the 24th, with an estimated 550 birds across Wiltshire by the month-end including 250 in Trowbridge. A colour-ringed bird from Aberdeen arrived in Exeter in a flock of 70. A flock of 300 in Berkshire also included Aberdeen-ringed birds, while a flock of 184 was in Hampshire and one of 180 in Surrey.

In Sussex, it is thus no surprise that records began to accelerate through January, and it is interesting that the first sizeable flock was in the west of the county at Midhurst, where there were up to 25 birds from 2 to 9 Jan with one lingering until the 14th. Also westerly was a single bird in Burpham from 9 to 12 Jan. The 9th also saw the first arrivals in Crawley (18) and in Horsham (1), with one seen at Shoreham on the 15th. However, a significant build up clearly happened from the 16th onwards. At Crawley, eight on the 16th rose to 67 by the 18th, 96 by the 19th, and 150 by the 20th. Similarly in Horsham, there were 70 by the 18th and 100 by the 20th. This influx also reached Crowborough where there were 27 on the 19th, with one at Piddinghoe the same day and six at Arundel on the 20th.

In the week subsequent to this influx through to the 27th, birds were seen regularly in Horsham and indeed further increased here reaching a peak of 150 on the 28th, although dropping to 100 on the 29th and only 30 by 1 Feb. Birds were seen in Crowborough until

the 24th, with the 29 at nearby Eridge on the 27th probably the same group, although this was to prove this area's last record. Records from Crawley, however, became decidedly scarce, with no records between the 25th and the 29th inclusive. While lack of observer coverage cannot be discounted, it is noteworthy that the counts on the 30th and the 31st were only 14 and 55 respectively. The big flocks, it seems, had moved on. It is interesting, then, that 40 in Southwater on 30 Jan should increase dramatically to 150 on the 31st. The arrival of a single bird in Brighton on the 28th and of seven in Littlehampton the same day, increasing to 22 nearby on 30th, would suggest birds moving south at the end of the month.

Numbers in the Midlands decreased during February to an estimated 9,500 birds, although the eastern Midlands such as Nottinghamshire and Leicestershire only now began to record flocks in the multi-hundreds. While Scotland was still recording 'very good numbers', and three figure flocks were still widespread in the northwest, there were said to be few birds in the northeast. Further evidence of ongoing southward movement included a county record for Devon of 95, Welsh birds were now 'mostly in the south', and flocks of 400 could still be found in Bristol, 200 in Wiltshire, over 300 in Southampton, and numbers in Kent were now respectable for the first time with 150 in Orpington, 135 in Dartford and 110 in Maidstone.

In Sussex, the Southwater flock numbered 137 on the 1st and then increased to an estimated 300 on the 2nd, a county record, with 150 still present the next day including two birds colour-ringed in Aberdeen. However, after all this drama, 21 on the 5th was to be Southwater's last record until late March. If these birds headed south, there were few records to prove it. One was at Kirdford to the west on the 4th, one flew over Lancing on the 5th, and a record with limited documentation was from Eastbourne on the 10th. In Midhurst, there was a second wave of records, with a maximum of 26 during the first week of the month. Intriguingly, in Crawley, after a few quiet days at the start of February, there was then a resurgence with ten on the 6th increasing to 100 on the 9th. By the 11th, 100-150 were recorded in the Broadfield area of the town, and numbers then grew steadily, reaching 220-250 by the 27th. In sharp comparison, after 30 birds in Horsham on the 1st, there was not to be another record in that town until March.

Numbers tailed off during March almost everywhere in the UK, with for example the highest count from Wales being only 38, although it is possible that 'Waxwing-fatigue' may have been generating fewer reports. However, there were still 500 estimated to be in Surrey, the Southampton flock still numbered 310. Birds were certainly not moving west, with just one seen in Cornwall. However, sightings in France rapidly accelerated with more than 8600 birds recorded between 26 Feb and 1 Mar, the most important influx in that country for 39 years, indicating a likely destination for many British birds.

In Sussex, numbers in Broadfield (Crawley) peaked at 240-250 on the 1st, but fell to 180 by 4 Mar and then to 45 on 8 Mar, before rising again to a peak of around 80 on the 17th. Smaller numbers were seen in many other areas of the town, but it is very difficult to gauge how much duplication there was between sites, although the mobility and unreliability of birds at some sites would suggest that at least some duplication was likely. Sightings began again in Horsham on the 6th, with 100 at Ropeland Way on 30 Mar by far the peak, although that, remarkably, was the last record for the town. However, it is interesting that a flock took to the more rural setting of Warnham LNR, with 20 on the 13th, 30 on the 18th and 20 the next day. The first record at Burgess Hill did not occur until 6 Mar when six were seen. Although this corresponded with the rapid decline of the Crawley flocks, numbers did not dramatically increase, with only up to 23 by the 9th, but

then increasing to 50 on the 22nd, and 90 on the 25th. There was a similar first record from Uckfield of 23 on the 8th, but that was to prove the only sighting there. A flock of 30 was in Cowdray Park, Midhurst, on the 12th. Two in Bognor on 18 Mar were quite isolated from the bulk of the records, while late in the month, there was an intriguing series of records from Ashdown Forest from the 23rd onwards. Birds were seen at Wrens Warren, Old Lodge and Wych Cross, with a peak of 40 on the 23rd, well away from the more typical urban environments recorded to that point.

Flocks lingered in many places around the UK into April, although numbers were now generally much lower everywhere. In Sussex, the regular flock based around the Broadfield area of Crawley still numbered 65 on 2 Apr and 49 on the 5th, but only ten were here on the 9th and the last record, of five, came on the 14th. The Burgess Hill flock peaked at 120 on the late date of 4 Apr; the last record there was of 12 on 25 Apr. Southwater once again became a regular site, with 12 on the 1st increasing to 60 on the 12th and then declining to 19 on the 16th, the last record there. It took until the 9th, however, for Cuckfield to get their first Waxwing record, an impressive 61, with ten still present on the 17th. Small numbers continued to be seen on Ashdown Forest until the 24th, and April also saw the only record for Worthing of five on the 6th, and there were also nine at Ringmer on the 5th and two in a Brighton garden on the 10th. The last bird was a very late individual in Crawley on 1 May.

Discussion

An obvious question is how many Waxwings were present in Sussex during the 2004/05 irruption? The numbers estimated in 1995/96 were 1200, when the largest flock seen was only 150, compared with the record 300 seen in Southwater in 2004/2005. It would seem logical that overall numbers this time were much higher. However, the true number of birds involved is very difficult to estimate. The extent of double-counting is impossible to determine. It is quite possible that, even within an apparently stable flock. the individuals involved were constantly changing as some birds moved on south to be replaced by newcomers arriving from the north. What does seem clear is that, along with a few isolated individuals and small flocks, the main movements were a first burst into Midhurst in early January, and then a major influx into central Sussex during 16-20 Jan, involving an absolute minimum of perhaps 330 birds. It seems plausible that there was then some local movement from Crawley down through Horsham into Southwater late in January, and this flock then moved on, to be followed by a fresh wave of arrivals between 6-11 Feb of at least 150 birds, with further recruitment through February involving 130 birds. There was probably another wave of incomers in late March, involving a minimum of perhaps 125 birds, but this assumes that large flocks gathering in Horsham and Burgess Hill were Crawley birds relocating.

These conservative figures would suggest an absolute minimum for the county of 735 birds in 2004/05, less than the 1995/96 figure of 1200. However, for 8600 birds to be recorded from France in March 2005 indicates the kind of numbers of Waxwings that were moving south through England and heading out over the south coast, although that in itself cannot determine whether they leapfrogged birds already settled in Sussex towns or effectively pushed through in waves. The instinctive feeling, however, is that a figure of 1500 to 2000 birds is probably nearer to the real figure, nevertheless making it a record year for the county, somewhat larger but not substantially so than the 1995/96 irruption.

One factor which perhaps suggests that the conservative end of the 1500-2000 estimate is nearer to the truth is how geographically restricted the 2004/05 influx was. Counting towns as one unit, the total number of sites where Waxwings were recorded was 23, and yet only in five of these did flocks exceed 50 and these were all in the very tight central belt of Crawley, Horsham, Southwater, Cuckfield and Burgess Hill. If there were new pulses of birds arriving sequentially in the county, they all took very much the same route and failed totally to reach places east of the main concentrations such as East Grinstead, Lewes, Hailsham or Battle, nor the entire coastal strip east of Brighton through to Hastings and Rye, bar one Eastbourne record. Similarly in West Sussex, there were no records from Billingshurst, Storrington, or Chichester. It is possible, however, that overflying birds heading for France may have been 'called down' by established flocks in the county, maintaining these apparent hotspots.

The geographical spread was in contrast to 1995/96 when the key town was East Grinstead, with the largest flock of 150 birds. The flock of 80 that year in Burgess Hill was the second largest, and the other large flocks were in Bexhill (53), Hastings (50), and Seaford (43). Of all these sites, only Burgess Hill featured at all in the 2004/05 irruption while the peak count in Crawley in 1995/96 was a mere 17.

The timing of the 2004/05 influx was rather different to the two previous largest recorded in the county, in 1965/66 and 1995/96. In 1965, the first birds were seen on 14 Oct, with 80 at Pett level by 21 Nov, and numbers peaking between 10 and 26 Dec, with up to 130 in the Groombridge area, before declining through January. In 1995/96, no birds had been seen prior to the end of 1995, only 21 birds had been seen in the county by the end of January, and numbers were still small in mid-February, although the number of sites they were being seen was increasing. The build-up only began in the second half of that month. Intriguingly, numbers in Burgess Hill were late to peak just as they did in 2004/05.

Little information was received regarding behaviour or food preferences in the 2004/05 irruption, although 30 in Horsham on 1 Feb were on crab apples *Malus*, and 20 on 13 April at Southwater were taking oak buds *Quercus*. Otherwise only unspecified 'berries' were noted as being taken. The type of locations chosen were perhaps more instructive. Birds turned up in suburban streets, at sports complexes, car parks, leisure centres, schools, industrial estates, on central reservations, and country parks, with just a few records from more rural locations.

The winter of 2004/05 saw only the fifth sizeable irruption into the county in 48 years, and the total observed in each of 1995/96 and 2004/05 was several times the number observed in all the other years put together.

Good Waxwing years in the UK do often fall consecutively, such as the three good winters in a row between 1970/71 and 1972/73, or the quite exceptional run of four good Waxwing years from 1956/7 to 1959/60. However, there can be even longer periods of scarcity. There was not a single invasion year between 1974/75 and 1988/89.

Even when it is clear that an irruption is taking place in the UK however, we cannot even guarantee that birds will reach Sussex. Four of the five years previous to the 2004/05 winter were irruption years in the UK (although not on the same scale) and yet a total of just six birds were noted in Sussex in just two of those years. In fact, in the last 13 years in Sussex, there have been eight blank years. While it remains possible that another irruption could be just around the corner, probability suggests that we could be waiting many years, even decades, for a repeat of such a major event as happened in 2004/05.

Expansion of the Breeding Bird Survey in Sussex

Dr Helen Crabtree 3 Myrtle Cottages, Ardingly Road, Cuckfield, West Sussex, RH17 5HD

Introduction

One of the most important objectives of the Sussex Ornithological Society (SOS), since its formation in 1962, has been to monitor the status of breeding birds in the county. The SOS has always held excellent records of the scarcer species in Sussex, but casual records of more common species have never been sufficient to allow any kind of population analysis. The following is an account of the project started by the SOS in 2005 to expand the Sussex contribution to the national Breeding Bird Survey (BBS). Data from the BBS in Sussex had previously been insufficient to allow population monitoring, but after a number of years the increased monitoring effort should enable population trends to be calculated for about 40 common breeding species.

Historical perspective

The Common Birds Census (CBC) was a major national British Trust for Ornithology (BTO) project during the period 1962-2000, involving volunteer fieldworkers using a territory-mapping census method. As well as determining numbers of territories, from which population trends were obtained, this method produced maps for each species, census plot and year, to show the exact locations of bird territories.

It was data from the CBC that drew attention to a number of serious declines among common and widespread species, such as Skylark *Alauda arvensis* and Willow Tit *Parus montanus*, and provided the evidence by which they have become high priorities for conservation effort. The CBC also documented how, for species such as Sparrowhawk *Accipiter gentilis* and Stock Dove *Columba oenas*, environmental change brought recovery and population expansion.

Despite these important results, the CBC had a number of disadvantages and is no longer used for large-scale population monitoring in the UK. One problem was that CBC sites were chosen by the observers, so that there was a large bias towards sites with plentiful numbers of birds. However, the main problem with the CBC was that it required intensive observation at each site, with up to ten visits in each breeding season and with detailed territory mapping. The Breeding Bird Survey (BBS) uses less intensive transect methods and enables more sites to be surveyed, thus allowing population trends to be detected more efficiently. The BBS was introduced in 1994, running alongside the CBC until 2000, and since then it has become the most important national BTO scheme for monitoring trends in populations of breeding birds.

BBS methodology and survey design

The BBS is organised by the BTO and is jointly funded by the BTO, the Joint Nature Conservation Committee (JNCC) and the Royal Society for the Protection of Birds (RSPB). The survey uses a line transect method in randomly-selected 1-km squares. Each BBS observer is assigned one or more 1-km squares, and makes two visits to each of their

squares during each breeding season, to count all the birds seen and heard along two 1-km transects approximately 500 m apart. Birds are recorded in one of three distance bands, or in flight, the former to enable detectability to be assessed and species density calculated. Habitat is also recorded using a simple coding system.

In order for the BBS data to be used as unbiased indicators of bird populations, the survey sites must be randomly distributed. The random selection of BBS squares is carried out by the BTO using an established strategy (Gregory and Baillie, 1994), and as far as possible the squares must be allocated to volunteer observers in the order in which they are generated. The aim is for as many as possible of the same 1-km squares to be surveyed every year, ideally by the same observers.

The total numbers of adult birds of each species detected in each 1-km square are calculated for each year, and these data are used to calculate population changes (Field and Gregory, 1999). Also calculated are the numbers of squares in which each species is recorded, and these numbers are expressed as percentages of the total number of squares surveyed, giving indications of abundance.

The BBS in Sussex before 2005

In the period 1994-2004 there were 70 randomly-selected BBS squares across Sussex. For BTO administrative reasons, the region classed as Sussex does not fall within the normal county boundaries but within certain 10-km squares, so that some areas of Hampshire, Surrey and Kent are included in the Sussex BBS monitoring effort, and similarly small areas of Sussex fall within neighbouring BTO regions. Of the 70 randomly-selected squares in the Sussex region, no more than 48 were surveyed in any year, as shown in Table 1. Figure 1 shows the distribution across Sussex of the BBS squares surveyed in 2004.

	Number of squares Surveyed	Number of observers involved	Number of breeding species recorded	Number of species recorded in >40 squares
1994	24	20	77	
1995	32	28	83	
1996	29	27	75	
1997	36	33	93	
1998	40	37	85	
1999	48	39	96	12
2000	45	34	91	9
2001	21	18	73	
2002	39	29	92	
2003	42	34	90	10
2004	46	38	94	10

 Table 1. The numbers of BBS squares surveyed in Sussex during the period 1994-2004

 and the numbers of breeding species recorded

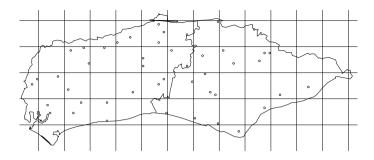


Figure 1. The distribution across Sussex of the BBS squares surveyed in 2004

In 2004 the question arose as to the usefulness of this BBS monitoring effort in Sussex. Although the dataset obtained through BBS monitoring in Sussex was an adequate contribution to the national BBS dataset, within Sussex itself the sample size was very small. In addition, whilst the SOS have excellent records of the scarcer species in Sussex, casual records of the commoner species can never be sufficient to allow any kind of population analysis. With this in mind, the SOS decided to investigate whether the BBS could be expanded in Sussex to a scale that would allow monitoring of population trends for the commoner breeding birds.

Calculation of BBS sample size

The BTO has carried out extensive research on the issue of the number of BBS squares that provides an adequate sample size for the determination of population trends (Greenwood, 1996). It might be assumed that the ratio of the total area of the BBS squares surveyed to the area of the study area (in this case Sussex) would be important. However, unless the survey sample makes up a very high proportion of the study area, this sampling ratio has no effect, and what is important is the actual size of the sample (J.J.D. Greenwood, pers. comm.).

