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SUSSEX ORNITHOLOGICAL SOCIETY

The Sussex Bird Report

Number Sixty-six, 2013



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Sussex Bird Report 2012 amendments and corrections

Very few errors in the 2012 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.



Pied Wagtail, Pulborough Brooks, January 2013 (Luke Dray)

Photographs

Cover photograph: *American Golden Plover, Cuckmere Haven, June 2013 (Marc Read)*

I would like to say thank you to all the photographers who took time to submit their photographs to me for use in this report of birds taken in Sussex in 2013. Yet again the quality is outstanding. There has been a noticeable increase in the number of photos submitted to me this year and it is a shame that there is not enough room in the report to print them all.

Princes Park in Eastbourne was a popular haunt for photographers with an obliging Bonaparte's Gull and a Black-throated Diver delighting many. The American Golden Plover at Cuckmere Haven was also photographed well and features on our front cover. Nearby, Newhaven hosted a wintering Spoonbill, which must have been the most photographed Spoonbill in the country!

I hope you enjoy the photos within the report and that the new paper quality used this year enhances the high standard of work submitted. I would also like to thank the SOS Council for supporting the improvements in the paper quality for you all to enjoy. I look forward to receiving more outstanding photos for the 2014 Sussex Bird Report. [Nick Bond]

Editorial

Joanne Chattaway

The number of records submitted has increased on 2012 but is still fewer than during the national Bird Atlas 2007-11, with 160,865 records submitted of 263 species recorded in Sussex during 2013 but it is disappointing that so few records contain breeding codes, fewer than 20%. It is easy to submit records with breeding codes using BirdTrack, the society's preferred method of recording, and I would urge all members to use it. Further details of the society's database and recording can be found in the database report of the Classified Records section of this report. There were 30 individuals who each supplied over 1000 records; a full list of contributors appears on pages 221-229.

	2008	2009	2010	2011	2012	2013
No. submitting records	962	952	986	948	894	1146
No. records received	191,788	176,388	170,113	183,732	148,727	160,865
No. species recorded	266	257	269	260	271	263

There have been occasions this year when scarce species have been seen but no records submitted. Observers are reminded that unless records are submitted they will neither be entered in the society's database nor appear in this and future reports. Records for those species requiring descriptions will only be included after approval by the society's Records Committee. For these species the SOS follows the *British Birds* format in the order of listing observer's initials alphabetically and in no way reflects anything other than the alphabet. Observers are also reminded to submit records early (by the end of March the following year) as late submissions delay the publication of the Sussex Bird Report.

There is one species new to Sussex in 2013, Semipalmated Plover, increasing the county list to 399; readers can read an account of the finding and identification on pages 230-232. Thanks to Barry Collins for writing this interesting account.

The *Sussex Winter Bird Survey* (SWBS), an SOS initiative, which began in November 2011, has now been going for three full winters and we are beginning to get some useful data for common wintering and resident species. These early findings are shown in tables on pages 214-217. Thank you to Christine George for presenting these data.

Sadly it has been the case that there has again been disturbance of Stone-curlews by birders. Such activity directly affects the breeding success of this species and observers are reminded that Stone-curlews are specially protected under Schedule 1 of the Wildlife and Countryside Act and the EU Birds Directive making it an offence to disturb or capture them without a license.

The species accounts were written by a large team of writers; thanks go to SP Baines, CJR Barfield, VP Bentley, RA Black, SJ Biddle, D Boddington, C Brooks, MJ Chattaway, WE Coleman, JR Cowser, J Curson, C Davis, P Denyer, RJ Eastwood, GD Evans, D Green, AC Gutteridge, PRJ Hadland, WG Harvey, JA Hobson, A House, DH Howey, P James, ME Kalaher, JA Newnham, G Osborne, TW Parmenter, PJ Plant, AH Podmore, CJ Reay, A Rowe, T Seabrook, A Thomas, AB Watson and JH Whitman. The initials at the end of each account identify the author.

We have an excellent team of proof readers and thanks are due to Val Bentley, Jake Everitt, Dick Gilmore, John Hobson, David Howey, Paul James, Phil Jones, Owen Mitchell, John

Newnham, Peter Plant and Barry Yates who have conscientiously read through versions of the species accounts and made recommendations for improvements, additions and amendments. As a result some of the draft accounts have been edited to reflect the suggestions made, to include late records and to present the accounts in a uniform style for future researchers. I hope that this action has not offended any of the authors, but if it has done so, I offer my apologies.

In addition I would like to thank: Helen Crabtree for editing the scientific articles and jointly writing one of them, typesetting this report and creating the BBS table; David Howey for writing the Review of the Year; Sue Walsh for writing the Ringing Report; Colin Brooks, Clare Buckle and Robin Crane for writing scientific articles; Nick Bond for selecting and processing the photographs; and Robert Yarham for designing the cover. John Newnham created the maps and database report and Peter Plant and John Hobson are the primary proof readers and checkers of numbers. Thanks to you all.

Abbreviations

The following abbreviations are used as standard practice:

BBRC	British Birds Records Committee	RSPB	Royal Society for the
BBS	Breeding Bird Survey		Protection of Birds
BTO	British Trust for Ornithology	RBRG	Rye Bay Ringing Group
BOU	British Ornithologists Union	PH	Public house
CBC	Common Birds Census	R	River
CP	Country park	SF	Sewage farm or works
Fm	Farm	SP	Sand pit
GP	Gravel pit	SSSI	Site of Special Scientific Interest
GC	Golf course	SWBS	Sussex Winter Bird Survey
Hbr	Harbour	WeBS	Wetland Bird Survey
IUCN	The World Conservation Union	WBBS	Waterways Breeding Bird Survey
MP	Mill pond	WWT	Wildfowl & Wetlands Trust
mo	Many observers	nc	No count
LNR	Local Nature Reserve	ha	Hectare(s)
NR	Nature Reserve	hr	Hour(s)
NNR	National Nature Reserve	km	Kilometre(s)
O/S	Offshore	m	Metre(s)
Res	Reservoir	N,E,S,W	As cardinal compass points

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

Review of 2013

David H. Howey

This review of 2013 is a chronological summary of the year's weather and the birding highlights of interesting and unusual records. In total, 263 species were recorded in the county during 2013, compared with 271 in 2012.

The county's first **Semipalmated Plover** in Chichester Hbr for four days in October was probably the highlight of the year for the few fortunate observers who saw it. Other Sussex birders did manage to see the bird at Hayling Island in Hampshire where it was less elusive. Details of the finding of this bird can be found in this report.

Eleven other scarce species which stayed around long enough to be seen by many observers included a **Red-breasted Goose** in Chichester Hbr for seven weeks from mid-January, an unusually obliging **Corncrake** at Beachy Head in April, a superb **American Golden Plover** at Cuckmere Haven in June, a **Grey Phalarope** at Newhaven Tidemills in November, a **Bonaparte's Gull** at Princes Park (Eastbourne) for a month from late January, autumn **Red-backed Shrikes** at Rottingdean, Thorney Island and Pagham Hbr, a **Western Bonelli's Warbler** at Church Norton in April, a **Rose-coloured Starling** at Selsey in October, a **Red-breasted Flycatcher** at Pevensey Bay in November, a **Serin** (also at Selsey) in May and **Parrot Crossbills** on Ashdown Forest in December. Totals of at least 15 **Great White Egrets** and 20 **Spoonbills** were seen throughout the year.

Although only present for one day, the use of mobile phones allowed other observers to see some scarce species including two **Temminck's Stints** at Rye Hbr in May, a **Terek Sandpiper** (also at Rye Hbr) in May, a **Red-rumped Swallow** at Waltham Brooks in April and a **Radde's Warbler** at Sheepcote Valley in October. Other scarce species were less obliging, staying for just one day and seen only by the finders: **Purple Herons** at Beachy Head in May and at Pagham Hbr in August, **Black Stork** near Horsted Keynes in May, **Black Kites** at Angmering in April and The Midrips in November, **Montagu's Harrier** at Ashcombe Bottom in September, **Spotted Crake** at Arundel WWT in October, **Bonaparte's Gull** at Rye Hbr in July, **Golden Orioles** at Highleigh (Sitlesham) and near Seaford in April and May respectively, **Shore Lark** at Beachy Head in October, **Tawny Pipit** at Cuckmere Haven in September, **Common Rosefinch** at Telscombe in May and **Lapland Buntings** at Winchelsea and Littlehampton in September and November respectively.