For a species to be monitored adequately, the criterion used by the BTO is that monitoring should be capable of detecting a population decrease or increase of 25% in 25 years (at the usual 5% significance level). On this basis, for a typical species to be monitored adequately, that species needs to be present in at least 40 BBS squares. Thus, if the sample size is 50 squares, then only those species that occur in 80% of the squares are likely to be monitored adequately. If the sample size is increased to 100 squares, then those species occurring in at least 40% of the squares will be monitored adequately.

This general principle has a number of limitations. First, it is approximate and varies from species to species. Second, it is applicable to the UK as a whole, but for most counties the number of squares required will be rather smaller. This is because the numbers of birds, and differences in these numbers, will be more similar within a county than across the whole country. Last, the estimate of the required sample size assumes that the squares are randomly distributed across the study area.

Based on these considerations, and using BBS data recorded in Sussex during the period 1994-2001, an estimate of the number of BBS squares needed for adequate monitoring of each species can be calculated (Table 2). It can be seen that for very

common species, such as Woodpigeon *Columba palumbus* and Chaffinch *Fringila coelebs*, the level of BBS coverage during the period 1994-2001 allows adequate monitoring, but this is true for only a very small number of species (see Table 1). An expansion of the BBS in Sussex to involve more than 100 squares would allow monitoring of approximately 40 of the more common species.

	Mean % of BBS Squares in which present	No. of squares needed for adequate monitoring		Mean % of BBS squares in which present	No. of squares needed for adequate monitoring
Woodpigeon	97.75	41	G. S. Woodpecker	53.91	74
Chaffinch	96.93	41	Whitethroat	53.76	74
Blackbird	96.67	41	Cuckoo	51.79	77
Blue Tit	96.13	42	Nuthatch	51.38	78
Carrion Crow	92.75	43	Goldfinch	48.85	82
Robin	92.04	43	Mistle Thrush	48.14	83
Wren	91.66	44	Long-tailed Tit	47.75	84
Song Thrush	91.00	44	Jay	47.25	85
Great Tit	88.44	45	Mallard	45.64	88
Starling	86.88	46	Linnet	43.07	93
Magpie	86.04	46	Willow Warbler	41.82	96
Dunnock	85.84	47	Pied Wagtail	41.04	97
Greenfinch	82.30	49	Goldcrest	40.59	99
House Sparrow	78.91	51	Swift	37.70	106
Chiffchaff	78.12	51	House Martin	35.75	112
Blackcap	72.44	55	Coal Tit	33.78	118
Jackdaw	71.42	56	Moorhen	33.17	121
Pheasant	70.44	57	Bullfinch	31.14	128
Green Woodpecker	65.38	61	Stock Dove	30.43	131
Rook	61.09	65	Garden Warbler	29.54	135
Swallow	60.31	66	Feral Pigeon	24.73	162
Skylark	59.01	68	Kestrel	23.73	169
Collared Dove	57.34	70	Treecreeper	23.45	171
Yellowhammer	56.28	71			

 Table 2. Calculation of the number of BBS squares required for adequate monitoring of common birds in Sussex, based on BBS data recorded in the period 1994-2001

It is important that any increase in monitoring effort in Sussex uses the BBS method exactly. Any departure from this method would mean that it would be difficult to compare the results with national data from the BBS. Using the established BBS method, the data

can not only be used to monitor populations of birds in Sussex, but can form a significant contribution to BBS monitoring on a national scale. There is an added advantage in that the BTO is willing to analyse all the BBS data for Sussex, using established methods.

Expansion of the BBS in Sussex

In 2005, further BBS squares were selected using the established BTO randomsampling strategy, increasing the number to 150 selected squares. To avoid bias, it is important that these squares are assigned to volunteer surveyors in the order in which they are selected, as far as possible. This is less important if a high proportion of the squares are surveyed by volunteers, but if fewer squares are surveyed, they must be evenly distributed across Sussex and cover a wide range of habitats.

To carry out this expanded survey, it was necessary to recruit more surveyors. The SOS ran a successful recruitment campaign, appointing the author to organise the BBS in Sussex, and advertising for volunteers in its newsletter and on its website. Recruitment was aided by Mike Raven, the BTO National Organiser of the BBS, speaking at the SOS Conference in January 2005. A training day covering BBS methods was arranged at Plumpton College in March 2005, run by Su Gough of the BTO and attended by 30 new surveyors.

This recruitment campaign increased the BBS survey team to 98 volunteers and enabled 105 BBS squares to be surveyed in Sussex in 2005. The geographical distribution of these squares is shown in Figure 2. The predominant habitats of these 105 squares generally reflected the variety of habitats across Sussex as a whole. Of the 105 squares, 70 squares were predominantly farmland, containing areas of woodland and villages. There were 17 squares located in towns, including Worthing, Hove, Crawley, Lewes, Seaford, Eastbourne and Tunbridge Wells. A further 10 squares were predominantly woodland, five squares were classed as downland, there was one square containing parkland (Parham Park) and two squares contained coastal habitat (Thorney Island and Pagham Harbour). This range of habitats also matched reasonably closely the range of habitats of the whole sample of 150 randomly-selected squares.

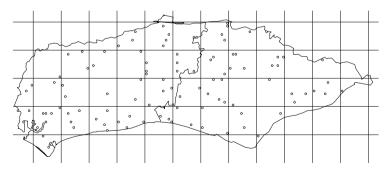


Figure 2. The distribution across Sussex of the BBS squares surveyed in 2005

A total of 118 breeding species was recorded in Sussex and, of these, 37 were recorded in >40 squares. Appendix 1 gives details, for each of the years 2002-2005, of the number of BBS squares in which each species was recorded. Data are also available on the total numbers of individuals of each species recorded (Raven *et al.*, 2005).

The list of species recorded in >40 BBS squares gives a useful indication of which species can be considered the more common breeding birds in Sussex. Whilst the BBS can provide population trends for these common species, some of the species recorded in Sussex, such as Long-eared Owl *Asio otus*, Waxwing *Bombycilla garrulus*, Cetti's Warbler *Cettia cetti* and Firecrest *Regulus ignicapillus*, are so scarce that even national data are insufficient for adequate monitoring.

In order to determine population trends from BBS data in Sussex, this level of BBS coverage clearly needs to be maintained for a number of years, probably 5-10 years. A second training day will take place in March 2006, which will hopefully be attended by 25 volunteers, and the expected coverage in 2006 will increase to 138 squares, surveyed by 112 volunteers. Realistically, the coverage that it will be possible to maintain during the period 2005-2015 will be in the region of 100-110 squares, which will allow monitoring of approximately 40 common species. Figure 3 shows the variations in the numbers of BBS squares surveyed, and the numbers of breeding species recorded, during the period 1994-2005, with expected figures for 2006.

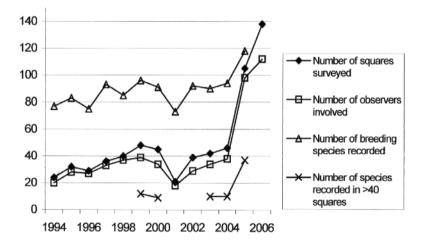


Figure 3. Variations in the numbers of BBS squares surveyed, and the numbers of breeding species recorded, during the period 1994-2005, with expected figures for 2006. Note the reduced number of surveys carried out in 2001 due to Foot and Mouth Disease (FMD) restrictions

Conclusions

In order to determine population trends for the more common breeding birds in Sussex, the SOS started a project in 2005 to expand the Sussex contribution to the national BBS. The number of BBS squares monitored in Sussex was increased from a maximum of 48 in the period 1994-2004 to 105 in 2005, and this figure will increase further in 2006. If this level of BBS coverage can be maintained, it should be possible after 5-10 years to

determine population trends in Sussex for about 40 of the more common breeding birds. In addition, the recruitment and training of new BBS observers will hopefully boost the pool of volunteers willing to help with survey work for the combined national 2007-2011 Winter and Breeding Bird Atlas.

Acknowledgements

Thanks are extended to all the observers who took part in the BBS in 2005 and who are fully acknowledged elsewhere, and to all those observers who have taken part in the past and/or offered to take part in 2006. Dr Barrie Watson, who organised the BBS in Sussex until 2004 before retiring to concentrate on other responsibilities, has continued to provide invaluable advice. Richard Cowser also gave much advice and helped with the recruitment and training of observers. John Hobson and Audrey Wende assisted with training. Dr John Newnham helped with recruitment and also produced the maps used in this report. Matthew Sennitt provided the data given in Table 2, and gave advice. Sincere thanks are also extended to Mike Raven, national BBS organiser at the BTO, for his enthusiastic support of the expansion of the BBS in Sussex, and for the help and guidance he has given throughout the project, and to Su Gough of the BTO for running the initial BBS training course.

References

Field, R.H. and Gregory, R.D. 1999. *Measuring population changes from the Breeding Bird Survey*. Research Report No. 217, British Trust for Ornithology, Thetford.

Greenwood, J.J.D. 1996. *Basic Techniques*. In Sutherland, W.J. (Ed) Ecological Census Techniques: A Handbook. Cambridge University Press.

Gregory, R.D. and Baillie, S.R. 1994. *Evaluation of sampling strategies for 1-km squares for inclusion in the Breeding Bird Survey*. BTO Research Report 139. British Trust for Ornithology, Thetford.

Raven, M.J., Noble, D.G. and Baillie, S.R. 2005. *The Breeding Bird Survey 2004*. BTO Research Report 403. British Trust for Ornithology, Thetford.

APPENDIX 1

Sussex BBS Results by Species, 2002-2005

For each breeding species, the number (n) of BBS squares in which that species was recorded in Sussex, and the percentage (%) of the total number of BBS squares surveyed in which that species was recorded, for the period 2002-2005. Species recorded in > 40 BBS squares in any year are emboldened. Species of which only single individuals were recorded have been omitted from the list, but are included in the total numbers of species recorded

Year (total number of squares surveyed)	2002 (39)		2003 (42)		2004 (46)		2005 (105)	
Species	n	%	n	%	n	%	n	%
Little Grebe	1	3	1	2	2	4	3	3
Great Crested Grebe					1	2	3	3
Cormorant	3	8			4	9	13	12
Little Egret	1	3			2	4	7	7
Grey Heron	12	31	16	38	11	24	28	26
Mute Swan	5	13	4	10	3	7	11	10
Greylag Goose	3	8	3	7	2	4	6	6
Canada Goose	14	36	11	26	14	30	26	25
Shelduck	1	3	1	2	3	7	3	3
Mandarin	3	8			1	2	2	2
Gadwall			1	2			2	2
Mallard	19	49	24	57	19	41	60	57
Shoveler							2	2
Tufted Duck	2	5	2	5	2	4	4	4
Sparrowhawk	6	15	5	12	7	15	24	23
Buzzard	4	10	6	14	9	20	21	20
Kestrel	8	21	6	14	12	26	28	26
Hobby	1	3	1	2			5	5
Red-legged Partridge	5	13	4	10	7	15	17	16
Partridge	2	5	1	2	1	2	7	7
Pheasant	32	82	39	93	34	74	78	74
Moorhen	17	44	17	40	20	43	45	42
Coot	1	3	6	14	3	7	13	12
Oystercatcher							2	2
Ringed Plover			1	2			2	2
Lapwing	7	18	6	14	6	13	20	19
Curlew	1	3	2	5	1	2	1	1
Redshank	2	5			4	9	4	4

Year (total number of squares surveyed)	2002	? (39)	2003	8 (42)	2004	(46)	2005	(105)
Black-headed Gull	8	21	3	7	6	13	12	11
Common Gull			2	5			2	2
Lesser Bbacked Gull	2	5	3	7	3	7	8	8
Herring Gull	11	28	11	26	16	35	43	41
Great Black-backed Gull							5	5
Common Tern	1	3					3	3
Stock Dove	10	26	13	31	11	24	27	25
Woodpigeon	39	100	42	100	46	100	105	99
Collared Dove	20	51	28	67	24	52	72	68
Turtle Dove	5	13	7	17	5	11	11	10
Cuckoo	16	41	18	43	20	43	34	32
Barn Owl	1	3	1	2	2	4	5	5
Tawny Owl	1	3	3	7	4	9	4	4
Swift	14	36	12	29	13	28	41	39
Green Woodpecker	26	67	30	71	35	76	77	73
G. S. Woodpecker	22	56	32	76	29	63	62	58
Woodlark							2	2
Skylark	25	64	25	60	27	59	63	59
Swallow	21	54	23	55	26	57	67	63
House Martin	14	36	13	31	17	37	36	34
Tree Pipit							5	5
Meadow Pipit	2	5	2	5	6	13	15	14
Grey Wagtail	5	13	1	2	3	7	6	6
Pied/White Wagtail	19	49	25	60	23	50	44	42
Wren	37	95	42	100	42	91	101	95
Dunnock	32	82	39	93	38	83	89	84
Robin	36	92	42	100	43	93	105	100
Nightingale	1	3	2	5	3	7	9	8
Redstart	2	5					1	1
Stonechat			2	5	1	2	1	1
Wheatear	2	5	1	2	2	4	4	4
Blackbird	38	97	42	100	45	98	105	100
Song Thrush	34	87	41	98	40	87	94	89
Mistle Thrush	17	44	21	50	13	28	44	42
Sedge Warbler	3	8			1	2	8	8
Reed Warbler	1	3	1	2	1	2	9	8

Year (total number of squares surveyed)	2002 (39)		2003 (42)		2004 (46)		2005 (105)	
Lesser Whitethroat	6	15	5	12	5	11	11	10
Whitethroat	25	64	27	64	27	59	58	55
Garden Warbler	8	21	10	24	13	28	15	14
Blackcap	32	82	38	90	39	85	79	75
Chiffchaff	33	85	40	95	41	89	83	78
Willow Warbler	11	28	19	45	14	30	36	34
Goldcrest	21	54	19	45	15	33	40	38
Spotted Flycatcher	1	3	2	5	2	4	7	7
Long-tailed Tit	15	38	19	45	19	41	46	43
Marsh Tit	7	18	8	19	8	17	15	14
Willow Tit	1	3	2	5			4	4
Coal Tit	12	31	16	38	14	30	29	27
Blue Tit	36	92	42	100	43	93	105	99
Great Tit	34	87	40	95	44	96	99	93
Nuthatch	21	54	21	50	23	50	47	44
Treecreeper	5	13	10	24	8	17	18	17
Jay	14	36	21	50	23	50	44	42
Magpie	31	79	36	86	39	85	91	86
Jackdaw	22	56	32	76	33	72	80	75
Rook	19	49	21	50	19	41	56	53
Carrion Crow	35	90	42	100	46	100	100	94
Starling	32	82	32	76	31	67	80	75
House Sparrow	29	74	32	76	30	65	78	74
Chaffinch	37	95	42	100	43	93	104	98
Greenfinch	27	69	36	86	37	80	90	85
Goldfinch	25	64	22	52	19	41	63	59
Siskin							2	2
Linnet	16	41	18	43	19	41	48	45
Bullfinch	11	28	15	36	18	39	32	30
Yellowhammer	20	51	25	60	23	50	45	42
Reed Bunting	3	8	1	2	4	9	12	11
Corn Bunting	1	3	1	2	2	4	5	5
Feral Pigeon	12	31	16	38	6	13	23	22
Lesser Redpoll			1	2			4	4
Number of species	92		90		94		118	

Gull-billed Tern Lingering on the Sussex Coast, Summer 2005

Christian Melgar 36 Victoria Road, Worthing, West Sussex BN11 1XB

A second-summer Gull-billed Tern (Gelochelidon nilotica) was present at Dungeness RSPB Reserve in Kent from the 4th until 15th May 2005. Although it visited Rye Hbr LNR on the evening of 7th May and was present briefly the next morning before returning to Dungeness, it was not until the bird visited Widewater Lagoon (Lancing) later in the month that a remarkable series of Sussex sightings began.

A routine visit to look for migrants at Widewater Lagoon on the evening of 21st May was rewarded with superb views of a Gull-billed Tern patrolling the eastern portion of the lagoon. Although occasionally dipping to the water's surface to pick off small food items, the bird initially remained for only a few minutes before flying off north over nearby houses. After fifteen minutes the bird had not returned and a check of the nearby R Adur also proved fruitless. However, it was found that the bird had already returned to Widewater where it showed well for 15 or 20 minutes flying up and down the eastern part of the lagoon. An algal bloom which covered a large percentage of the water surface during the summer appeared to be affecting the success of locating food items and it again soon flew off north over the houses along the edge of the lagoon.