A number of other scarce birds were observed or trapped at Pett Level and seen only by those present at the time: **Penduline Tit** (October), **Savi's Warbler** (June), **Melodious Warbler** (July), **Common Rosefinches** (August and October), **Ortolan Bunting** (August) and **Little Bunting** (October). In addition, there were impressive numbers of commoner species such as several species of waders, **Wood Pigeons**, **Common Swifts**, **Sand Martins**, **Barn Swallows**, **House Martins** and **Common Starlings**. Details of these and all other sightings can be found in the Systematic List section of this report.

First winter period (January–March)

January started with generally settled weather until mid-month when temperatures fell below freezing accompanied by snow. There was unsettled weather during the first half of February after which high pressure brought a long spell of dry weather but with low temperatures. The cold

weather continued into March (which turned out to be the second coldest on record) with biting easterly winds and significant snowfall.

The year started with overwintering by several species formally considered purely as migrants: **Whimbrels** (3), **Common Sandpipers** (6), **Green Sandpipers** (5), **Greenshanks** (25), **Sandwich Terns** (6) and at least 40 **Blackcaps**. There were some good numbers of wildfowl including 39 **Bewick's Swans** in the Arun valley, 300 **Common Scoters** at Glyne Gap, seven redhead **Smews** at Weir Wood Res and 109 **Red-breasted Mergansers** in Chichester Hbr. Scarcer wildfowl included a **Red-breasted Goose** passing Selsey Bill on the 13th before taking up residence in Chichester Hbr (where it remained until early March) and a **Red-crested Pochard** at Rye Hbr on the 29th. Large numbers of waders were recorded, particularly in the western harbours, with 1164 **Oystercatchers**, 12,000 **Dunlins** and 1311 **Common Redshanks** in Chichester Hbr and 2500 **Lapwings**, 1000 **Knots** and 1240 **Black-tailed Godwits** in Pagham Hbr. The cold weather in mid-month resulted in movements and influxes of **Woodcocks** (45 in total), **Woodlarks** (34), **Skylarks** (500 at Climping), **Fieldfares** (2000 at Lewes Brooks), and **Siskins** (140 at Warnham LNR). Other wintering species included **Eurasian Bitterns** (13), **Hen Harriers** (11), **Short-eared Owls** (14), **Waxwings** (several roving parties of 30 birds still present from 2012) and **Black Redstarts** (14). Scarce species recorded during the month included a **Great White Egret** at Horse Eye Level on the 6th (the first of 15 seen during the year), a **Crane** also at Horse Eye Level on the 24th (one of four seen during the year) and a **Bonaparte's Gull** at Princes Park (Eastbourne) on the 21st until late February.

Many of January's birds remained into February. Good numbers of waders were still in evidence with 38 **Avocets** and 1100 **Bar-tailed Godwits** in Chichester Hbr, 2000 **Lapwings** at Amberley Wild Brooks and 500 **Turnstones** in Pagham Hbr. New sightings included 500 **Redwings** seen arriving at Rottingdean (12th), a **Glossy Ibis** at East Worthing on the 20th (one of only four seen during the year), ten **Goosanders** at Chichester GP (23rd), and a pair of **Red-crested Pochards** at Rye Hbr on the 24th when 3240 **auks** moved west past Worthing.

March saw the arrival of the first summer visitors: **Little Ringed Plover** (7th), **Northern Wheatear** (9th), an exceptionally early **Black Tern** (9th) and **Sand Martins** (10th). There was then a gap of ten days before the next arrivals: **Barn Swallow** (20th), **Willow Warbler** (21st), **Garganey** (23rd), **Common Tern** (24th), **Common Cuckoo** (25th), **Stone-curlew** (27th), **House Martin** (29th) and **Ring Ouzel** (31st). Other signs of spring migration included **Whimbrels** moving east past Splash Point (37 on the 22nd) and Worthing (21 on the 31st) and an increase in the number of records of **Black Redstarts** (56). Winter visitors were still in evidence including two single **Smews** and a single **Snow Bunting** (the only record in the first winter period). Also of note during the month were a **Glaucous Gull** at Pett Level (15th), two **Kentish Plovers** at Rye Hbr (25th) and two single **Spoonbills**.

Spring (April–June)

April started cold and dry, getting warmer but wetter towards the end of the month. The low average temperatures in May set a new record and there was no improvement in June which was one of the coldest on record. These low temperatures were accompanied by a stream of south-westerly winds bringing unsettled weather.

Despite the poor weather, summer migrants continued to arrive in April, albeit generally later than usual: **Yellow Wagtail** (4th), **Osprey** (5th with a further four during the month), **Arctic Tern** (8th), **Little Tern** (9th), **Hobby** and **Nightingale** (10th), **Common Redstart** (11th), **Tree Pipit** (12th), **Sedge Warbler** (13th), **Turtle Dove**, **Lesser Whitethroat** and **Reed Warbler** (14th), **Common**

Swift (15th), **Wood Warbler** (16th), **Common Whitethroat** and **Whinchat** (18th), **Garden Grasshopper Warblers** (19th) and **Wood Sandpiper** (26th). Several winter visitors were also last seen during April: **Redwing** (13th), **Brambling** (16th), **Fieldfare** (20th), **Purple Sandpiper** (28th) and **Waxwing** (29th). Seawatching produced a mixture of spring migrants and departing winter visitors moving eastwards: 4767 **Brent Geese** at Selsey Bill (6th), and 388 **divers** (7th), 4478 **Common Scoters** (9th) and 1500 **Sandwich Terns** (14th) all at Splash Point (Seaford). Scarce birds during the month included a **Stone-curlew** at Beachy Head (7th), a **Hoopoe** at Rustington (15th with another near East Dean on the 29th), **Corn Crake** at Beachy Head (15th for four days), **Golden Oriole** at Highleigh (Sidlesham) (16th), a **Red-rumped Swallow** at Waltham Brooks (18th), a **Western Bonelli's Warbler** at Church Norton (for three days from the 22nd), a **Black Kite** at Angmering (28th) and a total of ten **Spoonbills**.

Migration continued in May with the first **Nightjar** (1st), an easterly movement of 5400 **Common/Arctic Terns** at Splash Point (5th), a **Bee-eater** at Church Norton (18th with another at Beachy Head four days later), a **Common Rosefinch** at Telscombe (19th), a **Golden Oriole** near Seaford (22nd) and a **Hoopoe** at Barcombe Mills on the 29th. The 25th produced records of three scarce birds: **Purple Heron** (Beachy Head), **Black Stork** (Horsted Keynes) and **Terek Sandpiper** (Rye Hbr). These were followed by **Temminck's Stint** at Rye Hbr (26th) and the only spring migrant **Honey-buzzard** at Warnham LNR (31st). Also of note was a **Bittern** booming at Rye Hbr until the 9th, a **Red-crested Pochard** at Arlington Res (24th), **Serins** at both Selsey Bill and Beachy Head, 1000 **House Martins** feeding over Bewl Water and a total of 62 **Woodcocks** roding at sites across the county.

For many observers June's highlight was the **American Golden Plover** at Cuckmere Haven from the 11th for four days. Another **Bee-eater** was at Beachy Head (6th) with four at Climping on the 14th and a **Savi's Warbler** was at Pett Level on the 18th. A total of five **Storm Petrels** (all singles) was seen off Selsey Bill and Worthing between the 13th and 23rd. A party of 400 **Common Scoters** in Rye Bay on the 23rd were evidently summering there while 1320 **Common Swifts** flying west at Beachy Head on the 29th were presumably involved in a 'mid-summer movement'.

Summer (July–September)

The first three weeks of July finally brought warm, dry and sunny weather before south-westerly winds brought rain during the last week of the month. Warm dry weather returned in August which was the warmest for nine years and the sunniest for six years. September was drier than in 2012 but also the duller September for five years. More autumnal weather prevailed from mid-month.

July was typically quiet in terms of records of scarcer species but the following were of note: a **Bonaparte's Gull** at Rye Hbr on the 20th, single **Marsh** and **Melodious Warblers** at Pett Level on the 15th and 27th respectively, a **Pectoral Sandpiper** at Pulborough Brooks (31st for a week) and single **Balearic Shearwaters** off three seawatching sites in the last four days of the month. Two **Roseate Terns** were present at Rye Hbr during the month and three **Quails** were heard at three different locations.

A combination of the cold spring weather and predation resulted in disappointing breeding success for many species. Nine broods of **Pochards** were recorded but only one of **Garganeys**; 47 pairs of **Avocets** raised a total of 21 young but 36 pairs of **Mediterranean Gulls** at Rye Hbr fledged just a single youngster. Terns had mixed success with no young from 120 pairs of **Sandwich Terns** at Rye Hbr where 11 pairs of **Little Terns** raised just one young (but no successful breeding at either Pagham Hbr or Chichester Hbr) but **Common Terns** did slightly



Bonaparte's Gull, Princes Park (Eastbourne), February 2013 (Jake Everitt)

better with 24 fledglings from 98 pairs at coastal sites. The wet weather and flooding of the river valleys in the early part of the year had a severe impact on **Barn Owls** with only eight broods found in 230 nest boxes in the west of the county.

Concentrations of autumn migrant warblers were in evidence in August with 264 **Sedge Warblers** ringed at Pett Level on the 4th, 100-150 **Willow Warblers** present at Cissbury Ring and Beachy Head on seven dates between the 6th and 23rd and 127 ringed at Pett Level on the 21st. Also at Pett Level, 168 **Reed Warblers** were ringed on the 21st. Other migrants in evidence were **Northern Wheatears** (96 at Beachy Head on the 28th), **Whinchats** (30 at Beachy Head on the 25th) and **Yellow Wagtails** with 450 at Rye Hbr on the 24th and 400 at Scotney GP a week later. The numbers of migrant waders also increased with 48 **Common Sandpipers** at Rye Hbr (9th) and 82 **Greenshanks** (23rd) and 2000 **Ringed Plovers** in Chichester Hbr (24th).

Scarcer species during August included a **Common Rosefinch** at Pett Level (3rd), a **Purple Heron** at Pagham Hbr (4th), a total of seven **Wrynecks** (between the 25th and 28th), a **Hen Harrier** at Cissbury Ring (27th), a **Booted Warbler** at Climping (27th), an **Ortolan Bunting** at Pett Level (29th), a **Honey-buzzard** at Pulborough Brooks (31st) and an obliging **Red-backed Shrike** which remained at Rottingdean for nine days from the 31st. Not to be outdone, seawatchers at Selsey Bill recorded a total of 76 **Balearic Shearwaters** (50 E and 26 W) on the 31st.

September saw more evidence of departing summer migrants together with the first arriving winter visitors and a scattering of scarcer species. Large numbers of **Blackcaps** moved through Beachy Head with peak counts of 600 on the 15th (when 344 were ringed at Pett Level), 750 on the 21st and 500 on the 24th. Migrating **Barn Swallows** were recorded moving at Selsey Bill in large numbers with 7000 S on the 23rd and 3000 E on both the 25th and 27th. An estimated 20,000 **Sand Martins** roosted at Pett Level on the 23rd and 6500 **House Martins** moved east in just 2½ hours at Selsey Bill on the 25th. The last records of departing summer migrants included **Turtle Dove** (11th), **Little Ringed Plover** (14th), **Little Tern** and **Wood Warbler** (22nd), **Nightingale** (23rd), **Nightjar** (29th) and **Common Cuckoo** (30th). At the same time the first winter visitors arrived: **Goldeneye** and **Snow Bunting** (20th), **Redwing** (23rd) and **Brambling** (30th). Scarce birds were also in evidence with **Wrynecks** on the 1st (the first of 18 seen during the month), a **Montagu's Harrier** near Lewes (4th), a **Pectoral Sandpiper** at Pagham Hbr (7th), two **Cranes** at Beachy Head (20th), a **Honey-buzzard** at Thorney Island (20th with two more elsewhere later in the month), two **Red-backed Shrikes** at Chichester Hbr (21st), a **Red-crested Pochard** at Chichester GP (24th), a **Tawny Pipit** at Cuckmere Haven (25th), a **Lapland Bunting** at Winchelsea (26th) and a **Booted Warbler** at Seaford Head on the 30th (the second Sussex record of the year).

Second winter period (October–December)

October's weather was typically autumnal with some bad weather in mid-month and persistent rain throughout the second half of the month. The first half of November was dominated by westerly winds bringing in damp weather. Calmer conditions prevailed in the second half of November but temperatures dropped below 10°C. The calm conditions continued into December but the year ended with a series of deep low pressure systems accompanied by gales which caused some structural damage and torrential rain resulting in considerable flooding.

Many summer visitors made their last appearance during October: **Honey-buzzard** and **Tree Pipit** (6th), **Sedge Warbler** (9th), **Common Swift** and **Grasshopper Warbler** (13th), **Sand Martin** and **Common Whitethroat** (14th), **Lesser Whitethroat**, **Garden Warbler** and **Willow Warbler** (15th), **Common Redstart** (18th), **Garganey** (20th), **Hobby** and **Black Tern** (24th), **Wood Sandpiper** (25th), **Arctic Tern** (27th), **Osprey** (28th) and **Reed Warbler** (30th). New

arrivals included the first **Purple Sandpipers** of the winter (18th) and **Fieldfares** (24th). Although weather conditions may not have been conducive to birding, October produced a number of scarce birds including a new species for the county list. The new species was a rather elusive **Semipalmated Plover** which spent the 18th-21st in Chichester Hbr before returning to Hayling Island (Hampshire). In addition there was a **Rose-coloured Starling** at Selsey Bill (1st-8th), a **Common Rosefinch** at Pett Level (1st), a **Grey Phalarope** at Newhaven Tidemills (3rd-11th), a **Wryneck** at Hope Gap on the 3rd (with two more at other sites during the month), a **Penduline Tit** at Pett Level (3rd), the **Red-breasted Goose** returned to Chichester Hbr on the 3rd (for one day), on the 5th there was the first of 18 **Yellow-browed Warblers** seen during the month, a **Red-breasted Flycatcher** at Beachy Head (6th), a **Radde's Warbler** at Sheepcote Valley (12th), a **Hoopoe** at Chidham (12th), a **Black Kite** at The Midrips (13th), the first of eight **Great Grey Shrikes** arrived on the 17th, a **Little Bunting** was at Pett Level (24th), **Spotted Crake** at Arundel WWT (24th), a **Glossy Ibis** at Pagham Hbr (24th), a **Pallas's Leaf Warbler** at Beachy Head (25th with another at Atherington three days later), and a **Shore Lark** at Beachy Head (27th). A total of 27 **Green Sandpipers** at Medmerry is also noteworthy. The weather conditions also produced a major influx of **Ring Ouzels** on the 12th with 238 at Hastings CP, 400 at Beachy Head, 162 at Crowlink and 150 at Seaford Head. The last week of the month saw the start of an influx of **Common (Mealy) Redpolls** with a total of 15 ringed at Pett Level.

The last summer visitors departed in November: **Common Tern** (10th), **Ring Ouzel** (13th), **Whinchat** and **Yellow Wagtail** (17th), **Barn Swallow** and **Northern Wheatear** (19th) and **House Martin** (24th). The influx of **Common (Mealy) Redpolls** continued into November with a further 38 ringed at Pett Level. There was also a major movement of **Wood Pigeons** which included 20,000 moving south over Broadbridge Heath on the 13th. The fourth **Red-backed Shrike** of the year was at Pagham Hbr (1st-9th), the third **Pallas's Leaf Warbler** was seen at Birling Gap (2nd), a **Red-breasted Flycatcher** spent ten days (5th-14th) at Pevensey Bay, an **Iceland Gull** was at Newhaven (24th), a **Lapland Bunting** at Littlehampton (24th) and two more **Yellow-browed Warblers** took the year's total up to 20.