The news was released that there was a Gull-billed Tern at the site but that it was highly mobile and after half an hour a few local birders arrived but the bird had not returned. After an anxious wait the bird suddenly appeared over flats at the east end of the lagoon and flew low along the length of the lagoon before flipping over the shingle ridge and continuing westwards along the beach until lost from view. The five or six observers present managed only brief views of the bird before it disappeared.

The following day the bird was seen flying past Selsey Bill in the morning and Worthing Seafront in the evening before reappearing on the R Adur opposite Shoreham Airfield on the morning of 26^{th} . The bird spent the following few weeks feeding along the muddy banks of the river at low tide and presumably feeding at sea or roosting on nearby beaches during high tide. Despite its prolonged stay it was seldom seen in other localities when not present on the river, and was only seen back at Widewater on one or two occasions.

The tern tended to favour the eastern bank of the river where it fed mainly on worms which it would extract from the mud and then run to the water's edge to wash before swallowing. At times the bird was also seen flying at some height above the river catching flying insects. Adult Sandwich Terns (Sterna sandvicensis) present at the same time on the river allowed for good comparisons of plumage features and behaviour and on occasions even confusion for some observers.

Unsurprisingly the presence of a lingering and closely-observable Gull-billed Tern was a popular attraction and during the period it was present attracted a constant stream of admirers which totalled several hundred over the course of its stay. The bird was last seen on 6^{th} June.

Plumage-wise the bird appeared to be an adult. However, close-up views and a superb series of photographs (particularly those of it in flight) reveal that the bird was in fact most likely a second-summer as there are moult contrasts in the wing. It could be seen that the outer secondaries and inner primaries were fresh, grey adult feathers but that the outermost four primaries were darker and of a previous generation. It could also be seen that there was a very narrow, but quite obvious, dark subterminal bar on the inner secondaries. The rest of the plumage was typically adult-like with a neat black cap extending to the lower edge of the (black) eye and down onto the forehead meeting the all-black dagger-like bill, pale grey upperparts extending onto the rump and tail, pure white body underparts with pale underwings and black legs and feet. The bird was also stockier and not as elongated as Sandwich Tern.

Gull-billed Tern is a very rare vagrant to Sussex, although it is an annual occurrence in the British Isles with one or two seen most years. A Guide to the Birds of Sussex (des Forges and Harber, Edinburgh, 1963) details about 7 birds obtained prior to 1937 and 42 recorded from 1950-1961. All records during the 1950s and 1960s, especially fly-pasts of which many of the records concerned were, must be open to some doubt. Details of those since 1958 were lost while being reviewed by the British Birds Rarities Committee (BBRC). The BBRC's initial view on Gull-billed Terns was that "few if any would be acceptable by today's standards (but that is true of many other perfectly good records of several other species for that era)" British Birds 88:379.

Since 1961 there have been a further 31 individuals in Sussex of which 20 were fly-by sightings at sea/along the coast including flocks of 4 and 3 past Birling Gap (Beachy Head) on the morning of 13th May 1982. The most recent records were a second-summer at Ivy Lake (Chichester) from 7th-9th July 1999 and one on the R Arun at Littlehampton on 26th and 27th May 2003.

The species breeds in colonies on lakes, marshes and coasts in Europe, Asia, North America, eastern South America and Australia. All forms show a post-breeding dispersal but northern birds are the most migratory, wintering south to Africa, the Caribbean and northern South America, southern Asia and New Zealand. In Europe it is classed as Endangered.

The western population, comprising colonies in Denmark, Netherlands, Germany, France, Italy, Spain, and north and north-east Africa, consists of about 6,200 pairs. The eastern population, comprising colonies in the Balkan Peninsula (Greece), shores of the Black Sea and Sea of Azov, and Turkey, consists of at most 6,800 pairs (Sanchez et al., 2004). Between 1900 and the mid-1970s the northern European populations virtually disappeared. However since then there appears to have been a phase of stabilization and increase in some of the western colonies. The recent upturn in the fortunes of this species in its western breeding grounds has no doubt contributed to the increase in numbers occurring during migration times in the British Isles.

References

Hume, H. R. 1995. News from the Committee. British Birds 88:379

des Forges and Harber. 1963. A Guide to the Birds of Sussex. Edinburgh.

James, P. (ed.). 1996. Birds of Sussex. Sussex Ornithological Society.

Sanchez, J.M., Munoz del Viejo, A., Corbacho, C., Costillo, E., and Fuentes, C. 2004. Status and trends of Gull-billed Tern *Gelochelidon nilotica* in Europe and Africa. Bird Conservation International, pp. 14: 335-351 Cambridge University Press.

Shrubb, M. 1979. Birds of Sussex. Chichester.

Sussex Ornithological Society Annual Reports 1963 – 2004. Sussex Ornithological Society.

A REVIEW OF THE RESULTS OF THE WETLAND BIRD SURVEY IN SUSSEX.

John Newnham. 61 Grand Avenue, Worthing, West Sussex, BN11 5BA. Richard Cowser. Beavers Brook, The Thatchway, Angmering, West Sussex, BN16 4HJ. John Hobson. 23 Hillside Road, Storrington, West Sussex, RH20 3LZ.

Introduction

The Wetland Bird Survey (*WeBS*) is the national scheme for monitoring the nonbreeding waterbirds in the United Kingdom. The survey, comprising monthly synchronised counts at important wetland sites, is organised jointly by the British Trust for Ornithology (*BTO*), the Wildfowl & Wetlands Trust (*WWT*), the Royal Society for the Protection of Birds (*RSPB*) and the Joint Nature Conservation Committee (*JNCC*). *WeBS* was officially launched in October 1993 (Cranswick *et al* 1995) and resulted from the merger of two long-standing surveys, the National Waterfowl Counts (*NWC*) organised by the *WWT* and the *BTO*'s Birds of Estuaries Enquiry (*BoEE*).

Organised recording of wildfowl in Sussex has a long history; in the Sussex Bird Report for 1951 John Reynolds wrote "Most readers of the Sussex Bird Report are no doubt aware of the inquiry into the status of the Wildfowl of Europe, which has been undertaken by the International Committee for Bird Preservation". Although regular counts had started elsewhere in 1947 he noted that these had not been organised in Sussex until 1951-52. In the first season 14 observers covered eight sites and for the first decade fewer than ten wetlands were surveyed in each winter. By 1958 PR Mills had taken over the organisation of these counts and he recorded that the Wildfowl Trust had included three Sussex sites, the Arun Valley, Darwell and Weir Wood Reservoirs, as their priority sites to be used in their assessment of the national wintering populations of wildfowl. AB Sheldon became the county organiser for wildfowl counts in 1960 yet in his other role as Editor of the Sussex Bird Report, stated in 1962 "The paragraph summarising results of the wildfowl counts has been omitted". Slowly the number of sites involved in the regular counts increased and by the time JW Clark assumed responsibility for the wildfowl counts in 1968 there was a good network of counters, particularly for the important coastal sites such as Chichester, Pagham and Rye Harbours. Between 1971 and 1976 the NWC were coordinated by R Batchelor and thereafter DW Codd continued this role until 1995 by which time the modern WeBS was well established.

The systematic recording of other wetland species, particularly waders, started twelve years later with the first coordinated counts of the West Sussex and eastern Hampshire harbours occurring in 1963 (Shrubb 1965). In the first season a single mid-winter count was also organised at other coastal locations. Annual counts at these locations were continued and, unlike the wildfowl counts, were presented as detailed tables in each *Sussex Bird Report* until 1970. From 1971 these tables also included wildfowl and other species; a change possibly stimulated by the start of the *BoEE* in 1969. The first national organiser of the *BoEE* was appointed in June 1970 (Prater 1981) and following this reporting of all wetland species, both nationally and in Sussex, was far more cohesive. M Shrubb, whilst acknowledging considerable help from other counters, continued analysing the Sussex estuary counts until 1974 after which RF Porter assumed this responsibility. It was no surprise that the estuary counts remained a high priority when AJ Prater, the first national

organiser of the *BoEE*, succeeded RF Porter as the South-East Regional Officer of the *RSPB* with their offices based in Sussex. In 1982 the large tables of counts were moved from a separate paper in the annual bird reports to appear in the systematic list of species; a presentation which has continued until now. This change introduced a greater integration between the species accounts and the *NWC* and *BoEE* counts and presented not only a county total but also the numbers of each species at the most significant sites, including inland locations, in Sussex. At this time Mrs M Milner, working in the *RSPB* offices, undertook much of the paper work and administration of these counts and she continued to offer support to the Sussex Ornithological Society (*SOS*) after AJ Prater had left Sussex. TW Parmenter assumed responsibility for these counts for a couple of years before CD Lowmass became the county coordinator in 1989 and he, with considerable help from reserve wardens and others, has overseen the change to the current *WeBS*. The survey has continued to grow with nearly 50 sites now regularly counted by over a hundred participants; a marked change from the situation in 1951. The records gathered have been a valuable tool in the conservation of the wetlands in the county.

Although the surveys have been running for many decades and produced a wealth of information there have been few specific publications by the *SOS* using these data. Shrubb (1979) graphically presented the wader counts and tabulated wildfowl numbers at the major locations over a ten year period from the mid 1960s. The population trends for waders up to the mid-1980s, particularly those counted in Chichester and Pagham Harbours, were described by Prater (1987). James (1996) presented the survey data as tables showing the five-year means of maxima for each species at the key locations. During the past twenty years county reviews of Canada Goose (Hughes and Watson 1986), feral Greylag Goose (Hughes 1987), Little Grebe (Hughes 1991) and Bewick's Swan (Hughes 1992) have used records from these surveys.

WeBS Records.

At the end of 2005 the SOS's data-base held over 103,500 records which derived from *NWC*, *BoEE* or *WeBS* counts; these accounted for 13% of the entire collection of records. Although wetland counts have been conducted at many sites throughout the year only 12% of the records are for the months April to August; thus this paper has only studied the "core" counts (September to March). Generous sponsorship by grants from East and West Sussex County Councils, the *RSPB* and Environment Agency during the early 1990s allowed the *SOS* to compute the archived count data and subsequently the Society has computed each season's counts. Without this the analysis involved in this paper would have been impossible.

A preliminary analysis of the 7425 winter counts from 70 different sites revealed several gaps in the data, mainly from a period in the 1970s. Fortunately, the *BTO* were able to supply most of the missing records. Additionally, a few records from the 1964 to 1969 *Sussex Bird Reports,* which were not previously on the Society's computerised data base, have also been added. As a result 1188 counts have been added from 41 sites, so that this paper is summarising the details from 8613 counts from 78 sites.

Figure 1 shows the number of sites surveyed and the total counts conducted in each season since 1961/62. The information from the first few years is less complete so this study has started from the 1964/65 season. The figure clearly shows the growth in both the number of sites and counts. Although records come from 78 sites the maximum surveyed in a single season was 48, all in recent years. Furthermore the number of counts in each winter at each site has increased; since 1981/82 the average number of counts per site has

exceeded six (from a maximum of seven) in all seasons except 2000/01 when the March counts were curtailed due to the outbreak of Foot and Mouth Disease.

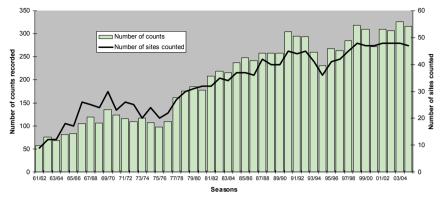


Figure 1. – The number of wetland sites surveyed and the number of site counts in each season 1961/62 –2004/05.

Table 1 lists the sites in the conventional west to east order which have been surveyed since 1964. The table shows the number of seasons (maximum 41) and counts (maximum 287) which have been recorded from each of these locations. Only 15 of these sites were surveyed over the entire period and for the remainder the first and/or last survey season has also been shown. Twenty three of the listed sites (29%) have been surveyed for five or fewer seasons and, conversely, 37 sites (47%) have been counted on more than 100 occasions. Several sites (marked **) are now counted in sub-sites or sectors and the greater detail gathered is of greater conservation value. In most instances, for example the various gravel pits in the complex at Chichester, the sub-units are obvious and detailed recording has only been a recent phenomenon. The history of counting in the Arun Valley, however, is not clearly defined; in some years counts combined Pulborough and Amberley, in other winters Amberley and Waltham, whilst in other seasons the individual counts for each of the brooks are available. In order to use these historic count data reference to the Arun Valley in this paper refers to the combined Amberley, Pulborough, Waltham and Bury Brooks.

Site Name	Grid	Α	В	С	D	Site Name	Grid	Α	В	С	D
Chichester Hbr **	SU7600	41	281			Adur Levels **	TQ1912	22	144	78/79	
Nyewood Lake	SU8021	2	12	90/91	92/93	Widewater	TQ2004	7	48	98/99	
Bracklesham Bay	SZ8096	5	20	82/83	87/88	Adur Estuary	TQ2104	39	184		
Forest Mere	SU8129	32	170	69/70		Holme Fm	TQ2128	4	25	78/79	81/82
Chithurst H. P.	SU8423	4	20	90/91	93/94	Ifield MP	TQ2436	18	110	80/81	
Selsey	SZ8593	3	3	66/67	68/69	Tilgate	TQ2734	7	46	86/87	92/93
Pagham Hbr	SZ8697	41	272			Brighton	TQ3302	2	14	84/85	85/86
Chichester GP **	SU8703	38	256			Ardingly Res	TQ3329	28	179	77/78	
Midhurst	SU8821	1	1	66/67	66/67	HedgeCourt	TQ3540	6	32	74/74	79/80
Rother Valley	SU8822	7	45	98/99		Gravetye	TQ3634	18	123	87/88	
Sefter Fm Res	SZ8899	1	7	04/05		Weir Wood Res	TQ3834	41	273		
Valewood House	SU9030	5	9	66/67	72/73	Ifold Brooks	TQ4107	11	63	94/95	
Cotchets Fm	SU9129	2	12	86/86	86/87	Lewes Brooks	TQ4207	9	55	87/88	98/99
Brockhurst Fm	SU9227	3	12	90/91	92/93	Lewes -Barcombe	TQ4213	1	3	87/88	87/88
Lurgashall MP	SU9325	29	128	69/70	03/04	Piddinghoe Pond	TQ4302	2	2	67/68	68/69
Seaford College	SU9416	2	12	86/87	87/88	Barcombe Res	TQ4314	39	264	66/67	
Burton Ponds **	SU9617	36	215			Newhaven	TQ4400	32	170	67/68	
Shillinglee	SU9631	25	124	69/70	00/01	Glynde Level	TQ4609	38	254		
Petworth Park **	SU9721	26	178	77/78		Cuckmere Hvn.	TV5197	41	278		
Wicks Fm	SU9804	7	47	98/99		Arlington Res	TQ5307	34	219	71/72	
Climping	TQ0101	37	178			Eridge Park	TQ5634	2	9	88/89	89/90
Swanbourne Lake	TQ0107	38	243	66/67		Eastbourne Lakes **	TQ6001	9	62	96/97	
Arundel Meadows	TQ0207	3	14	02/03		Princes Park	TQ6200	7	39	98/99	
Arundel WWT	TQ0208	28	189	77/78		Bayham Lake	TQ6336	2	10	67/68	68/69
Offham to Houghton	TQ0211	27	155	77/78		Langney	TQ6401	13	82	89/90	03/04
Mewsbrook Park	TQ0401	7	45	98/99		Pevensey Levels **	TQ6605	32	202	69/70	
Angmering Decoys	TQ0505	17	104	82/83	01/02	Bewl Water	TQ6733	27	186	78/79	
Parham Park	TQ0514	1	1	66/67	66/67	Normans Bay	TQ6805	9	36		89/90
Arun Valley **	TQ0516	41	281			Darwell Res	TQ7121	40	270		
Streele Lake	TQ0624	17	94	87/88		Glyne Gap	TQ7607	25	145	65/66	
Patching Pond	TQ0805	26	147	67/68	01/02	Asten Pond	TQ7709	1	7	70/71	70/71
Goring	TQ1001	31	149			Powdermill Res	TQ7919	34	208		
Oldhouse Lakes	TQ1222	2	3	68/69	69/70	Alexandra Park	TQ8010	26	164	78/79	
Kneppmill Pond	TQ1521	41	271			Pannel Sewer	TQ8715	6	29	90/91	95/96
Southwater Quarry	TQ1525	8	50	97/98		Pett Level **	TQ9015	40	241		
Wiston Pond	TQ1612	1	1	66/67	66/67	Rye Hbr **	TQ9216	40	247		
Southwater CP	TQ1625	8	50	97/98		Northpoint GP	TQ9319	4	5	67/68	71/72
Warnham MP	TQ1632	39	233			Moneypenny GP	TQ9420	5	5	66/67	71/72
Brooklands	TQ1703	9	50	67/68		Scotney Court GP	TR0119	15	98	88/89	

Table 1. – Sussex sites surveyed by NWC, BoEE or WeBS 1964/65 to 2004/05(arranged west to east).