December was a quiet month for birds enlivened by ten **Parrot Crossbills** first seen on Ashdown Forest on the 20th and still present at the end of the year. Up to six **Snow Buntings** at East Head and nine at Camber Sands were popular birds as was a drake **Smew** at West Langney (still present at the end of the year) but a **Balearic Shearwater** off Selsey Bill on the unusual date of the 23rd was seen by only a few observers. The numbers of some wader species built up during the month with 1000 **Knots** recorded in Chichester and Pagham Hbrs, 1222 **Grey Plovers** in Chichester Hbr and 200 **Sanderlings** at Worthing. Equally impressive were 40,400 **Common Starlings** coming in to roost at Brighton's Palace Pier.

Classified Records for 2013

This list covers all species in Categories A and C of the BOU checklist with records of Category D species listed separately. An index to all the Category A and C species included in the Systematic List is given on pages 285-288.

The Category A and C species are again listed in the order announced by the BOU in October 2002 and include the further minor adjustments made by the BOU since that date.

Status descriptions

Preceding each species account, there is a brief description of its status in the county. These are regularly reviewed and amended to account for 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

Seawatching records were received from several sites and at five sites daily logs were maintained. 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	Total
Selsey Bill	33	12	98	186	267	83	20	58	91	85	74	54	1060
Worthing	17	24	40	44	51	25	15	29	24	37	30	38	373
Telscombe Cliffs	22	1	28	16	18	9	2	4	2	8	6	3	116
Splash Point (Seaford)	11	24	57	87	91	13	6	7	7	17	8	0	326
Beachy Head	7	7	29	24	31	2	0	0	0	0	0	0	99

Wetland Bird Survey data

Many tables which are included in the accounts for wetland bird species refer to the monthly WeBS counts. Data were supplied by the Wetland Bird Survey (WeBS), a joint scheme of the British Trust for Ornithology, the Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee (the last on behalf of the Countryside Council for Wales, the Environment and Heritage Service, English Nature and Scottish Natural Heritage). These counts are undertaken on a fixed date each month during the winter, and sometimes during the summer months as well. During 2013 the priority core count dates were: 13 Jan, 10 Feb, 10 Mar, 14 Apr, 12 May, 23 Jun, 21 Jul, 25 Aug, 22 Sep, 13 Oct, 10 Nov and 15 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 since the 2004 report show only sites where this figure is reached during the core (Sep–Mar) monthly counts.

Breeding Bird Survey data

Results from the Breeding Bird Survey (BBS) are presented on pages 210–212 as the numbers of 1-km squares in which each species was recorded at least once during the year. These figures provide a useful indication of the relative abundance of different species although they do not take account of differences in detectability between species. They do not provide a measure of absolute abundance because BBS surveys do not detect all of the birds present in a particular square. The BBS is organised by the British Trust for Ornithology (BTO), and jointly funded by the BTO, the Joint Nature Conservation Committee (JNCC) and the Royal Society for the Protection of Birds.

Database report

Each species account in the systematic list is written by an individual using the records abstracted from the society's CoBRA (County Bird Recording Application) database. As usual the dataset is a complex mixture of records received from the British Trust for Ornithology (BTO), from a miscellany of recording systems used by various groups and nature reserves and from individual observers.

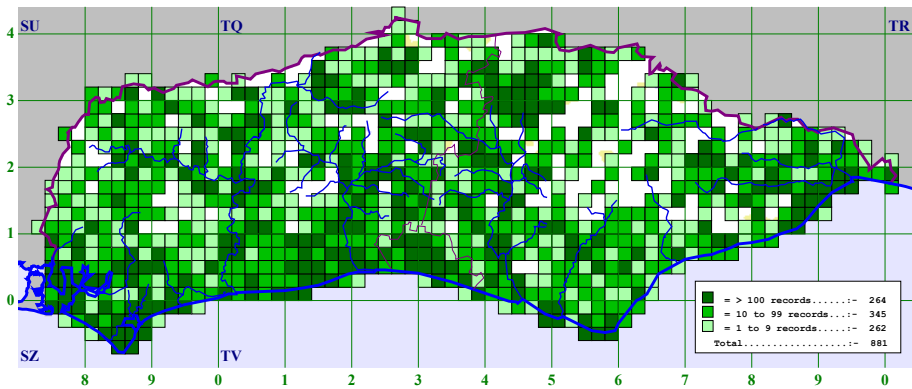
The total of just over 160,000 records for 2013 is a small rise on the total for 2012 but fewer than the previous four years. The following table, showing percentages of record sources over the past three years reveals that over two-thirds of the records in 2013 originated from the BTO's online recording, most of these derived from BirdTrack, an excellent online recording system which the society encourages members to use. BirdTrack is organised by the BTO in partnership with the Royal Society for the Protection of Birds (RSPB), Birdwatch Ireland, the Scottish Ornithologists' Club and the Welsh Ornithological Society and continued to develop during the year. It is interesting that the figures in the table for the years 2012 and 2013 are the same. Only a small number of records were submitted on paper and the society is grateful to the volunteers who transfer these into a suitable electronic format for importing into CoBRA. It is interesting to record that over 1500 records were received from the BirdTrack mobile recording application; perhaps a sign of the future way for gathering, storing and sharing wildlife observations.

Record source	2011	2012	2013
BTO online surveys (BirdTrack, WeBS and BBS)	46%	67%	67%
Reserve databases and seawatch datasets	23%	24%	24%
Records captured from other recording groups	2%	4%	4%
Individual observer record submissions	13%	5%	5%

The downward trend in the number of contributing observers since the atlas fieldwork was halted as the 1146 observers represented a 25% increase on 2012. As usual, the number of submissions varied considerably with 30 birders providing over 1000 records whilst 225 observers were ascribed just a single record. The records during the year came from 1679 sites with most coming from the well-watched locations such as Chichester Hbr (6430), Pagham Hbr

(14,574), Amberley to Pulborough area (8611), Ashdown Forest (14,388) and Rye Bay (11,512). At the other end of the spectrum just a single record was ascribed to 251 sites.

The widespread recording is clearly shown in the following map which has been drawn using the same scale as previous years. During 2011 over 97% of the Sussex tetrads received some recording attention; in 2012 this figure fell to 82% but has risen to 85% in 2013. The traditional “hole” in central East Sussex is once again showing and, as usual, the recording hotspots, some of which are mentioned above, are shown clearly. Throughout the systematic list reference is made to the number of tetrads in which some of the more widespread species have been recorded; the fact that only 85% of the county’s tetrads have been visited, and not all these for detailed recording, needs to be considered whilst reading these statements.



The number of records received for 2013 in each tetrad in Sussex. Dark green, >100 records; mid-green, 10-99 records; pale green, 1-9 records.