Bold print – sites with >90% seasons counted and analysed as "key-sites".

** - Sites comprising several sub-sites or sectors for which more details are recorded.

A – Total number of seasons with at least one count.

C – First season records if not 1964/65.

B – Total number of counts recorded.

D – Last season count recorded if not 2004/05.

Edgar in Shrubb (1979) listed the reservoirs and important levels in Sussex and these all feature strongly in Table 1. More recently counts from Scotney Court GP and the newly developed lakes at Eastbourne have contributed to the growth in reported waterbird populations in the county. Several of the longstanding sites are managed for wildlife and

developments in the Arun Valley, at Rye Hbr and Pett Level have encouraged wildfowl. Although some watermeadows have been drained and gravel pits, such as those at the Crumbles (Eastbourne) have been redeveloped there has not been any loss of a major wetland in Sussex in this period.

Aims and Method

In a series of papers, the first looking at the commonly occurring wildfowl, the authors propose to present the results of the *WeBS* by presenting graphically the maximum county totals in each season and comparing these patterns with the national indices for each species. A decade has passed since the publication of *Birds of Sussex* (James 1996) thus this paper will update the tables of five year means of maxima and peak counts for the key locations in the county. Furthermore the addition of early records from the *BTO* has allowed the presentation of data for the period 1964/65 to 1968/69. It is important to emphasis that the figures used in this paper are from the monthly counts and therefore may not be the same as other published records. For each species biases and flaws in the count data have been examined and are presented and the sites of national and international importance are reviewed.

It has been clearly established in Figure 1 that the number of counts and sites surveyed has steadily risen. In order to determine whether any demonstrated changes in waterbird populations were merely due to an increase in the number of sites counted the records have been analysed in two groups. Table 1 shows the sites (in bold) which have been counted, at least once, for 90% or more of the seasons since 1964/65. The counts from this group of 16 sites (labelled key) have been examined separately from the entire collection of sites (labelled all). For both groups a regression coefficient has been calculated for the 41 season series of maxima county totals using the method of least squares. The standard errors in each series were calculated and each T-tested to estimate the significance of the regression line (Fowler & Cohen). The same series have been matched with the English *WeBS* index to calculate a correlation coefficient to see how closely the counts from the two sets of sites follow the national figures.

Results

Table 2 lists these coefficients. The regression coefficient shows the change in number of birds per year; positive numbers reveal gains whereas declines are depicted as negative values. Where b_{all} and b_{key} are similar (e.g. Brent Goose) this shows that the population change in the county has occurred predominantly in the regularly counted "key" sites whilst a large difference between b_{all} and b_{key} (e.g. Mallard) shows changes are due to an increase in the number of sites counted.

	Regression	Coefficent (b)	Correlation	Coefficent (r)
	All sites (ball)	Key Sites (bkey)	All sites (rall)	Key Sites (rkey)
Mute Swan	16.8	8.4	0.90	0.84
Bewicks Swan	1.6	0.8	0.75	0.75
Greylag Goose	22.4	13.4	0.88	0.89
Canada Goose	88.8	59.3	0.94	0.92
Brent Goose	249.4	250.1	0.88	0.91
Shelduck	-54.4	-57.0	0.23	0.22
Wigeon	203.6	171.5	0.81	0.82
Gadwall	21.0	13.8	0.91	0.89
Teal	141.0	126.2	0.73	0.72
Mallard	66.1	4.0	0.15	0.34
Pintail	32.7	32.0	0.08	0.09
Shoveler	13.0	9.6	0.63	0.54
Pochard	13.6	-2.6	0.08	-0.36
Tufted Duck	19.8	6.5	0.43	0.38
Goldeneye	0.6	0.5	0.21	0.19
Red-breasted Merganser	6.8	5.8	0.84	0.86

Table 2 – The Regression Coefficient for the season maxima 1964/65 to 2004/05 and the Correlation Coefficient between the English index and the season maxima 1966/67 to 2003/04 for "all" sites and "key" sites for 16 regularly occurring waterfowl species.

Bold figures represent statistically significant coefficients at p=0.01 level.

The correlation coefficients, r_{all} and r_{key} , are for most species very similar and in some species (i.e Mute Swan, Canada Goose and Gadwall) show a very strong correlation with the English index. The strength of the correlation increases as the value of r approaches 1 or -1 with a value near zero implying a weak or no correlation.

Although there are tabulated *WeBS* records for 18 species of wildfowl the information for Common Eider and Common Scoter is very patchy, therefore these species have been omitted from analysis. The values in Table 2 should be read with the figures in each of the detailed reviews of the common species which follows.

In order to maintain consistency in species nomenclature with James (1996) the Eurasian Wigeon and Eurasian Teal will be called Wigeon and Teal whilst Common Shelduck, Common Pochard and Common Goldeneye will be termed Shelduck, Pochard and Goldeneye respectively throughout this paper.

In the species accounts that follow the Sussex population is expressed as a percentage of the national population. Two figures are usually expressed; the higher expresses the Sussex mean of maximum *WeBS* counts for the season 1999/00 to 2003/04 as a percentage of the equivalent national *WeBS* mean of maximum counts over the same period (Musgrove *et al* 2001, Pollitt *et al* 2003, Cranswick *et al* 2005 and Collier *et al* 2005). However, because *WeBS* counts rarely cover 100% of the population of a species (and in some species such as Mute Swan and Mallard the coverage can be as low as 50% of the population or even less) variances in such percentage coverage between the National and Sussex counts can cause this calculation to be misleading (AJ Musgrove *pers. comm.*). Therefore a second percentage number is quoted whereby the Sussex mean of maximum *WeBS* counts for the season 1999/00 to 2003/04 is expressed as a percentage of the estimated total national population (1% of which is the quoted threshold number for which a site becomes nationally important for a species). This figure is a lower percentage number and it is also a minimum number. In reality the Sussex population as a percentage of the national population will lie between the two figures quoted.

SPECIES ACCOUNTS

Mute Swan (Cygnus olor)

This species is widely distributed throughout Sussex and is largely, but not totally, resident. A survey in 1990 found a total of 1111 birds, comprising 175 pairs known to have nested, an additional 52 territorial pairs, and 657 non-breeding birds (Hughes 1991b). Based on an estimated population of 890 birds in 1983 (Hughes & Watson 1984), these figures represented an increase in the total population of c.20%. This increase was attributed, in part, to the ban in 1987 on the use of most sizes of lead weights for fishing, which was believed to have contributed to an increase in the national population of c.49%. Since 1990 the national population has increased by a further c.50% and Figure MS indicates that the Sussex wintering population has tended to mirror the national trend; indeed the figures in Table 2 show a very strong correlation between the two.

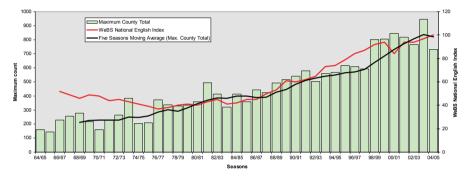


Figure MS. The maximum number and five year moving average of the maximum for Mute Swan recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Since 1964/65, Mute Swans have been recorded at 66 of the 78 sites listed in Table 1, confirming that the species is widespread. Although Mute Swans have been recorded at many sites not included in the *WeBS*, a review of these records suggests that no important sites are regularly missed and that, therefore, this survey is a reliable indicator of the county's population of this species. There appears, however, to be a strong correlation between the number of sites counted and the maximum number of birds counted each year. This observation supported by the regression coefficients shown in Table 2 suggests that half of the observed increase in the county population comes from counts introduced to the *WeBS* subsequent to the 1964/65 season.

Table MS shows all the sites where the peak counts exceed 100 birds and includes those listed by Mason (1996a). The highest county total of 946 was recorded in January 2004 when significant herds included 158 in Chichester Hbr, 238 in the Arun Valley and 110 at Scotney Court GP. However, the highest single count ever recorded, a herd of 240 on Pevensey Levels in December 1973, was still below the 1% international threshold level of 380.

		AA 74	74 70	70.04	04.00				.
	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County Total	213	250	290	384	426	540	638	836	946, Jan 2004
Chichester Hbr	46*	58	62	86	103	91	131	173	227, Oct 1975
									and Dec 2003
Chichester GP	50	29	18*	28	41	64	60	102	141, Jan 2003
Climping	nc	nc	3*	12	12	2	20	77	123, Feb 2005
Arun Valley*	51	42	89	95	114	81	102	124	238, Jan 2004
Adur Levels	nc	nc	13*	16	14	29	56	94	105, Feb 1995
Iford Brooks	nc	nc	nc	nc	nc	nc	81	67	136, Jan 1996
Lewes Brooks	nc	nc	nc	nc	68*	78*	72*	nc	107, Nov 1992
Eastbourne Pk Lakes	nc	nc	nc	nc	nc	nc	75*	39	111, Sep 1998
Pevensey Levels	nc	143*	160*	99*	30*	97	79	81	240, Dec 1973
Pett Level	3*	19	12	24	28	7	46	16	126, Jan 1997
Rye Hbr	18*	20	19	36	61	66	65	57	121, Sep 1993
Scotney Court GP	nc	nc	nc	nc	30*	18*	20	40	110, Jan 2004

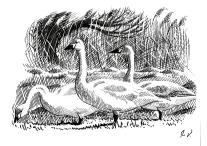
Table MS. The five year means of maxima of peak counts of Mute Swans 1964-69 to 1999-2004 based on sites with a maximum count of >100 birds.

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

With the national population estimated at 38,000 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 19,885 birds Sussex holds between 2.2 and 4.2% of the national wintering population.

Bewick's Swan (Cygnus columbianus)

Bewick's Swans are winter visitors to the British Isles in varying numbers which probably reflect mainly the influences of breeding successes and the weather. Mason (1996b) detailed the history of Bewick's Swans in Sussex. He noted that they had not been recorded in the county prior to 1952 and that the average number seen per year rose from just over one to 14 in 1962, to 70 or more per year between 1963 and 1972, and to over 100 between 1973 and 1976. Figure BS illustrates this growth in numbers and, with the figures in Table 2, shows a modest correlation between the English index and county maxima. A peak of 256 was reached in the winter 1986/87 and thereafter numbers have fluctuated downwards at a greater rate than the English index. The regression coefficients shown in Table 2 reveal no significant change over the 41 year period but the comparable figures pre 1986/87 ($b_{all} = 7.9$ and $b_{key} = 7.0$) and post 1986/87 ($b_{all} = -8.7$ and $b_{key} = -7.7$) reveal statistically significant (p=0.01) increases and declines.



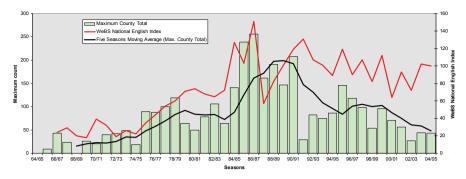


Figure BS. The maximum number and five year moving average of the maximum for Bewick's Swan recorded in Sussex compared with the WeBS English index in each season 1969/70 to 2004/05.

The distribution of Bewick's Swans in the county is fairly restricted to a small number of favoured sites. Indeed, it has been counted in only 19 of the sites listed in Table 1. The majority of the favoured sites are in, or close to, the major river valleys. This is illustrated in Table BS which shows that there have been only four sites where the maximum number recorded exceeded 50 on any occasion.

Table BS. The five year means of maxima of peak counts of Bewick's Swans 1964-69 to 1999-2004.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	15	35	83	72	198	108	101	59	256, Jan 1987
Offham	nc	nc	3*	8*	72	12	30	27	144, Feb 1987
Arun Valley*	17*	31	82	69	159	69	76	30	239, Mar 1985
Adur Levels	nc	nc	0*	0*	3*	28*	6	6	84, Feb 1991
Iford Brooks	nc	nc	nc	nc	nc	nc	13	2	51, Mar 1997

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

The current 1% international threshold number for this species is 290 so at no time has the county held an internationally significant number of birds but with the Great Britain threshold being 81 birds the Arun Valley was of clear significance between 1984 and 1994. With the national population estimated at 8100 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 6183 birds Sussex holds between 0.7 and 1.0% of the national wintering population.

Greylag Goose (Anser anser).

James (1996a) described, in detail, the early history of the Sussex feral or reestablished population of Greylag Geese; he noted a steady expansion in the late 1980s and concluded that the county's peak counts of 166 at Scotney Court GP in December 1991 and 206 at Weir Wood Res in January 1992 would soon be exceeded. Figure JE clearly shows the continuing increase in the population with a marked acceleration occurring in the mid 1990s and an elevenfold increase over the last 20 years. The highest county total of 1299 was recorded in October 2002 when flocks included 500 at Scotney Court GP, 234 in the Arun Valley, 170 at Bewl Water and 146 at Glynde Level. The figure shows how the Sussex expansion runs parallel to the national index and Table 2 shows a strong correlation between this index and the county maxima.

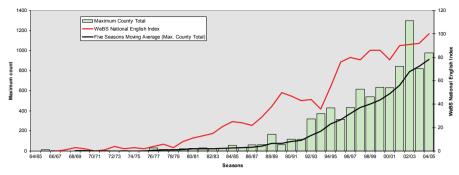


Figure JE. The maximum number and five year moving average of the maximum for Greylag Geese recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

During the *WeBS* Greylag Geese have been recorded at 37 sites but at many locations only small numbers have been encountered. Although Greylag Geese have been recorded at sites not included in the *WeBS*, a review of these records suggest no important sites are regularly missed thus concluding that this survey is a good indicator of the county's population for this species. Table JE shows the sites with the highest counts and includes those listed by James (1996a.) The only other large flock, not shown in Table JE, was 160 at Kneppmill Pond in December 2004. The table clearly shows the growth in population at each site with all locations recording peak counts within the recent five years.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak Counts
County total	4	1	12	25	76	198	467	846	1299, Oct 2002
Arun Valley	0	0	3	16	45	63	126	261	358, Sep 2002
Ardingly Res.	nc	nc	0*	0	0	18	47	83	100, Nov 2000
Weir Wood Res	0	0	0	5	17	31	151	169	300, Sep 2001
Glynde Level	0	0	0	0	8*	28	103*	162	280, Oct 2000
Bewl Water	nc	nc	0*	2	4	2	2	55	170, Oct 2002
Rye Hbr	0*	0	0*	0	4	9	20	96	202, Sep 2003
Scotney Court GP	nc	nc	nc	nc	100*	167*	308	485	570, Dec 2003

Table JE. The five year means of maxima of peak counts of Greylag Geese 1964-69 to 1999-2004.

nc – indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

Collier *et al* (2005) state that the British Index suggests a continued rise in the population but at a reduced rate and demonstrates the highest counts for this resident species to be in the autumn months. Table JE supports this as no winter peak counts occur after December. The same authors list approximately 40 sites in Great Britain where mean peak counts exceed 300 birds; only Scotney Court GP reaches this level. Recent estimates suggest the re-established population of Greylag Goose to fall between 25 - 30,000 birds and the national mean of maximum counts for the seasons 1999/00 to 2003/04 was 24,259 whence Sussex holds between 2.8 and 3.5% of the national total of this population.

Canada Goose (Branta canadensis)

This species is another introduced, mainly resident, goose which has flourished in Sussex. Here too the history of the population expansion in the county is described by James (1996b) who noted, from breeding season surveys, a 600% increase between 1976 and 1991. The *WeBS* data, shown in Figure CG, reinforces this with a steep increase demonstrated in the same period and a 445% rise in the wintering population over the last thirty year period. Interestingly the rise in the population of Canada Geese in Sussex lagged behind the national situation but, once started, expanded at a more rapid rate and the correlation between the national index and county figures, as shown in Table 2, is very strong. James (1996b) also noted the numbers declined in the 1990s, following the national trend, but counts have subsequently risen to the same levels recorded in the late 1980s. The national index suggests the population growth has again slowed similar to the period in the 1990s (Collier *et al* 2005).

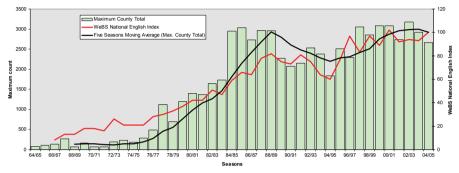


Figure CG. The maximum number and five year moving average of the maximum for Canada Geese recorded in Sussex compared with the WeBS English index in each season, 1969/70 to 2004/05.

Canada Geese have been recorded widely and only at seven sites which have been regularly counted in the past 10 years have no Canada Geese been seen. This species has a widespread breeding distribution in the county (James 1996b) and it is unclear how many geese remain on smaller, uncounted, waters during the autumn and winter. All the sites which have a five year mean of maxima exceeding 200 birds are shown in Table CG and, with the exception of 540 at Lurgashall MP in September 1985, the table includes all sites at which 400 or more geese have been recorded. Like the Greylag Goose most of the peak counts occurred in late autumn but unlike the former species several sites have recorded lower numbers in recent years and peak counts varied with five each occurring during the periods 1985-88 or 2000-02.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak Counts
County Total	129	143	550	1469	2927	2283	2509	3000	3177, Nov 2002
Petworth Park	nc	nc	413*	298	282	203*	111*	184	591, Dec 1985
Arundel WWT	nc	nc	8*	151	350	401	314	79	607, Jan 1992
Arun Valley*	112	23	275	432	992	418	917	1214	1754, Nov 2002
Weir Wood Res	22	19	17	132	259	139	132	54	431, Oct 1988
Glynde Level	0	0	2	37	108*	77	128*	242	420, Nov 2002
Barcombe Res	0*	0	38	135	307	212	130	154	733, Nov 1987
Glynde Level	0	0	2	37	108*	77	128*	242	420, Nov 2002
Cuckmere Haven	1	6	0	18	194	397	450	482	669, Nov 2000
Arlington Res	nc	78*	112	186	240	168	177	392	823, Sep 2001
Bewl Water	nc	nc	75*	644	1182	714	575	683	1500, Sep 1986
Darwell Res	0	0	18*	90	231	161	128	77	415, Sep 1988
Rye Hbr	3*	12	26*	105	141	187	255	294	521, Sep 2002

Table CG. The five year means of maxima of peak counts of Canada Geese 1964-69 to 1999-2004.

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

Two Sussex sites, the Arun Valley and Bewl Water, by virtue of high counts during the period 1999-2004 are amongst the top ten locations in Great Britain for Canada Geese (Collier *et al* 2005). Neither national nor international thresholds have been set for this species but the national mean of maximum counts for the seasons 1999/00 to 2003/04 was 52,589 whence Sussex holds c.5.7% of the national total.

Brent Goose (Branta bernicla bernicla)

The Dark-bellied Brent Goose, like the previous two species, has enjoyed a population increase during the period of this review but, unlike the others, the number wintering in Sussex by the mid 1960s was already rising from the re-establishment of a winter flock in Chichester Hbr in 1952/53 (de Potier 1996a). Figure DB shows how the population rapidly grew with an eight fold increase by 1984. The high population remained fairly static for a decade but the Figure DB suggest a decline has occurred in the last ten years. The pattern observed in Sussex shows a strong correlation with that demonstrated in the national context (Collier *et al* 2005).

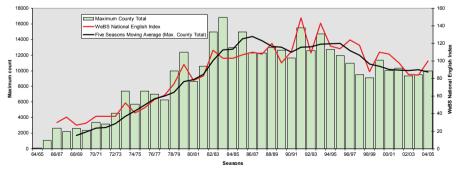


Figure DB. The maximum number and five year moving average of the maximum for Brent Geese recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Although small flocks of Brent Geese have been recorded at 31 sites, including occasional small parties at inland sites, the main wintering population is located in and around Chichester and Pagham Harbours. The largest flock encountered away from these harbours was 580 at Climping in February 1991. Table DB shows the numbers found at these two key sites.

Table DB. The five year means of maxima of peak counts of Brent Geese 1964-69 to 1999-2004.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak Counts
County total	1723	4170	7261	12666	13090	13412	10848	10111	16827, Jan 1984
Chichester Hbr	2096*	4085	6206	9524	10163	10967	9179	7973	12647, Jan 1994
Pagham Hbr	102	191	1076	2327	3035	3042	2271	2252	4219, Jan 1985

* indicates mean based on less than 5 years counts.

With the threshold for designation being 2200 birds both of these qualify as sites of international importance; indeed Chichester and Pagham Harbours are ranked fourth and tenth respectively in the United Kingdom (Collier *et al* 2005). With the national population estimated at 98,100 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 78,141 birds Sussex holds between 10.3 and 12.9% of the national wintering population.

Shelduck (Tadorna tadorna)

The status of Shelducks in Sussex was comprehensively surveyed in 1990-92, with particular reference to breeding as part of a national breeding survey (Yates & de Potier 1993). Shelducks breed mainly around Chichester and Pagham Harbours and the Rye Bay area but also in small numbers at a few favoured coastal and inland sites (de Potier, 1996b). Most adult birds make a moult migration, departing in June and July, probably to the Heligoland Bight along with most of the northwest European population. They return to Sussex from October onwards to wintering grounds which are, as for breeding, mainly the western harbours and Rye Bay.

Figure SU shows that wintering numbers can be very variable, possibly for weather related reasons, but demonstrates a clear, and statistically significant, decline of c.62% since the mid 1980's. Figure SU also shows that the English population index, although fluctuating, has not shown such a marked decline as in Sussex. Table 2 shows this to be one of the few species studied where the county maxima and English national index show only a weak, not significant, correlation.

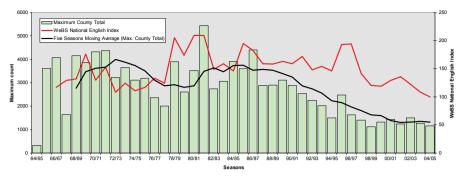


Figure SU. The maximum number and five year moving average of the maximum for Shelducks recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Although the species has been recorded at 45 different sites the numbers are usually small. Table SU shows the locations where 50 or more Shelducks have been recorded and demonstrates how important the western harbours and Rye Hbr are as wintering areas for this species.

Table SU. The five year me	ans of maxima of peak counts	of Shelducks 1964-69 to 1999-
2004.		

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County Total	2764	3887	2914	3474	3541	2563	1626	1351	5439, Jan 1982
Chichester Hbr	2926*	3289	2181	2828	2884	2022	1247	949	4552, Jan 1982
Pagham Hbr	527	746	710	653	666	452	286	293	1048, Jan 1987
Climping	0*	0*	1	15	6*	1	0	0	51, Dec 1983
Arundel WWT	nc	nc	0*	28	40	67	74	59	91, Jan 1998
Newhaven	nc	0*	5*	11	45	5	4	5	110, Jan 1987
Cuckmere Haven	13	20	35	33	30	18	21	21	56, Feb 1981
Pett Level	7*	3	10	14*	8	14	22	24	50, Jan 1997
Rye Hbr	15*	7	50*	69	117	105	36	27	184, Jan 1991
Scotney Court GP	nc	nc	nc	nc	10*	35*	19	28	52, Nov 1992

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

The current 1% international threshold number is 3000 whence no site in Sussex regularly meets this figure. However, Chichester Hbr and, occasionally, Pagham Hbr are important in the national context by exceeding the Great Britain threshold figure of 782. With the national population estimated at 78,200 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 56,973 birds Sussex holds between 1.7 and 2.4% of the national wintering population.

Wigeon (Anas penelope)

Kalaher (1996a) noted that Wigeon are a common winter visitor and that in periods of severe weather, such as January 1985 (when 14,714 were recorded) and January 1987, large influxes may occur, with the sea itself being used as a roosting site. As Figure WN shows, the Sussex wintering population maxima remained fairly constant from the late 1960s through to the early 1980s (as did the national population), but since then it has almost trebled, which is a faster rate of increase than for the national population, which over the same period doubled.

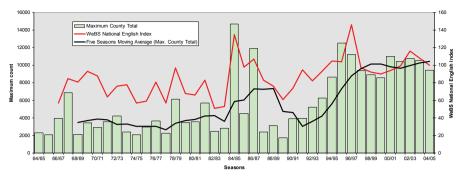


Figure WN. The maximum number and five year moving average of the maximum for Wigeon recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Wigeon are highly sociable, preferring shallow, fairly sheltered waters, often along the coast, with extensive tracts of tidal mud, sand, salt marsh or grassland offering sustenance and security of gatherings (Snow *et al* 1998). Large winter flocks are typical of this species. Whilst the major British sites for this species are along the coast, Sussex has a higher than usual number of important inland sites, with the Arun Valley being particularly prominent. Table WN demonstrates this by listing all sites with a five year mean of maxima exceeding 500 and peak counts greater than 1000 birds.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak Counts
County Total	3469	3300	3411	3606	7339	4209	10146	10266	14714,Jan 1985
Chichester Hbr	482*	717	580	985	1459	1196	1521	1663	2485, Jan 1987
Pagham Hbr	834	193	147	335	1939	989	1835	1458	4528, Jan 1987
Arun Valley	993	1044	483	356	688	1716	4780	4918	6093, Jan 2003
Barcombe Res	172*	647	67	46	97	15	25	3	1079, Jan 1970
Glynde Level	574	880	1064	758	287*	50	143*	99	1750, Feb 1976
Cuckmere Haven	164	42	157	183	748	846	1241	895	2020, Jan 1997
Arlington Res	nc	313*	992	1088	885	110	164	223	3200, Jan 1985
Pevensey Levels	nc	60*	118*	101	280*	70	435	599	1260, Dec 2001
Bewl Water	nc	nc	150*	215	670	452	378	352	1170, Jan 1987
Rye Hbr	728*	95	80*	68	600	119	245	457	2000, Jan 1985
Scotney Court GP	nc	nc	nc	nc	0*	192*	1602	794	3300, Mar 1996
na indiaataa na	a a constanting	the Fire	ام م م م ما	. * india		امممما م			an encate

Table WN. The five year means of maxima of peak counts of Wigeon 1964-69 to 1999-2004.

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

Indeed, whilst there has been a steady growth in Wigeon in most of the major sites across the county over the last 20 years (with the exception of Arlington Reservoir and Glynde levels, where numbers have declined since the late 1970s) the recent growth in Wigeon numbers has occurred primarily in the Arun Valley. Its peak *WeBS* count occurred as recently as 2003, and it is now a site of national importance, holding more than 1% (4060) of the British population. No doubt this growth is due to the cessation of wildfowling there together with the creation of the improved habitat at Pulborough Brooks *RSPB* reserve in the 1990s. As Figure WNa shows, of four species in the Arun Valley Special Protection Area (*SPA*), Wigeon is the one that has benefited most from the changes made there.

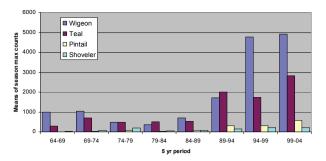


Figure WNa. Five year mean of winter maxima counts 1964-69 to 1999-2004, Arun Valley (Houghton to Pulborough), for Wigeon, Teal, Pintail and Shoveler.

During the period 1989–94 Sussex held about 1.4% of the British population (Kalaher, 1996a). Figure WN clearly shows that since 1990/91 the county population has increased at a much faster rate than the British population. With the national population estimated at 406,000 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 377,961 birds Sussex holds between 2.5 and 2.7% of the national wintering population. The closeness of these figures suggest most Wigeon, at both national and county level, are counted during the *WeBS*.

Gadwall (Anas strepera)

Shrubb (1979) noted that only about 25 birds had been recorded in the county up until 1938, and that between then and 1961 about 120 were seen, with no more than 17 in any one year. Kalaher (1996b) described the dramatic increase in Gadwall numbers since the 1960s, and this growth has continued, both nationally and at the county level, over the last 10 years.

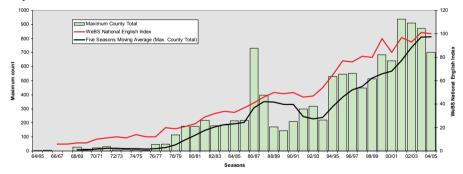


Figure GA. The maximum number and five year moving average of the maximum for Gadwall recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

In the last 25 years the population has increased fourfold, one of the highest increases of any waterbird in the county during this period. One sign of the scale of this increase is that up to 1993/94 only 3 sites had recorded 100 or more birds, whereas ten years later 6 sites had recorded more than 100 birds. The 12 locations where more than 50 birds have

been recorded are listed in Table GA. Gadwall show a marked preference for shallow, eutrophic, standing water, with plenty of cover on banks or islands, and they are averse to marine, brackish or turbulent waters (Snow *et al* 1998), although some of those recorded at Chichester and Pagham Harbours are found on brackish or saline water. They are now found in both large and small numbers throughout the county where such conditions exist, so that there has not only been a marked increase in the overall numbers of Gadwall in the last 40 years, but also a marked increase in their distribution across the county with 41 of the listed sites recording this species.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	7	17	45	187	347	238	518	809	938, Dec 2001
Chichester Hbr	0*	0	4	33	9	12	23	38	61, Nov 1982
Chichester GP	5	7	33*	20	28	37	169	367	569, Jan 2002
Swanbourne Lake	0	0	19	76	84	32	16	63	149 Jan 1987
Arundel WWT	nc	nc	0*	59	108	50	46	90	285 Jan 1988
Arun Valley	1	0	2	3	24	29	37	38	87, Mar 2002
Eastbourne Pk Lakes	nc	nc	nc	nc	nc	nc	45*	65	96, Feb 2003
Pevensey Levels	nc	0*	0*	4	17*	3	2	16	76, Mar 2000
Bewl Water	nc	nc	0*	20	116	57	142	139	230, Jan 1987
Darwell Res	0	0	2*	2	1	5	34	49	191, Jan 2005
Powdermill Res	0	0*	0*	1*	1	2	3*	13	54, Dec 2004
Pett Level	0*	0	1	2*	1	4	38	40	62, Oct 2004
Rye Hbr	7*	9	23*	1	17	38	89	81	135, Dec 1995

Table GA. The five year means of maxima of peak counts of Gadwall 1964-69 to 1999-2004.

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

Chichester GP, where the major increases in the county have been seen, is now a site of national importance (regularly exceeding the 171 threshold) and Bewl Water with a peak count of 230 in January 1987, 222 in December 1994 and 186 in February 2003 could yet become one. Indeed, it can be seen that the trend at most sites is upwards over the study period.

This increase in Gadwall numbers in Sussex mirrors the sustained national growth of the last forty years, which is particularly marked in central and southern England. In the last ten years the national *WeBS* population has doubled and similar population growth has been recorded across Europe (Collier *et al* 2005). With the national population estimated at 17,100 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 15,225 birds Sussex holds between 4.7 and 5.3% of the national wintering population.

Teal (Anas crecca).

Shrubb (1979) noted that there had been a 35-45 % decline in numbers of wintering Teal between 1955-64 and 1964-75 due to improved drainage of many extensive areas of wet grassland, its primary habitat. Kalaher (1996c) noted that by 1970 the wintering population rarely exceeded 4000, whereas Shrubb (1979) had noted that in 1960 and 1962 up to 3000 birds had been recorded at Pulborough and Amberley alone. However, since 1970 winter maxima have steadily increased, (except in the winters 1985/6 to 1991/2, when numbers dipped slightly), so that the mean maxima for 1999-2004 has grown to 6523. Figure T. clearly shows this growth in population and this, coupled with the figures in Table 2, shows a strong correlation with the English index.