With records from county-wide studies such as the Sussex Winter Bird Survey and Breeding Bird Survey coupled with the encouragement to record full lists in BirdTrack it is not surprising that the common and widespread species have again been the most recorded; in 2013 Blackbird (4066 records), Wood Pigeon (3654) and Robin (3650) were the top three species. However, two decades ago it would have been unthinkable that Gadwall (1032 records), Little Egret (1250) and Common Buzzard (2258) would be amongst the top 40 recorded species. The monthly distribution of records follows a similar pattern from one year to the next with July producing the fewest records except during the years of the atlas. During 2013 there were small rises in monthly totals of records except for February, May and July. These features are clearly seen in the table below.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2006	7876	7127	8554	13,675	11,554	9924	5824	6117	7228	7562	6511	5800	97,752
2007	9402	8444	10,159	17,415	13,789	12,029	8780	8478	9709	10,875	21,016	20,583	150,679
2008	19,756	22,753	12,871	28,121	30,519	29,683	11,818	6580	9384	8134	13,514	14,637	207,770
2009	16,846	17,132	12,301	27,696	25,316	26,790	10,357	8305	9910	9495	10,496	12,717	187,361
2010	15,667	13,087	12,085	25,367	21,987	22,219	9697	7597	9441	9937	11,623	11,404	170,111
2011	19,285	17,152	13,573	24,911	23,135	20,469	13,104	9757	11,098	10,967	10,754	9527	183,732
2012	12,713	13,321	13,506	17,682	19,265	12,953	8375	8705	10,363	10,524	10,614	10,706	148,727
2013	13,739	12,901	14,047	22,113	17,815	14,562	8281	10,807	12,597	11,010	11,661	11,332	160,865

The recording concerns raised last year continue. Sadly records are lost each year as additional notes describing rare and scarce species or unusual “out of season” sightings are not forthcoming. Records including evidence of breeding frequently carry a “value-added” factor when providing evidence for planners investigating land use change. It was thought this aspect of recording would decline after the atlas was finished and sadly these fears have been realised as the 2013 dataset revealed a further decline in the number of records with a breeding status code recorded. The following table shows a halving of this recording during the breeding season over the past years. Readers need to consider this when statements in the systematic list refer to very small numbers of areas with breeding records.

Year	No. records Apr-Jul	Confirmed (%)	Probable (%)	Possible (%)	Total with breeding status (%)
2010	84,862	8.0	15.5	20.9	44.4
2011	87,600	9.5	14.1	16.3	39.9
2012	59,835	3.0	6.8	9.7	19.5
2013	62,771	2.4	5.4	10.8	18.6

As mentioned previously the proliferation of birding websites and personal blogs has revolutionised the dissemination of news, sightings, photographs and opinions. Although some efforts have been made in 2013 to capture observations from the society’s website and some blogs, it is not possible to capture information into the database from most and therefore some interesting and important observations may be lost to the county avifauna. Another issue raised frequently relates to the late arrival of records. Once again several records from 2013 arrived well into 2014 and long after authors of the systematic list had started writing this report. Correcting and inserting records is a time-consuming exercise which can easily introduce errors; all problems which could be avoided by the timely submission of records, preferably before the end of March in the following year.

A new database, to replace the ageing CoBRA, continues to develop but all the records for 2013 were processed and uploaded into CoBRA and have been transferred into the new application. It does look, however, as if CoBRA may need to survive to tackle one more year’s set of records. [John Newnham, Database Manager, September 2014]

Distribution maps

The distribution maps for certain species include a range of symbols:

Large red circle	Confirmed breeding
Medium red circle	Probable breeding
Small red circle	Seen in suitable breeding habitat
Small open circle	All other records with a grid reference

Mute Swan*Cygnus olor*

Fairly common resident.

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	555	563	511	338	487	566	428	439	610	620	614	574
Chichester Hbr	94	90	47	67	182	199	148	127	263	247	297	230
Chichester GP	55	103	48	18	22	33	nc	nc	-	40	23	46
Climping	22	10	17	20	29	43	nc	55	36	23	10	10
Arun S. of Arundel	70	36	75	68	44	43	nc	nc	nc	nc	nc	nc
Arun Valley	44	47	31	46	65	65	41	50	54	61	65	67
Upper Adur Levels	68	74	63	nc	nc	nc	nc	nc	nc	nc	50	37
Ouse Valley	3	57	36	5	4	-	-	2	5	13	4	7
Eastbourne Lakes	26	23	30	6	13	19	22	19	39	49	35	16
Pevensey Levels	21	36	71	40	32	43	16	24	16	48	33	50
Rye Bay	103	36	47	24	59	57	139	93	129	73	27	59

For reasons which are not clear, but which may perhaps be due to reduced observer coverage, the sum of the monthly county totals is down by c.1300 compared to last year with the differences being most noticeable in the breeding season, late summer and the second winter period.

During the first winter period, significant counts additional to the WeBS counts included 101 on 3 Mar at Chichester GP and 93 on 7 Feb at Scotney GP.

The earliest occupied nests were noted at Southwater CP on 27 Mar, Selsey East Beach on 2 Apr and at Brooklands (Worthing) on 6 Apr. The first eggs were seen at Rustington on the 12th. The first cygnets (six) were noted at Widewater (Lancing) on 11 May and as well developed young on 17 Jun, and at Pagham Hbr on 9 Jun. Breeding was confirmed in 16 tetrads and was probable in a further 12.

Despite the relatively large numbers in the county, few as usual were recorded at the principal seawatching sites and then mostly in May and the second winter, presumably as birds moved between breeding and feeding sites.

In the second winter period the highest numbers were again noted at Chichester Hbr with up to 143 at East Chidham on 7 Dec. Elsewhere the highest counts were 73 at Southwater CP on 1 Dec and 50 each at Henfield Levels on 10 Nov and at Barnham on 22 Dec and there were 14 other counts of 20 or more. [WEC]

Bewick's Swan*Cygnus columbianus*

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

The majority of records (83%) were from sites in West Sussex, predominantly the Arun Valley. The monthly WeBS counts at this principal site were as shown in the table below.

	Jan	Feb	Mar		Nov	Dec
County total	22	39	-		-	19
Arun Valley	22	39	-		-	19

Minimum numbers from counts additional to the above, based on the maximum recorded in each area, were as follows:

	Jan	Feb	Mar		Nov	Dec
Arun Valley	39	39	20		14	19
Upper Adur Levels	13	9	-		5	5
Arlington Res	2	-	-		-	-
Rye Bay area	12	-	4		-	-

During the first winter period the highest counts were at Burpham (Arun Valley) with a herd of 39 on 26 Jan, including nine juveniles and an adult with a yellow ring, and from 9-13 Feb. Twenty-seven roosted at Arundel WWT overnight on 21-22 Jan. At times some were seen further inland at Amberley Wild Brooks and Pulborough Brooks. Numbers in the Arun Valley fluctuated during the period and reduced to 20 on 5 Mar as birds left the area. Elsewhere during the period 13 were noted in the Upper Adur Levels on 1 Jan, and ten there on the 30th. In the east of the county there were two on 24 Jan at Arlington Res. Five at Scotney GP on 21 Jan and 12 there on the 26th were likely to be from the large herd that winters on Walland Marsh (Kent). The final record was of four on 10 Mar at Rye Hbr, probably birds returning eastwards.

In the second winter period numbers were much lower. The first two birds were recorded in the Arun Valley on 16 Nov increasing gradually to 14 on the 26th and peaking at 19 on 16 Dec. The only other records were five birds in the Upper Adur Levels on 29 Nov and between 18 and 26 Dec and one at Pagham Hbr on 18 Dec. [WEC]

Whooper Swan

Cygnus cygnus

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

The only records accepted as being of genuinely wild birds came from the southwest of the county. Three birds (two adults and a juvenile) were in the South Mundham area on 15 and 16 Jan (CN) and four adults were in the same area on 26–28 Jan (CRJ). The final record during the first winter period was of three at Lidsey on 12 Feb (AS).

The only record in the second winter period was of two at Barnham on 1 Dec (AS).

The feral bird returned again to winter in the Henfield area where it was seen in January (CAH) and February (VPB). One with Mute Swans south of Bodiam Castle on 26 Apr (PG) was assumed to be of captive origin. [WEC, DHH]

Bean Goose*Anser fabalis**A scarce winter visitor and passage migrant.*

All records were at the beginning of the year and all of the Tundra form *A. f. rossicus*. At Scotney GP there was one on 26 Jan and there were five on 9 Feb (DC, JFC, BK). Two took up residence with a Greylag Goose flock and were seen at a number of locations around Arundel from 20 Feb to 2 Mar (ARK). [AH]

Pink-footed Goose*Anser brachyrhynchus**Very scarce winter visitor and passage migrant. Also recorded as a feral bird. Amber listed species of medium conservation concern.*

Although between two and four birds were recorded at Pett Level on at least 14 dates between 26 Jan and 3 Mar the only record supported by a description was of two on 26 Jan (DC, JFC, BK). [JAN]

White-fronted Goose*Anser albifrons**Scarce winter visitor and passage migrant. European race (A. a. albifrons) is a red listed species of high conservation concern.*

The adverse winter weather meant that it was another good year for this species, with a wide distribution of birds across the county, though the largest counts were as usual in East Sussex. The first January record was of a single bird at Scotney GP on the 3rd. One at Pulborough Brooks on 4 Jan was joined by a further nine or ten on the 25th, presumably the group seen at Warningcamp the previous day, when another four were also recorded at Amberley Wild Brooks. A flock of 17 turned up on Lewes Brooks on the 13th, with 15 still there on 9 Mar and (the other) two seen on nearby Iford Brooks four days later. At Pett Level the first birds, a group of eight, were also seen on 13 Jan, but the flock in the area and adjacent Rye Hbr peaked at 78 on 29 Jan, with a February peak of 51 on the 9th and a March peak of 14 on the 10th, with the last four seen there on 3 Apr. Away from these sites there were a scattering of records, comprising 11 at the Ouse Estuary Project (Newhaven) on 20 Jan and ten on Thorney Island on the same day, three at Pagham Hbr on 1 Feb, eight on Pevensey Levels on 5 Mar and one past Birling Gap on 23 Mar.

The first autumn bird was at Pett Level on 26 Aug, which is the earliest ever, but the second winter period, in contrast to the first winter period, was very quiet, with just a single bird at Arlington Res on 1 Oct, two adults and a juvenile on Barnham Brooks from 17 Nov until 3 Dec, and another three birds at Pett Level from 1-8 Dec. [AH]

Greylag Goose*Anser anser**Increasingly common introduced resident and winter visitor; scarce passage migrant. (Native population in the UK is amber listed species of medium conservation concern.)*

Greylag Goose was recorded in 120 tetrads. The monthly WeBS counts at sites where at least 5% of the county total occur in any of the core months (Jan-Mar and Sep-Dec) were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	877	258	187	139	159	314	478	1952	1162	1192	1329	843
Chichester GP	39	16	3	6	5	6	nc	nc	-	15	11	-
Arun Valley	63	27	31	7	15	5	89	73	136	476	91	112
Warnham MP	-	1	-	nc	nc	Nc	nc	nc	66	-	47	63
Upper Adur Levels	63	50	10	nc	nc	Nc	nc	nc	nc	nc	290	nc
Ardingly Res	-	100	40	2	2	52	nc	110	150	325	170	250
Weir Wood Res	-	1	1	2	-	21	71	116	142	90	130	192
Ouse Valley	8	9	22	14	4	-	-	-	60	35	-	100
Pevensey Levels	18	-	11	19	-	7	-	-	-	24	29	62
Rye Bay	665	34	62	47	91	62	292	1394	572	208	558	58

Numbers from the monthly WeBS counts were broadly similar to last year, bar February when the Rye Bay flock, which accounted for three-quarters of the January total for the county, went missing. Remarkably, the December count was just two birds lower than the previous year. Away from their eastern stronghold there were counts in excess of 100 at Brighthams Fm (Partridge Green), with a peak of 231 on 3 Jan, Beeding Brooks with a peak of 113 on 6 Jan, and Warnham LNR with a peak of 200 on 13 Feb. As ever, reports from sea-watching sites were few; 3 E past Worthing and 3 W past Splash Point (Seaford) in early April was the grand total.

Breeding attempts by this species would appear to be under-recorded and only from a few locations with confirmed breeding only recorded at Petworth, Pulborough Brooks, Arundel WWT, Warnham LNR, Henfield Levels, Falmer, Pett Level and Rye Hbr.

The first big post-breeding flocks were 240 at Barcombe Res on the relatively late date of 25 Aug and 400 at Weir Wood Res on 2 Sep. The biggest counts at Pulborough Brooks (400) and Rye Hbr LNR (422) were not reported until the WeBS count of 22 Sep. Autumn numbers were pretty typical, with peaks of 325 at Ardingly Res on 9 Oct, 500 at Pulborough Brooks on 14 Oct and 360 at Brighthams Fm on 7 Nov. [AH]

Two (possibly three) birds showing the characteristics of the eastern race *A.a. rubrirostris* were present in the Arundel/Burpham area from 26 Feb to 3 Mar (ARK *et al.*). [DHH]

Canada Goose

Branta canadensis

Common introduced resident and partial migrant.

Canada Goose was recorded in 200 tetrads. The monthly WeBS counts at sites where at least 5% of the county total occur in any of the core month counts (Jan-Mar and Sep-Dec) were as shown in the table below.

Numbers were lower in the WeBS counts in the early part of the year, particularly in February when totals were down by over a half, possibly reflecting a movement out of the county due to the harsh weather, or a dispersal away from regular (and counted) haunts. The biggest counts came from Bewl Water, with 854 present on 26 Jan, and Cuckmere Haven with 550 the following day. A few more birds than usual were noted from sea-watching sites in the spring, but sightings offshore remain quite a rarity. Totals were 1 N at Selsey Bill, 5 E at Worthing and Telscombe Cliffs, 3 E and 6 W at Splash Point (Seaford) and 4 E at Birling Gap.

As usual, breeding reports were received from around 20 widespread locations in the county, mostly of individual family groups, and many more at quiet bodies of water must go unreported.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	1850	1031	433	305	289	336	378	1170	1732	2456	2671	2726
Medmerry	272	27	nc	3	5	2	-	22	225	320	475	295
Chichester GP	12	22	25	17	11	43	nc	nc	-	15	-	-
Arun Valley	338	58	58	29	75	24	22	117	261	1416	973	1147
Upper Adur Levels	16	75	10	nc	nc	Nc	nc	nc	nc	nc	66	nc
Weir Wood Res	5	85	46	10	14	30	54	182	158	-	4	-
Ditchling Common	-	26	30	22	35	-	-	-	11	20	3	35
Ouse Valley	-	-	7	7	-	-	-	-	14	5	1	200
Barcombe Res	33	55	-	13	7	-	10	163	2	-	143	39
Arlington Res	3	2	7	4	4	8	8	37	415	1	21	9
Cuckmere Haven	353	173	47	nc	nc	nc	nc	nc	65	40	100	200
Pevensey Levels	30	14	19	21	-	2	-	21	8	101	82	324
Wadhurst Park	-	50	4	12	-	-	-	-	-	320	-	-
Bewl Water	330	140	nc	nc	nc	nc	nc	35	379	35	560	261
Rye Bay	305	135	55	27	33	25	77	478	34	83	90	4

Numbers were quite slow to build up at traditional post-breeding sites, with the first big count, 246 birds at Arlington Res, on 10 Aug. The Pulborough Brooks flock reached 443 on 27 Aug and at Bewl Water 406 were recorded on 21 Sep, but generally big counts were few. The autumn's peak count was from Pulborough Brooks, with 1387 on 14 Oct, but the only other places to record in excess of 500 during the second winter period were Bewl Water, with a peak of 560 on 10 Nov, and Amberley Wild Brooks with 585 on 16 Dec. There were further counts of over 300 at Medmerry, Widney Brooks (Greatham), Henfield Levels and Wadhurst Park Estate during this period. [AH]

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 started with a promising record of a potentially wild flock of 16 heading out to sea over Cuckmere Haven on 1 Jan and there was a record of at least 45 seen briefly in Pagham Hbr on 31 Jan but most other records probably referred to feral birds. Counts of 11 on Bewl Water on several dates, and a flock of ten on Pett Level on 19 Feb, could have been wild birds, but the fact that both sites recorded birds in mid-April (four and six respectively) makes this less likely. The feral flock at Barcombe Res numbered 53 on 13 Jan and 43 on 10 Feb. One to three birds were recorded from a variety of sites in West Sussex, probably all relating to wandering feral birds.

In the autumn the resident flock at Barcombe Res had increased to 62 birds, a slight rise on the previous year, and the dubious single bird, often consorting with Canada Geese, was seen in the far west of the county. During the WeBS counts at Scotney GP 23 were recorded in September and 85 each in October through December. [AH]

Brent Goose

Branta bernicla

Very common winter visitor and passage migrant; very scarce non-breeder in summer. Red listed species of high conservation concern.