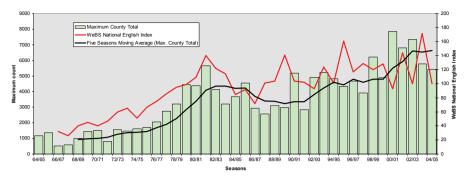


Figure T. The maximum number and five year moving average of the maximum for Teal recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Teal are usually well scattered in small groups over small, outlying pools and ponds, often forming part of larger water complexes, both fresh water and saline (Snow *et al* 1998). Table T below shows the major sites, but more than 250 birds have been recorded at another eight sites not shown on this table, and smaller numbers were found at another 39 sites as well, so they are well distributed across Sussex. They have increased across most of the major sites, although a decline has been recorded at Darwell Reservoir over the last 10 years. The wintering population between Offham and Houghton appears to have increasingly gone to the Amberley/Pulborough part of the Arun Valley or to Arundel WWT. Indeed the Arun Valley is the major site where increased numbers have occurred, and numbers there now exceed the numbers quoted by Shrubb from the early 1960s. Figure WNa above shows just how much Teal have benefited from the habitat and shooting changes made in the Arun Valley, albeit not quite to the extent that Wigeon have benefited. Numbers have also increased well at Pagham Hbr, no doubt helped by the ban in wildfowling in 1991.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	931	1360	2265	4365	3368	4228	4790	6523	7842, Feb 2001
Chichester Hbr	209*	371	1229	2392	1838	1332	1675	1638	3253, Dec 1981
Pagham Hbr	209	166	352	726	425	1020	1497	1310	2321, Dec 2004
Arundel WWT	nc	nc	298*	161	172	197	205	259	726, Dec 2002
Offham to Houghton	nc	nc	500*	354*	44	42	11	57	600, Jan 1980
Arun Valley	283	694	486	508	525	1995	1730	2811	4254, Dec 2000
Glynde Level	274	222	229	348	175*	128	251*	164	480, Dec 1983
Pevensey Levels	nc	65*	116*	103	48*	173	249	324	500,Feb 2001
Darwell Res	66	38	80*	107	198	244	29	60	509, Jan 1986

Table T. The five year means of maxima of peak counts of Teal 1964-69 to 1999-2004. All sites where maximum >500 or any mean of maxima >300 birds.

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

The GB threshold is 1920, so the Arun Valley is a site of national importance and Chichester Hbr, which used to be a site of national importance is again becoming significant, with a peak count of 2426 in January 2002.

The increase in Teal numbers in Sussex is mirrored by an increase in England across the same period, (31% over the last 20 years), although there are quite noticeable year on year fluctuations in the English numbers. With the national population estimated at

192,000 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 160,633 birds Sussex holds between 3.4 and 4.1% of the national wintering population.

Mallard (Anas platyrhynchos)

Mallard is a very widely distributed bird nationally, so much so that in the period 1999/00 to 2003/04 the national mean of maximum *WeBS* counts only recorded 40% of the estimated national wintering population, one of the lowest coverages of any of the species in this paper.

In Sussex Mallard is also a very widely distributed wintering and resident species which has been recorded at all, bar two, of the locations listed in Table 1. As Kalaher (1996d) noted, several important sites for this species were not included in *WeBS* counts until the 1970s – thus *WeBS* data does not include such records as 1000 at Rye Hbr 1969/70; 700 at Barcombe Res 1970/71 or 500 at Weir Wood Res 1969/70, and it is probable that some other sites with 100+ birds were not regularly counted. Therefore the county population shown in Figure MA below should be regarded as too low up to 1971/72. The regression coefficients in Table 2 suggest that most of the population increase shown in Figure MA is attributable to counts from other than the "key" sites and, as this is such a widespread species, may merely reflect the number of sites counted. Shrubb (1979) wrote that the Sussex population was regularly supported by the release of hand-reared birds by wildfowlers and that the wintering population appeared to be stable in the period 1964-75. Figure MA and the values in Table 2 show a poor correlation between the county figures and English index.

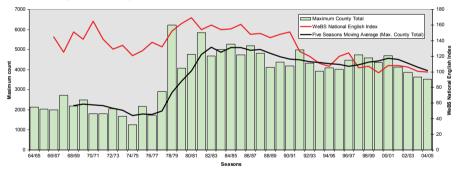


Figure MA. The maximum number and five year moving average of the maximum for Mallard recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Table MA includes all sites with a maximum count greater than 500 birds but a further 27 sites have recorded maximum counts between 100-500 birds at some time. It can be seen that from 1974-79 populations have fallen at most sites, with the exception of the Arun Valley and Chichester GP, and that the declines at Arlington and Darwell Reservoirs have been the most marked.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	2211	1971	2853	4867	4820	4354	4381	4139	6225, Jan 1979
Chichester Hbr	165*	170	495	540	607	516	349	419	1075, Jan 1976
Chichester GP	453	331	253*	233	159	153	219	286	655, Dec 1964
Arundel WWT	nc	nc	385*	655	708	792	986	466	1116, Nov 1995
Arun Valley*	151	176	147	84	148	370	657	509	914, Sep 1995
Weir Wood Res	451	215	198	133	158	118	105	76	765, Dec 1961†
Barcombe Res	130*	199	201	131	172	115	113	105	620, Dec 1978
Glynde Level	306	110	157	175	150*	184	374*	201	650, Jan 1962 [†]
Arlington Res	nc	222*	230	576	543	319	208	103	1000, Jan 1985
Bewl Water	nc	nc	610*	681	625	446	661	605	1016, Sep 1983
Darwell Res	120	124	362*	429	346	334	110	102	711, Feb 1981
Pett Level	257*	22	101	196*	110	132	161	112	500, Jan 1967
Rye Hbr	367*	370	159*	343	470	321	288	289	1000, Dec 1969

Table MA. The five year means of maxima of peak counts of Mallard 1964-69 to 1999-2004.

nc - indicates no counts in the 5 year period;* indicates mean based on less than 5 years counts.

[†] denotes peak count outside study period.

WeBS data shows a steady decline in the county's winter population of 15% since the mid-1980s. By contrast the overall decline in England has been 35% over the same period, so it would appear that the expansion and improvement of sites such as the Arun Valley and Chichester GP have helped lessen the decline of this species in Sussex. With the national population estimated at 352,000 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 141,450 birds Sussex holds between 1.2 and 2.9% of the national wintering population.

Pintail (Anas acuta)

Shrubb (1979) noted that wintering Pintail numbers were little altered between 1947 and 1974/5 although by the 1970's Chichester and Pagham Harbours were the main wintering sites and that a decline was evident in the Amberley/Pulborough marshes, where flocks of more than 100 were rarely seen by then. He also noted that only rarely did the wintering population in the county exceed 400 by the 1970's. Kalaher (1996e) noted that wintering populations had started to increase in the late 1980's (a county population of 886 in January 1986 being the highest ever at that date) and that this increasing trend continued in the 1990's, especially in the Arun Valley, following the introduction of favourable management of water levels at Pulborough Brooks.

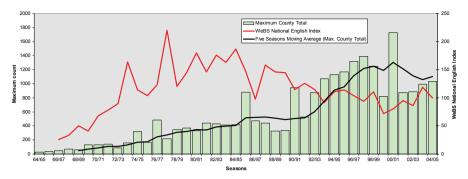


Figure PT. The maximum number and five year moving average of the maximum for Pintail recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Wintering Pintail prefer sheltered coastal habitats, especially on estuaries, floodlands and nearby inland waters (Snow *et al* 1998). They are quite sensitive to the depth of water (the peak count in the Arun Valley occurred in February 2001, when the R. Arun burst its banks), and can be quite mobile as a result. In Sussex Pintail occur primarily in Chichester and Pagham Harbours and in the Arun Valley, and few Pintail winter in the east of the county. It has never been recorded at 32 *WeBS* sites including several which have been counted for a long time, and 19 other locations have maximum counts of less than 10 birds.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	48	131	308	397	508	751	1253	1061	1729, Feb 2001
Chichester Hbr	29	102	154	163	125	211	216	161	321, Jan 1992
Pagham Hbr	3	49	136	248	345	512	915	427	1210, Dec 1996
Arun Valley*	9	29	69	31	61	312	320	586	1154, Feb 2001
Adur Levels	nc	nc	20*	9*	3*	0*	13	40	180, Feb 2000

Table PT The five year means of maxima of peak counts of Pintail 1964-69 to 1999-2004.

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

It will be noted that there has been a growth in Pintail at Pagham Hbr, helped by the cessation of wildfowling there in 1991, and that numbers have also grown in the Arun Valley, (see Figure WNa above), helped by the improvements in habitat. Because of these localised circumstances there has been an upward trend in Pintail populations in the county (an almost 10 fold increase in the means of maxima between 1969-74 and 1994-99) whereas the English Index has only moved from 60 to 102 during the same period. However, over the last 5 years winter numbers in Sussex have declined.

Collier *et al* (2005) listed Pagham Hbr and the Arun Valley as sites of national importance, as their most recent counts exceed the 279 national threshold but are just below the 600 international threshold.

With the national population estimated at 27,900 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 24,048 birds, Sussex holds between 3.8 and 4.4% of the national wintering population and 1.8% of the NW Europe population (Snow *et al* 1998).

Shoveler (Anas clypeata)

Shrubb (1979) noted that wintering numbers of Shoveler declined by about 30% between 1947 and 1973, and that, like Teal, Shoveler had undoubtedly suffered from the improved drainage of many inland marshes such that by the 1970s the winter population did not often exceed 200 – 400 birds. However, he also noted that 400 were recorded in the Amberley/ Pulborough Brooks alone in 1974/75, when they were flooded in what was an exceptionally wet winter. Kalaher (1996f) noted that in Sussex the peak wintering numbers usually occur in December/January unlike the national peak, which occured in October, with birds then moving south and west to France, the Iberian peninsula or Ireland.

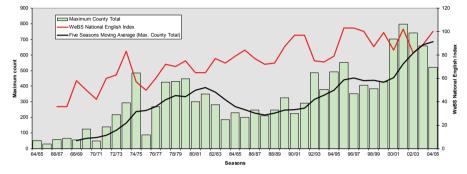


Figure SV. The maximum number and five year moving average of the maximum for Shoveler recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Shoveler require exceptionally shallow, but productive waters where their specialised bills can find plenty of plankton to filter. They therefore need waters free of overhanging trees, but which are often bordered by lush grassland (Snow *et al* 1998). Because of these quite specific needs, Shoveler are not widely distributed in Sussex and 31 *WeBS* locations have never recorded this species whilst a further 19 have a maximum count in single figures.

Because some important sites were not counted before the mid-1970s in Sussex, the trend lines for Shoveler in Figure SV above are really only meaningful from 1974/75 onwards (which for the reasons mentioned above was an abnormal year). As Table SV below shows between 1974-79 and 1999-2004 the 5 year mean maxima for the county has increased from 339 to 665, which means it has nearly doubled.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	52	164	339	313	227	341	437	665	798, Dec 2001
Chichester GP	18	80	183*	120	32	39	52	230	325, Feb 2004
Arun Valley*	13	79	181	46	83	147	217	228	400, Feb 1975
Arlington Res	nc	8*	40	35	29	83	48	12	176, Dec 1992
Eastbourne Pk Lakes	nc	nc	nc	nc	nc	nc	43*	73	172, Dec 2000
Pevensey Levels	nc	15*	10*	26	25*	12	22	38	115, Feb 2004
Pannel Sewer	nc	nc	nc	nc	nc	69*	33*	nc	150, Sep 1991
Rye Hbr	3*	17	26*	36	45	81	120	172	271, Nov 2001

Table SV. The five year means of maxima of peak counts of Shoveler 1964-69 to 1999-2004.

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

The increase in Shoveler numbers is most pronounced in the Arun Valley, Eastbourne Lakes and at Rye Hbr. All these locations have had improvements made to their habitats over the last 15 years which have clearly benefited Shoveler, and help explain why the wintering population in Sussex has doubled, whilst the English population has only increased at half this rate. New excavations at Chichester GP in the last 5 years may also have benefited this species.

The 1% national threshold for this species is 148, and the Arun Valley, Chichester GP and Rye Hbr are all recognised as sites of national importance. With the national population estimated at 14,800 and the national mean of maximum counts for the seasons 1999/00 to 2003/04 being 11,187 birds Sussex now holds between 4.5 and 5.9% of the national wintering population.

In the past few years the national population has started to decline. 2004/05 *WeBS* data suggests that Sussex may too be starting to see a decline.

Pochard (Aythya ferina)

This species is predominantly a bottom-feeding diving duck, normally requiring several hectares of open water uncluttered with floating vegetation but prolific in submerged plant and animal food. It is generally found, therefore, on reservoirs, large lakes and flooded gravel pits where it is highly gregarious outside the breeding season.

Kalaher (1996g) noted that the county total may reach about 1000 in mid-winter and that in cold winters this figure could be exceeded. Figure PO demonstrates this and also shows that the frequency with which the county total exceeds 1000 has increased in recent years and has become the norm since 1980/81. The notable very low count in 1975/76, mirrored in both Figures 1 and TU, reflects a season when several sites important for diving ducks were not counted because of Foot and Mouth Disease. Figure PO shows a small but significant increase in the county population over the study period, but as Table 2 shows this is mainly due to the addition of new sites; numbers at key sites have very slightly declined over the study period. The figure also shows the English index to be fluctuating independently of the Sussex counts and this is confirmed with very low correlation coefficients shown in Table 2.

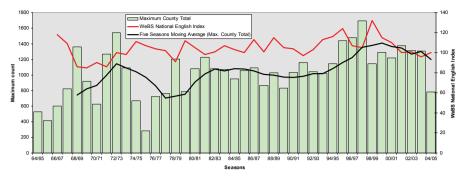


Figure PO. The maximum number and five year moving average of the maximum for Pochard recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Pochards have been recorded at 56 of the sites listed in Table 1 and at 17 of these peak counts have exceeded 100. However only seven sites have recorded maxima in excess of 250 and these are shown in Table PO. The Arun Valley occurs in the table by virtue of an unusually high number recorded during a period of extensive flooding in late 2000. It is interesting to note numbers have declined at several of the reservoirs including Weir Wood, Arlington and Bewl Water, whilst at other locations, particularly those formed mainly from flooded gravel pits, the numbers have been maintained or, as at Scotney Court GP, have risen. Table PO also confirms the mid-winter peak in numbers.

Table PO.	The five year	means of	^c maxima	of peak	counts	of Pochard	1964-69 to
<i>1999-2004</i> .							

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	746	1090	725	1050	999	1018	1380	1300	1693, Jan 1998
Chichester GP	357	378	273*	279	213	163	296	340	530, Jan 1962†
Arundel WWT	nc	nc	105*	311	379	457	386	235	615, Jan 1997
Arun Valley*	12	4	1	1	19	31	27	68	254, Dec 2000
Weir Wood Res	81	102	135	99	78	56	69	38	330, Dec 1977
Barcombe Res	78*	38	47	20	43	67	146	65	286, Dec 1996
Arlington Res	nc	100*	35	71	25	45	75	6	285, Jan 1997
Bewl Water	nc	nc	380*	138	135	77	70	68	380, Dec 1978
Rye Hbr	277*	385	196*	171	199	217	138	210	600, Dec 1968
Scotney Court GP	nc	nc	nc	nc	25*	102*	197	310	500, Dec 2003

nc – indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts. † denotes peak count outside study period.

Collier *et al* (2005) quote a 1% national threshold level of 595 and only two county sites have ever exceeded this figure. However, the numbers at Arundel WWT in Jan 1997 may have benefited from the presence of a feral flock attracting wild birds. The Dungeness GP complex, although largely in Kent and which includes Scotney Court GP (partly in Sussex), is cited amongst 14 locations of national importance. With the national population estimated at 59,500 and the national mean of maxima counts for the seasons 1999/00 to 2003/04 being 31,998 birds Sussex holds between 2.2 and 4.1% of the national wintering population.

Tufted Duck (Aythya fuligula)

Tufted Duck, like the previous species, is a diving duck which, in winter, occurs most frequently on reservoirs, flooded gravel pits, lakes and large ponds throughout much of the county, feeding mainly on molluscs, insect larvae and various plants seeds.

Kalaher (1996h) noted that post-breeding moult gatherings are supplemented by the arrival of wintering birds from mid-October, usually peaking in numbers in January and February. Table TU shows that the peak counts occur in a range of winter months, but mainly in January, and that numbers are numerically similar to those for Pochard. Figure TU shows low counts in similar winters to Pochard (Figure PO) and similar key sites were not counted in 1975/76. There was a significant step change in county totals in the 1970s, coincident with the start of counts at Arundel WWT and Bewl Water, and that during the 29 years since then there has been a steady growth in numbers. The regression coefficients in Table 2 suggest that the largest portion of this population rise has come from waters, such as those mentioned above, which have not been counted consistently from the mid-1960s. Figure TU also suggests that the county totals since c.1975/76 have followed the English index but the coefficients for the entire period only show a modest correlation.

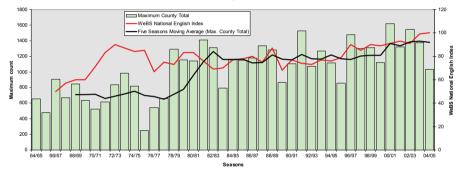


Figure TU. The maximum number and five year moving average of the maximum for Tufted Duck recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

This species has been recorded at 61 locations of which 15 have supported peak counts exceeding 100 birds. These are shown in Table TU which also includes any site with a five year mean of maxima greater than 75 birds. It is interesting to note that, like Pochard, there have been declines on some of the long established waters such as Warnham LNR, Weir Wood, Darwell and Powdermill Reservoirs whilst numbers on the flooded gravel pits have been maintained or grown. The table shows the importance of the Chichester GP complex in a county context and also shows that the peak counts occur in a range of winter months but mainly in January.

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	711	718	710	1160	1220	1166	1213	1396	1619, Jan 2001
Chichester Hbr	65*	54	68	17	37	25	25	48	195, Feb 1969
Chichester GP	355	347	355*	298	319	253	485	506	652, Jan 1998
Burton & Chingford Ponds	51	54*	64*	77	41	68*	20	23	119, Jan 1980
Swanbourne Lake	13*	33	53	110	93	201	131*	127	243, Dec 1993
Arundel WWT	nc	nc	103*	221	358	321	243	134	444, Jan 1987
Warnham LNR	43	10	17	17	12	8	1	1	180,Jan 1967
Weir Wood Res	99	95	94	90	63	38	7	13	241, Nov 1962
Barcombe Res	45*	55	61	48	75	52	38	33	99, Feb 1985
Arlington Res	nc	32*	29	28	12	8	34	2	134, Jan 1997
Cuckmere Haven	0	6	14	51	30	9	6	0	101, Jan 1982
Eastbourne Pk Lakes	nc	nc	nc	nc	nc	nc	53*	75	89, Mar 2000
Pevensey Levels	nc	29*	46*	78	80*	2	6	3	130, Nov 1983
Bewl Water	nc	nc	220*	153	188	163	140	158	288, Jan 1987
Darwell Res	68	65	121*	40	18	32	20	19	188, Jan 1975
Powdermill Res	75	28*	35*	23*	31	34	38*	18	100, Jan 1969
Rye Hbr	40*	98	141*	137	127	158	150	204	249, Mar 2004
Scotney Court GP	nc	nc	nc	nc	75*	20*	75	150	250, Sep 2002

Table TU. The five year means of maxima of peak counts of Tufted Duck 1964-69 to 1999-2004

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

The 1% national threshold value is 901 thus no site in Sussex qualifies as one of national importance. With the national population estimated at 90,100 and the national mean of maxima counts for the seasons 1999/00 to 2003/04 being 54,657 birds Sussex holds between 1.5 and 2.6% of the national wintering population.

Goldeneye (Bucephala clangula)

Curson (1996) observed that Goldeneye winter regularly at just five sites in the county and, with the exception of Chichester Hbr, in small numbers. He also noted they occur in greater numbers in harsh winters and showed that shore based counts, such as *WeBS*, potentially underestimate this species. Figure GN shows large fluctuations in the county maxima with the 41 year regression coefficient shown in Table 2 revealing, as noted by Curson (1996), no change in population. Figure GN does suggest however that there was a small rise in numbers up to the mid-1980s with a subsequent decline, approaching 50% over the last 20 years. This is supported by a regression analysis where the comparable figures pre 1986/87 ($b_{all} = 4.7$ and $b_{key} = 4.1$) and post 1986/87 ($b_{all} = -3.1$ and $b_{key} = -2.8$) reveal statistically significant (p=0.10) increases and declines. Figure GN shows this recent decline is in contrast to the English index. This species is more abundant in more northerly latitudes and, as noted earlier, seen more frequently in harsh winters, thus the reduced recent numbers may reflect a succession of milder winters.

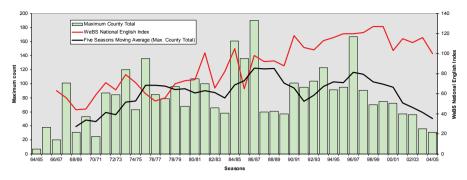


Figure GN. The maximum number and five year moving average of the maximum for Goldeneye recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Forty one of the sites listed in Table 1 have recorded this species but only six have recorded maxima greater than 10 birds and these are shown in Table GN. The importance of Chichester Hbr in the county context is clearly shown and all sites have recorded a peak in mid to late winter.

Table GN. The five year means of maxima of peak counts of Goldeneye 1964-69 to 1999-2004

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	39	74	92	80	120	96	103	63	190, Jan 1987
Chichester Hbr	35*	66	79	64	88	77	74	41	139, Jan 1987
Pagham Hbr	3	3	5	3	14	11	16	9	31, Jan 1984
Weir Wood Res	5	2	2	4	8	5	2	0	11, Mar 1985
Langney	nc	nc	nc	nc	nc	0	4*	0*	11, Jan 1997
Bewl Water	nc	nc	15*	5	8	5	4	3	18, Feb 1986
Rye Hbr	7*	3	5*	6	7	5	4	6	14, Jan 1968

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

The 1% national threshold value is 249 thus no sites are in Sussex are designated for this species. The national mean of maxima counts for the seasons 1999/00 to 2003/04 was 14,003 whence Sussex supports a mere 0.3 to 0.4% of the national total.

Red-breasted Merganser (Mergus serrator)

Wilson (1996) noted that this, mainly marine, species was most frequently recorded in Chichester and Pagham Harbours and observed that the numbers were increasing. He also noted that winter flocks were regularly found off the West Sussex coast between Climping and Shoreham-by-Sea but seldom occurred in large numbers in East Sussex. Figure RM shows a steady increase in the numbers recorded in the *WeBS*; an increase which shows a strong correlation with the English index. The population growth has been in the order of 93% over the past 25 years.

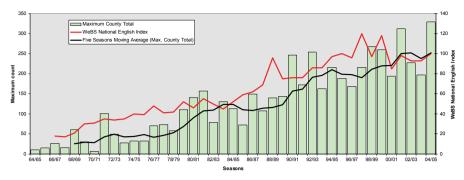


Figure RM. The maximum number and five year moving average of the maximum for Redbreasted Merganser recorded in Sussex compared with the WeBS English index in each season, 1964/65 to 2004/05.

Although few sites support large numbers this species has been recorded at 28 locations including 12 inland sites. Table RM lists the three locations where peak counts have exceeded 100 birds and show these to be in the same areas described by Wilson (1996) and demonstrate a continuing growth in numbers. Also shown at the bottom of Table RM are the same data derived from peak winter counts recorded at Worthing. Here too an increase has been observed and undoubtedly the birds seen at Worthing and Goring are the same wintering flock. The difference in numbers highlights the difficulty in using set month counts to monitor species which range over a large area of coast or may be difficult to observe in poor weather. Nationally only 36% of the estimated national population is counted by the *WeBS*; the lowest percentage of the species discussed in this paper and emphasising the difficulty in counting sea-ducks as part of the *WeBS*.

Table RM. The five year means of maxima of peak counts of Red-breasted Merganser 1964-69 to 1999-2004

	64-69	69-74	74-79	79-84	84-89	89-94	94-99	99-04	Peak counts
County total	26	43	53	123	114	196	211	238	329, Mar 2005
Chichester Hbr	20*	37	41	67	95	130	136	185	212, Nov 1999
Pagham Hbr	11	7	10	30	25	71	80	30	145, Feb 1997
Goring	0*	0*	10*	28	18*	31*	33	55	186, Dec 2001
Worthing	nc	nc	39*	30	43	75	95	183	340, Nov 2005

nc - indicates no counts in the 5 year period; * indicates mean based on less than 5 years counts.

Collier *et al* (2005) lists 19 sites in Great Britain which exceed the 1% national threshold value of 98; Chichester Hbr, with the eighth highest numbers in the country, is therefore a site of national importance. The growth of the wintering flock off Worthing and Goring suggest this too should be equally considered. With the national population estimated at 9800 and the national mean of maxima counts for the seasons 1999/00 to 2003/04 being 3,574 birds Sussex supports between 2.4 and 6.7% of the national total.

Summary and Conclusion

Over the past 40 years the overall picture for wintering waterbird populations in Sussex has been very positive. With the exception of two species the populations of all the species discussed in this paper have increased over the four decades of the study period. The biggest percentage growths have been in the populations of naturalised Greylag Goose and Gadwall, which have grown from being very scarce, with less than 10 recorded per annum in the mid-1960s, to fairly common, with over 800 a year now. Canada Goose and Red-breasted Merganser have also done well, with a ten-fold increase in the former's and a five-fold increase in the latter's winter populations, whilst the populations of Mute Swan, Brent Goose, Wigeon, Teal, Pintail and Shoveler have all more than doubled in numbers during the study period. Overall growth has also been seen in the populations of Bewick's Swan, Mallard, Pochard and Tufted Duck. The only species of those studied which has shown a decline in population is Shelduck, whilst the Goldeneye population is similar to what it was in the late-1960s.

In comparing what has happened in Sussex to what has happened in England overall, there is again a favourable picture. Thus the increases in the wintering Sussex populations of Mute Swan, Canada Goose, Brent Goose, Wigeon, Mallard, Pintail, Shoveler and Tufted Duck, are greater than for the English population increases over the last four decades. Moreover, the rate of increase of Gadwall, Teal, Pochard and Red-breasted Merganser in Sussex match the rates of increase in England over the study period. Only Greylag Goose has shown a slower rate of growth than the English population.

However, in three species studied, the Sussex populations have fared worse than the English populations. Thus the English population of Shelduck, after a period of growth, has fallen back to the levels recorded in the 1960s, whereas the Sussex population has halved over the same period. Whilst the English population of Goldeneye has doubled over the study period, in Sussex, after a period of growth, it is back at the levels seen in the late 1960s, following a particularly sharp decline over the last 5 years. Bewick's Swan numbers, in both England and Sussex, rose to a peak in the mid-1980s and the Sussex population has subsequently reduced notably whereas the English population has declined only slightly. Moreover, it is not just Bewick's Swan, Shelduck and Goldeneye that have declined in Sussex in recent years, as three of the other species, Brent Goose, Mallard and Pintail, although having shown an overall growth over the four decades, have actually declined in the last 5 to 10 years.

In seeking to understand why the overall picture in Sussex is better than the not unfavourable picture for waterbirds in England the biggest factor that is apparent is the extent of the improvement and expansion that has occurred in Sussex's water bodies over the last four decades. As noted by Corrigan (1996), four reservoirs opened in Sussex in the study period, namely Barcombe (1964), Arlington (1971), Bewl Water (1975) (formerly known as Bewl Bridge) and Ardingly (1978), creating a total of 461 ha of new standing water. The establishment of the WWT reserve at Arundel (in 1976), the creation of SWT reserves at Waltham and Amberley Wildbrooks and favourable changes in water level control following the creation of the Pulborough Brooks Reserve in 1989, has meant that the Arun Valley has been restored as a major Sussex location for wintering waterbirds. The creation of Shinewater, Broadwater, Lottbridge and West Langney Lakes at Eastbourne in the 1980s and 1990s (albeit offset by the loss of the Crumbles and the pits that were developed into Sovereign Hbr) has also added new water bodies. The creation of Rye Hbr LNR in 1970, the erection of its electric fence in 1980 (limiting disturbance), the creation of SWT's Castle Water Reserve in 1992, the significant reduction in wildfowling

from the 1990s and the new excavations at Castle Water in 2002, have all helped Rye Hbr to become another major Sussex location for wintering waterbirds.

Moreover Sussex's wintering waterbirds have benefited not just because of an increase in the area of water available, but also because so much of it is now sympathetically managed for birds, particularly at the major sites of Chichester Hbr, Pagham Hbr, the Arun Valley, Bewl Water, and the East Sussex portion of the Dungeness to Pett Level *SPA* which includes Rye Hbr. The cessation of wildfowling at Pulborough Brooks in 1989 and at Pagham Hbr in 1991, has also benefited wintering waterbirds at these sites but is not necessarily an adverse factor elsewhere.

However, whilst there have been welcome improvements in the size and quality of some sites one cannot ignore that there has also been a growth in their human use. In Chichester Hbr more use is made of boats in the winter than 40 years ago, Pagham Hbr and Chichester GP now have major holiday home sites on their banks; and many more people fish, walk their dogs and generally enjoy the facilities at these locations and the major inland reservoirs.

Two other factors, which have affected all of Europe, have also left their mark on Sussex over the study period, namely the trend towards milder winters and changes in agricultural practice. Whilst it is not the intent of this paper to explore in depth the impact of these changes on the populations of Sussex's wintering waterbirds, some brief mention of their impact should be made.

Milder winters are thought to be one factor why the numbers of Bewick's Swans, a species which in Sussex is near the southwestern edge of its winter range, is now declining in the county. Furthermore Cranswick *et al* (2005) noted that satellite populations such as those in the Arun Valley have declined in recent years whilst the core English winter population in the Ouse and Nene Washes has remained fairly stable. Goldeneye is another species near the southwestern edge of its winter range in Sussex, so milder winters may well be a factor affecting the numbers of this species occurring in Sussex. Indeed Cranswick *et al* (2005) suggest that the Baltic is an important staging post for Goldeneye migrating from their Fenno-Scandinavian breeding grounds, and that with milder winters in the Baltic fewer birds may then continue their journey to Great Britain.

The impact of another weather factor, the driest spell in south-east England for many years in the winters of 2004/05 and 2005/06, is not yet fully apparent, but early evidence suggests that wintering waterbird numbers may be being affected. Certainly the present lower than average levels of rain combined with ever-growing demands for water (spurred on by new house building) cause concern for the future health of some of Sussex's waterbodies and wetlands.

The other pan-European factor that is apparent over the study period is changes in agriculture. Thus Snow *et al* (1998) noted that range expansion of Gadwall in the UK, Low Countries, Scandanavia, Latvia and Estonia, has apparently been encouraged by an increase in eutrophic (i.e nutritionally rich) waters. This is almost certainly caused by changes in agricultural practices over the study period. Changes in the nutritional state of the water may also have influenced the trend in Shelduck numbers.

So what of the future? Whilst climate change will doubtless affect national and international population trends for wintering waterbirds (and therefore affect Sussex too), the good news in Sussex is that so many of our major water bodies are now being proactively managed for birds. Future projects like those planned for the Lewes to Newhaven stretch of the Ouse Valley, the Cuckmere Estuary and the Sussex portion of

Scotney Court GP clearly have the potential to improve these sites for wintering waterbirds.

Acknowledgements.

The preparation of this paper would have been impossible without the help of many people. The authors express thanks to JES Cooper, M Mason and BRGilmore who have computerised past and present *WeBS* counts. Thanks are extended to A de Potier, CD Lowmass and AJ Musgrove who have kindly commented on the draft and provided constructive advice. The BTO have provided extensive information used in this paper and in particular we thank MP Collier and AJ Musgrove. The organisation of such an extensive and long running survey, even at a county level, is vital and we therefore acknowledge those mentioned in the introductory section. Finally we thank the innumerable observers for their time and effort to undertake the 8613 counts over the past four decades used in this paper.

References.

Collier, M.P. Banks, A.N., Austin, G.E., Girling, T., Hearn, R.D. & Musgrave, A.J. 2005. *The Wetland Bird Survey 2003/04: Wildfowl and Wader Counts.* BTO/WWT/RSPB/JNCC, Thetford.

Corrigan, C. 1996. Wetlands. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 39-46.

Cranswick, P.A., Waters, R.J., Evans, J. & Pollitt, M.S. 1995. *The Wetland Bird Survey* 1993-94: Wildfowl and Wader Counts. BTO/WWT/RSPB/JNCC, Slimbridge.

Cranswick, P.A., Worden, J., Ward, R.M., Rowell, H.E., Hall, C., Musgrove, A.J., Hearn, R.D., Holloway, S.J., Banks, A.N., Austin, G.E., Griffin, L.R., Hughes, B., Kershaw, M., O'Connell, M.J., Pollitt, M.S., Rees, E.C. &Smith, L.E. 2005. *The Wetland Bird Survey 2001-2003: Wildfowl and Wader Counts.* BTO/WWT/RSPB/JNCC, Slimbridge.

Curson, J. 1996. Goldeneye. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 180-181.

de Potier, A. 1996a. Brent Goose. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 146-149.

de Potier, A. 1996b. Shelduck. In James, P.J. (Ed.) *Birds of Sussex* : Sussex Ornithological Society. 150-152.

Fowler, J. & Cohen, L. Statistics for Ornithologists BTO Guide 22. British Trust for Ornithology.

Hughes, S.W.M. 1987. Feral Greylag Geese in Sussex. The Sussex Bird Report 39:91-96.

Hughes, S.W.M. 1991. The Little Grebe in Sussex. Part 11 – Non-breeding Distribution and Status, 1966-1989. *The Sussex Bird Report* 43:78-89.