The monthly WeBS counts at sites where at least 5% of the county total occur in any of the core month counts (Jan-Mar and Sep-Dec) were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	10,098	13,094	13,202	81	20	13	2	4	79	6036	9386	10,147
Chichester Hbr	8451	10,702	10,867	38	20	13	2	4	79	5963	7643	7409
Medmerry	1230	-	nc	-	-	-	-	-	-	27	660	1222
Pagham Hbr	8	2351	2316	16	-	-	-	-	-	43	1061	1516

Details of seawatching totals from the five regular sites are shown below:

		Jan	Feb	Mar	Apr	May		Sep	Oct	Nov	Dec	Peak counts
Selsey Bill	E	142	55	1005	10,055	66			64	27	34	4767 on 6 Apr
	W	24	23	5	33	2		980	793	728	31	
Worthing	E	625	40	2093	5209	2		29	19	29	101	1784 on 9 Apr
	W	17	10	6	10	5		43	191	700	30	
Telscombe Cliffs	E	862	-	450	1902	3		-	-	-	-	677 on 7 Apr
	W	7	-	3	-	-		-	-	108	-	
Splash Point	E	2279	306	3251	8893	36		10	39	6	-	2741 on 7 Apr
	W	2	1	40	1	-		-	62	413	-	
Birling Gap	E	262	125	1686	4306	17		-	-	-	-	1636 on 7 Apr
	W	-	-	-	2	-		-	-	-	-	

Wintering numbers continued to remain broadly stable around the two western harbours, where they are a familiar and conspicuous sight, and encouragingly increasing numbers seem to be wintering at the eastern end of the county. Rye Hbr regularly held around 200 birds in January and February, and nearby at Pett Level there were a number of counts of between 150 and 500 birds. There was a pronounced movement mostly recorded in East Sussex on 12 Jan, with 460 E at Worthing, 2030 E at Spalsh Point (Seaford), 1595 E at Hastings and 2130 E passing over Rye Hbr. Unusually, there were no inland sightings.

Spring migration was very slow to start, with no big days of movement and passage numbers in March down by more than 50% on the previous year (and WeBS counts up by 50% for the time of year). However everything changed on the afternoon of 6 Apr, when the hitherto dismal weather lifted and a massive movement occurred along the Sussex coastline. At Selsey Bill 4767 E were recorded during the day, nearly all from mid-afternoon till dusk and mostly very close inshore, creating a memorable spectacle for birdwatchers and the general public alike. Passage continued into the following day, with Splash Point topping the lists with 2741 birds flying east. Several more counts in excess of 1000 birds were made from sea-watching sites during the month, and the final total for Selsey Bill finished on 10,055 birds for April alone, four times the previous spring's total.

There were a number of records of summering birds. As usual, Chichester Hbr held a small flock, coincidentally the same total of 13 as last year, recorded on a number of dates, whilst Pagham Hbr held three birds. There were also records of four at Goring Gap on 8 Jul and 1 E past Worthing on 21 Jul.

The first evidence of return passage was noted in Chichester Hbr on 21 Sep, when 36 birds were seen, and numbers built up very quickly for the time of year. On the 26th 842 flew west past Selsey Bill, with 800 seen in Chichester Hbr the following day, and that number had risen to 2000 birds on the day after that.

Numbers in West Sussex were pretty typical for the autumn, though in East Sussex there were rather fewer reports than in the spring, with peaks of 120 at Pett Level on 11 Nov and 260 at Rye Hbr the following evening. Only four inland reports were received, of 130 birds south over Barcombe Cross on 2 Nov, a migrating flock heard but not seen over Troutbeck (Eridge) on 14 Nov, two at Lidsey SF on 26 Nov and a single at Arundel WWT on 13 Dec.

A single Pale-bellied Brent Goose *B.b. hrota* was seen amongst its commoner congeners to the north of Pagham Hbr on 15 Jan, with two in the same area on 19 Feb, and in Chichester Hbr one was seen from 24-29 Jan, with it or another seen on 16 Mar. Three were seen at Rye Hbr on 2 Mar, and there were two seawatching records from Worthing, both of singles amongst Dark-bellied Brent Geese flocks on 29 Mar and 13 Apr. The only record for the second half of the year was of two at West Wittering on 22 Oct. [AH]

One of the form Black Brant *B.b. nigricans* was present in the Fishbourne Creek area from 2 Jan to 13 Feb (GAH *et al.*). [DHH]

Red-breasted Goose

Branta ruficollis

Very rare vagrant.

Following a year when none was recorded one was seen flying first east, then west with Brent Geese past Selsey Bill on 13 Jan (JA) and the following day, what was presumably the same bird, was recorded at Thorney Island (Chichester Hbr) where it was seen intermittently with Brent Geese until 3 Mar (CBC.). What is again presumed to be the same bird returned to Chichester Hbr on 3 Oct (AJ). These records have been accepted by the BBRC. The identification of another bird associating with Greylag Geese seen at Henfield in January, Pulborough Brooks in September and Bury in December was accepted by the BBRC but placed in Category E as a probable escape. [DHH]

Egyptian Goose

Alopochen aegyptiaca

Very scarce introduced resident, bred for the first time in 2000.

During the year, birds were seen in 33 widespread tetrads, with concentrations of records in the Petworth/Cowdray area, the Arun Valley, Ifield MP and the Rye Hbr area.

At the Petworth Park stronghold, the peak count in the early part of the year was ten on 8 Jan, while there was a surprise one-day record of 15 at Combe Pond (Milland) in the far northwest of the county on 21 Feb.

In the breeding season, there were seven early goslings at Benbow Pond (Cowdray) on 17 Apr, where the birds were very approachable. A nest with young was seen at Petworth Park on 26

May and on 27 Jun there was a total of 17 birds including nine youngsters from three broods. A late brood was at Rye Hbr in August. There was no repeat of last year’s breeding in the Cuckmere Valley but the slow consolidation of the breeding population continues.

The peak single-site count of the year came in the autumn at Petworth Park, where there were 20 birds on 26 Sep, presumably including some of the year’s youngsters. A group of 13 at Barns Green on 3 Sep was also impressive, but there was no other count in double figures. [AT]



Egyptian Geese, Petworth Park, January 2013 (Andrew House)

Common Shelduck

Tadorna tadorna

Fairly common winter visitor and scarce passage migrant; scarce breeding species. 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	682	1095	679	366	300	192	72	22	67	61	326	556
Chichester Hbr	359	696	391	127	59	42	15	1	31	34	158	273
Medmerry	7	11	nc	21	48	9	16	7	14	8	34	11
Pagham Hbr	111	215	83	104	99	74	7	5	12	8	110	192
Chichester GP	-	61	-	1	-	-	nc	Nc	-	-	-	-
Arun Valley	60	45	61	46	36	22	8	-	-	1	10	28
Rye Bay	93	41	104	53	49	34	26	9	10	10	10	49

The January WeBS total was the lowest for that month on record, but numbers rallied considerably in February, the total being the highest of any month since January 2010.

This is not a species seen in large numbers at seawatching sites, but counts during the early part of the year were especially low, with 20 W at Worthing during February the largest monthly total at any site. More were seen in March, April and May with some movement in both directions as is usual. The highest day-count was 15 past Splash Point (Seaford) on 22 Mar.

Breeding records were scarce. The first ducklings were seen on 27 May at Arundel WWT. Sites where breeding was successful were as follows (with the peak number of ducklings in brackets): Chichester Hbr (8); Ham (Sidlesham), where a pair bred in a straw stack (9); two sites around Pagham Hbr (20); Pulborough Brooks (2); the Ouse/Glynde confluence (7); Rye Hbr (8); Union Canal (East Guldeford) (9); and The Midrips (possibly 6). It is possible, therefore, that only around ten pairs bred successfully in the county, a very poor showing, with very low counts and no confirmed breeding records at formerly regular sites such as Cuckmere Haven, Pevensay Levels and Pett Level.