Hughes, S.W.M. 1991b. The 1990 Mute Swan census in Sussex. *The Sussex Bird Report* 43:91-96.

Hughes, S.W.M. 1992. The Changed Distribution and Status of Bewick's Swan in Sussex. *The Sussex Bird Report* 44:83-92.

Hughes, S.W.M. & Watson, A.B 1984. Censuses of the Mute Swan in Sussex in 1978 and 1983. *The Sussex Bird Report* 36:69-73.

Hughes, S.W.M. & Watson, A.B 1986. The Distribution, Status and movements of Sussex Canada Geese. *The Sussex Bird Report* 38:85-94.

James, P. 1996. Birds of Sussex. Sussex Ornithological Society.

James, P. 1996a. Greylag Goose. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 140-142.

James, P. 1996b. Canada Goose. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 142-145.

Kalaher, M. 1996a. Wigeon. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 154-155.

Kalaher, M. 1996b. Gadwall. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 156-157.

Kalaher, M. 1996c. Teal. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 158-159.

Kalaher, M. 1996d. Mallard. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 160-161.

Kalaher, M. 1996e. Pintail. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 161-163.

Kalaher, M. 1996f. Shoveler. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 165-166.

Kalaher, M. 1996g. Pochard. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 167-169.

Kalaher, M. 1996h. Tufted Duck. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 171-172.

Mason, M. 1996a. Mute Swan. In James P. (Ed) *Birds of Sussex*: Sussex Ornithological Society. 132-133.

Mason, M. 1996b. Bewick's Swan. In James P. (Ed) *Birds of Sussex* : Sussex Ornithological Society. 133-136.

Musgrove, A.J., Pollitt, M.S., Hall, C., Hearn, R.D., Holloway, S.J., Marshall, P.E., Robinson, J.A., & Cranswick, P.A. 2001. *The Wetland Bird Survey 1999-2000: Wildfowl and Wader Counts.* BTO/WWT/RSPB/JNCC, Slimbridge.

Pollitt, M.S., Hall, C., Holloway, S.J., Hearn, R.D., Marshall, P.E., Musgrove, A.J., Robinson, J.A., & Cranswick, P.A. 2003. *The Wetland Bird Survey 2000-2001: Wildfowl and Wader Counts.* BTO/WWT/RSPB/JNCC, Slimbridge.

Prater, A.J. 1981. Estuary Birds of Britain and Ireland. T & AD Poyser, Carlton.

Prater, A.J. 1987. Coastal Wetlands and Waders in Sussex. *Birds in Sussex 1962-1987*. Sussex Ornithological Society.

Shrubb, M. 1965. Report on Wader Counts. The Sussex Bird Report 17:41-44.

Shrubb, M. 1979. The Birds of Sussex, Their Present Status. Phillimore, Chichester.

Snow, D.W., Perrins, C.M., Gillmor, R., Hillocat, B., Roselaar, C.S., Vincent, D., Wallace, D.I.M. & Wilson, M.G. 1998. *The Birds of the Western Palearctic, Concise Edition*. Oxford University Press.

Wilson, T.J. 1996. Red-breasted Merganser. In James P. (Ed) *Birds of Sussex*: Sussex Ornithological Society. 183-184.

Yates, B.J. & de Potier, A. 1993. Shelduck breeding survey in Sussex (1990-92). Sussex Bird Report 46:98-102.

UNUSUAL RECORDS

All records of the unusual species listed below are required to be considered by the Records Committee and it may be assumed that those published in the Annual Bird Report have been fully authenticated. Such records should be submitted on (or in the same format as) the special forms available from the Recorder or the SOS website and should be either posted or e-mailed to the Recorder. Reports of national rarities as defined by *British Birds Rarities Committee* should be submitted to the Recorder (not direct to *BBRC*) either in the same format as above, or on forms available from the Secretary of the *BBRC*.

Photographic submissions will be accepted only when they are accompanied by full details of the sighting (location, time, observers, etc as on page 1 of the SOS record form) and the identification can be assessed by the relevant Committee on the details supplied. All records submitted in whatever format may require additional details to be supplied by the observer to the Recorder and/or the Committee.

Whooper Swan	Temmimck's Stint	Marsh Warbler
Bean Goose (both races)	White-rumped Sandpiper	Icterine Warbler
Pink-footed Goose	Pectoral Sandpiper	Melodious Warbler
American Wigeon	Buff-breasted Sandpiper	Barred Warbler
Green-winged Teal	Grey Phalarope	Subalpine Warbler
Ring-necked Duck	Red-necked Phalarope	Greenish Warbler
Ferruginous Duck	Pomarine Skua (except in spring)	Pallas's Warbler
Surf Scoter	Long-tailed Skua	Yellow-browed Warbler
All Pheasants (except Common)	Sabine's Gull	Radde's Warbler
Great Northern Diver	Ring-billed Gull	Dusky Warbler
All shearwaters (except Manx)	Iceland Gull	Red-breasted Flycatcher
All petrels (except Fulmar)	Glaucous Gull	Crested Tit
Great White Egret	White-winged Black Tern	Golden Oriole
Purple Heron	Roseate Tern	Red-backed Shrike
White Stork	Black Guillemot	Woodchat Shrike
Honey-buzzard	Little Auk	Chough
Black Kite	Puffin	Hooded Crow
White-tailed Eagle	Alpine Swift	Rosy Starling
Montagu's Harrier	European Bee-eater	Serin
Goshawk	Short-toed Lark	Twite
Rough-legged Buzzard	Shore Lark	Common (ex-Mealy) Redpoll
Red-footed Falcon	Red-rumped Swallow	Arctic Redpoll
Spotted Crake	Richard's Pipit	Common Rosefinch
Corn Crake	Tawny Pipit	Lapland Bunting
Common Crane	Red-throated Pipit	Cirl Bunting
Stone-curlew	Water Pipit	Ortolan Bunting
Kentish Plover	Dipper	Rustic Bunting
Dotterel	Bluethroat	Little Bunting
American Golden Plover	Aquatic Warbler	-

The following are the unusual species in Sussex for which descriptions are required:

In addition, descriptions are required for **all** races other than the normally occurring one including; Black Brant, Baltic Gull, Caspian Gull, Kumlien's Iceland Gull, Scandinavian Rock Pipit and Yellow Wagtail (except 'Blue-headed') but excluding Palebellied Brent Goose, *intermedius* Lesser Black-backed Gull, White Wagtail and Greenland Wheatear. Descriptions may also be required for any species seen on a date outside the range of historic first and last dates for migrants (see pages 194-195).

It should be noted, however, that the following species, or any other species seen in unusual circumstances or on an unusual date, may, at the discretion of the Recorder, require a description; Inland divers, Red-necked Grebe (inland records), Black-necked Grebe, Manx Shearwater, Shag (inland records), Bittern, Spoonbill, Egyptian Goose, Ruddy Shelduck, Red-crested Pochard, Hoopoe, Wryneck, Waxwing, Cetti's Warbler, Great Grey Shrike and Raven.

Registered Charity 256936

THE SUSSEX ORNITHOLOGICAL SOCIETY

Who are we and what do we do?

The Society was formed in 1962 to promote the recording, study, conservation and enjoyment of birds in Sussex.

We encourage our members to keep records of birds seen in Sussex, and to submit these to our County Recorder.

We carry out bird surveys, often as part of our partnerships with the BTO, RSPB and WWT. The county is divided into 10 Km squares, each of which has a steward. If you are good at bird identification help is always needed with surveys.

What do members get?

A quarterly Newsletter, with articles by members, and news of recent sightings and forthcoming events.

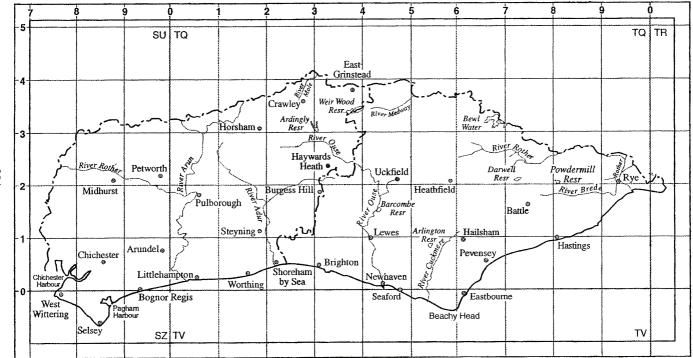
The annual Sussex Bird Report (which is free to members). This contains a number of well-researched papers and a full systematic list of birds seen in our county. These records are assessed by the Recorder and a Records Committee, to ensure that each entry portrays the true current status of the birds in Sussex.

A year round diary of field outings led by expert bird watchers, with visits to all parts of East and West Sussex.

An annual conference, which gives members an opportunity to get together, hear details of the Society's current work, and enjoy talks by local and national experts.

Visit our website for the very latest details of bird sightings in Sussex, and to find out lots more about the Society.

www. sos.org.uk



Alexandra Park, Hastings Amberley Wild Brooks Ambersham Common Angmering Park Estate Apuldram Manor Farm Ardingly Reservoir Arlington Reservoir Arundel Park Arundel W.W.T. Ashdown Forest Atherington Balsdean Barcombe Reservoir Beachy Head Belle Tout Bewl Water Billingshurst Birling Gap Bluebell Railway Brede Levels Bremere Rife Brighton Marina Brighton Wild Park Broadwater, Worthing Brooklands, Worthing Broomhill Level Buchan Park Burton Mill Pond Camp Hill, Ashdown Castle Water & Farm Cattlestone Farm Chailey Common

TQ8010 Charleston R TQ0314 Chelwood Va SU9119 Chichester G Chichester H TQ0506 SU8301 Church Norto TQ3229 Cissbury Rine TQ5307 Climping TQ0108 Cobnor Point TQ0208 Combe Have TQ4332 Crows Nest. TQ0000 Cuckmere Ha TQ3704 Darwell Rese TQ4314 East Guldefo TV5895 East Head TV5695 Ebernoe Con TQ6733 Elms Farm, I TQ0825 Eridge Park TV5596 Fairlight TQ4023 Fishbourne C TQ8417 Fore Wood, 0 SZ8798 Forest Mere TQ3302 Four Countie TQ3207 Friston Fores TQ1404 Gills Lap. Ast TQ1703 Glvnde Level TQ9818 Glyne Gap, E Goring Gap TQ2434 SU9617 Gossops Gre TQ4629 Gravetye Lak TQ9118 Greenwood (TQ1020 Halsey's Farr TQ3821 Harbour Farm, Rye

GAZETTEER:

Reedbed	TQ5100	Henfield Levels	TQ1914	Northpoint Pit, Rye	TQ9319	Sidlesham Ferry & Fields	SZ8596
achery	TQ4330	Hollies, Ashdown	TQ4528	Old Airstrip, Ashdown	TQ4231	Sompting Brooks	TQ1604
Gravel Pits	SU8703	Hollingbury Camp	TQ3207	Old Lodge Reserve	TQ4630	South Stoke	TQ0210
Harbour	SU7600	Horse Eye Level	TQ6208	Pagham Harbour	SZ8596	Sovereign Hbr Marina	TQ6403
ton	SZ8795	Horseshoe Plantation	TV5695	Pagham Lagoon	SZ8896	Splash Point, Seaford	TV4898
ng	TQ1408	Hotham Park, Bognor	SZ9399	Pannel Sewer	TQ8715	St Leonards Forest	TQ2231
	TQ0001	Hurstpierpoint	TQ2716	Parham Estate	TQ0614	Stakes Island	SU7801
nt & Farm	SU7902	Ifield Mill Pond	TQ2436	Partridge Green	TQ1919	Stansted Forest	SU7511
en	TQ7609	Iping Common	SU8421	Pett Level Pools	TQ9014	Stedham Common	SU8521
, Ashdown	TQ4728	Ivy Lake, Chichester	SU8703	Petworth Park	SU9721	Streele Farm Billingshurst	TQ0624
laven	TV5197	Kingley Vale NNR	SU8110	Pevensey Bay	TQ6503	Swanbourne Lake	TQ0107
ervoir	TQ7121	Kneppmill Pond	TQ1521	Pevensey Bridge Level	TQ6504	The Goat, Ashdown	TQ4032
ord Level	TQ9421	Lancing Clump	TQ1806	Pevensey Levels	TQ6605	The Mens	TQ0223
	SZ7698	Langney Point	TQ6401	Pilsey Island & Sands	SU7600	The Severals	SZ8794
mmon	SU9726	Lavington Common	SU9418	Pippingford Park	TQ4430	Thorney Deeps	SU7503
Icklesham	TQ8815	Lewes Brooks	TQ4207	Portfield Gravel Pit	SU8805	Thorney Island	SU7602
	TQ5635	Littlehampton G.C.	TQ0101	Powdermill Reservoir	TQ7919	Tilgate Park	TQ2734
	TQ8611	Long/Narrow Pits, Rye	TQ9217	Pulborough Brooks	TQ0516	Union Canal, E.Guldeford	TQ9322
Channel	SU8303	Lullington Heath	TQ5401	Rackham Woods	TQ0414	Upper Adur Levels	TQ1914
Crowhurst	TQ7513	Lurgashall Mill Pond	SU9325	Roman Road, Ashdown	TQ4729	Wakehurst Place	TQ3331
•	SU8129	Manxey Levels	TQ6306	Rye Bay Wood	TQ9217	Walland Marsh	TQ92
es, Ashdown	TQ4631	Marline Wood	TQ7812	Rye Harbour LNR	TQ9216	Waltham Brooks	TQ0215
st	TV 5499	Marsh Farm, Yapton	SU9804	Scotney Court Gravel Pits	TR0119	Warnham L.N.R.& M.P.	TQ1732
shdown	TQ4632	Maynards Green	TQ5818	Seaford Head	TV4997	Weir Wood Reservoir	TQ3834
els	TQ4609	Mill Hill, Shoreham	TQ2107	Selsey Bill	SZ8592	West Beach Littleh'mpton	TQ0201
Bexhill	TQ7607	Millbrook, Ashdown	TQ4428	Selsey West Fields	SZ8394	Westdean Woods	SU8515
	TQ1001	New Salts Farm	TQ2004	Seven Sisters Country Pk	TV5197	Whitbread Hollow	TV5996
een	TQ2535	Newhaven Harbour	TV4499	Sheepcote Valley	TQ3404	Widewater, Lancing	TQ2004
ikes	TQ3634	Newhaven Tide Mills	TQ4500	Shillinglee Lake	SU9631	Willingdon	TQ5802
Clump	TQ4731	Nook Meadows, Rye	TQ9217	Shooters Bottom	TV5795	Woods Mill	TQ2113
rm	SZ8697	Normans Bay	TQ6805	Shoreham Airport	TQ2005	Woolbeding Common	SU8625
m, Rye	TQ9317	North Wall Pagham Hbr	SZ8797	Shoreham Harbour	TQ2304	Worth Forest	TQ3034

The grid references given are intended as a guide only to finding the sites and are not necessarily where a species was observed.

SUSSEX BIRD REPORT NUMBER FIFTY-EIGHT, 2005

Recorder: CW Melgar Editorial Team: PN Paul ,I Barnard, Dr JA Cocks ,J Curson, RJ Fairbank, JA Hobson, P James, Dr JA Newnham, A Thomas & Dr BJ Yates.

CONTENTS

Page

Editorial	3
Review of 2005	4
Classified Records - Introduction	16
Systematic List	18
Escapes & Feral Birds	188
First and Last Migrant Dates	194
Breeding Surveys in Defined Areas	196
Contributors, Acknowledgements and Surveys	200
The Sussex Ringing Report for 2005, RDM Edgar and S McKenzie	207
Ivory Gulls in Sussex, RJ Fairbank	214
Diseases of Garden Birds, RT Pepper	226
The 2004/05 Waxwing Invasion, A Thomas	233
Expansion of the Breeding Bird Survey in Sussex, Dr H Crabtree	238
Gull-billed Tern Lingering on the Sussex Coast, Summer 2005, CW Melgar	248
A Review of the Results of WeBS in Sussex, Dr JA Newnham et al	250
Map of Sussex and mini gazetteer	284

The publication of the 2005 Sussex Bird Report was supported by a generous legacy from the late E.G. Robus and a contribution from West Sussex County Council.

Cover photograph by Ian Barnard Waxwing at Littlehampton, January 2005.

Published in December2006 by THE SUSSEX ORNITHOLOGICAL SOCIETY (www.sos.org.uk)



Best Annual Bird Report

Placed joint 1st in the 2004 competition.