The WeBS count of 22 in August was the lowest for that month on record in the county. Overall numbers remained low until November, although even at the tail-end of the year totals remained lower than the 10-year average and barely a third of what would have been expected 20 years ago. This continues to be a species in trouble in the county. [AT]

Mandarin Duck

Aix galericulata

Scarce introduced resident.

Mandarins were recorded in 65 tetrads, a slight increase on 2012, but *The Birds of Sussex* (Thomas 2014) revealed how widespread they are in the underwatched Weald; casual records on an annual basis only show a small part of the overall picture. The bulk of the records in 2013 came from the well-watched sites at Arundel WWT/Swanbourne Lake, Pulborough Brooks, Warnham LNR, Ardingly Res and Weir Wood Res.

High counts in the first winter period included 21 at Gravetye Lakes on 10 Feb and 20 at Arundel WWT on 11 Feb.

The first record of ducklings was of 12 at Chafold Copse (Northchapel) on 20 May, with 14 there on 26 May. Other sites with successful breeding were three broods at Troutbeck (Eridge) and apparently single broods at Arundel WWT, Pulborough Brooks, Wisborough Green, Southwater Quarry, Warnham LNR, Warninglid, Weir Wood Res and Powdermill Res.

In the second half of the year, the highest counts were 30 at the fishing lakes at Poling on 21 Oct, 20 at Ardingly Res on 11 Sep and 20 at Weir Wood Res on 8 Nov. [AT]

Eurasian Wigeon

Anas penelope

Common winter visitor; scarce on observed passage. Very scarce in summer; does not breed. Amber listed species of medium conservation concern.

The monthly WeBS counts from the principal sites were as shown in the table below.

This was to turn into another impressive year for this species in the county, although it started slowly with January's WeBS count being somewhat below average. However, by the end of the month, numbers were building, as evidenced by the 4000 estimated at Pett Level on the 27th, 1000

at Pagham Hbr on 29th, and 1000 at Partridge Green SF on the 30th. The February count was the second highest ever for that month, beaten only by the astonishing count of 16,628 in 2011, and there was a single-site count of 3638 at Amberley Wild Brooks on 11 Feb.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>County total</i>	8951	13,309	4374	292	6	1	2	62	2395	7395	7292	11,352
Chichester Hbr	1596	2111	986	2	-	-	-	18	1117	3865	2085	2446
Medmerry	435	575	nc	3	-	-	-	-	-	129	455	385
Pagham Hbr	714	2605	884	24	-	-	-	5	774	1369	926	2697
Arun Valley	2153	4148	1418	47	2	1	1	11	142	765	2068	3030
Ouse Valley	320	740	310	-	-	-	-	-	40	12	70	590
Cuckmere Haven	500	171	191	Nc	nc	nc	nc	nc	6	5	45	124
Rye Bay	2683	2184	444	137	4	-	1	23	216	1115	1113	1609

At seawatching sites, a few dozen birds had been seen passing in January and February, with records of movements both east and west, but by March the movement became strongly easterly and there was a peak day-count of 285 E at Selsey Bill on 6 Apr.

As is usual, very few remained through the summer in the county, the highest number being five at Pulborough Brooks on 8 Jun. Atypically, a male was seen in full breeding plumage in midsummer in the Fishbourne Channel (Chichester Hbr) on 2 Jul.

The first returning birds were noted on 21 Aug when there were nine at Rye Hbr and 18 at Thorney Island; 73 were back in Pagham Hbr on the 26th. The September and October WeBS counts were the highest ever for those two months and were accompanied by some good movements offshore, with 197 W at Worthing on 30 Sep and 231 W and 76 E at Selsey Bill on 19 Oct. Totals in the county remained above average in November and December and there was a notable movement of 182 W and 7 E at Splash Point (Seaford) on 11 Nov. [AT]

Gadwall

Anas strepera

Very scarce breeder and scarce summer non-breeder; fairly common winter visitor. Scarce on observed passage. 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
<i>County total</i>	886	866	322	148	100	107	128	159	261	428	383	629
Chichester Hbr	87	115	72	7	-	-	-	-	20	8	16	49
Chichester GP	187	145	21	17	3	15	nc	nc	-	52	31	69
Burton & Chingford Ponds	3	-	5	-	nc	nc	nc	23	39	-	4	18
Arun Valley	124	136	35	33	40	19	1	32	43	49	40	62
Weir Wood Res	9	11	19	2	-	-	-	-	-	-	1	9
Eastbourne Lakes	79	120	28	4	-	-	-	2	15	13	32	60
Bowl Water	68	13	nc	Nc	nc	nc	nc	-	24	40	35	115
Powdermill Res	nc	5	-	-	nc	nc	-	nc	-	6	17	42
Rye Bay	288	238	121	53	43	53	118	84	109	251	176	159

The relatively high numbers counted during the January WeBS were maintained into February, giving the best ever total for the latter month, helped by three-figure counts from five of the key sites. The numbers at the Eastbourne Lakes continue to be impressive for a small site.

As usual, only small numbers were seen past seawatching sites with, for example, 30 E at Splash Point (Seaford) in April, with 16 of those on the 9th.

The good WeBS year continued through the spring and summer months, with the highest counts ever for April, June, July and August. Sadly but typically, this did not translate into many records of breeding success, with broods noted only at Arundel WWT (ten ducklings on 29 May), Pett Level (four ducklings on 29 May) and Chichester GP (five ducklings on 19 Sep). There was no evidence of breeding at Rye Hbr, despite up to 14 adults being present in May. Nevertheless, it was encouraging to see so many adults summering in the county, with the peak count being 36 at Pett Level on 9 Jun.

During the autumn, the record-breaking year looked likely to continue, with the highest ever October WeBS total, although, unusually, numbers then fell away slightly in November before recovering in December. [AT]

Eurasian Teal

Anas crecca

Rare breeder and scarce summering non-breeder; common winter visitor and fairly common on observed passage. 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	4439	4924	3419	784	18	94	55	962	2402	3623	5015	5643
Chichester Hbr	1237	1614	1252	2	-	-	-	19	385	695	714	1129
Medmerry	172	68	nc	162	12	3	8	6	28	685	1025	985
Pagham Hbr	203	358	434	106	-	18	26	214	1014	553	141	349
Arun Valley	1122	1280	683	221	6	6	-	247	470	1103	2157	1854
Upper Adur Levels	29	-	177	Nc	nc	nc	nc	nc	nc	nc	-	-
Rye Bay	1008	809	288	147	-	7	20	392	316	310	715	609

WeBS totals were a little under the 10-year average in January and February but then remained relatively high in March. Although the majority of birds had left by the time of the April WeBS count, the tally for that month was the highest ever, indicating that many stayed late in the county, probably in response to the cold, late spring. The last three-figure count was 162 at Medmerry on 14 Apr.

At seawatching sites, no single location recorded a total in double figures during January and February. There was then a slight increase in March and April, with Splash Point (Seaford) taking the lion's share of the total with 67 E and 11 W in March followed by 112 E in April including 71 on the 9th.

During the breeding season, the only record of proven breeding was a brood of four juveniles seen at Pett Level on 18 Jul. As is usual, however, small flocks visited a number of the key wetland sites in the summer, with peaks of 24 at Pagham Hbr on 18 Jun, 23 there on 21 Jul and 20 at Pett Level on 25 Jul, although such birds appear to be quite mobile.

These non-breeding summering birds make it difficult to pick out with certainty the first birds returning from outside of the county, but 34 at Pagham Hbr on 7 Aug presumably included at least some newcomers. By 15 Aug, 99 were counted on Pett Level, with 190 at Scotney GP on 25 Aug and 400 at Rye Hbr on 9 Sep.

Such notably high early autumn totals were reflected in the WeBS counts, which included all-time records for August, September and October and remained above average in November and December. The November count of 1025 at Medmerry was encouraging so soon after the completion of the managed realignment there, with birds often using the freshwater flood storage pool by Medmerry Park. There were also a couple of notable movements past seawatching sites during the autumn, with 91 W at Selsey Bill on 26 Sep and 104 W at Worthing on 21 Nov. [AT]

Mallard

Anas platyrhynchos

Common resident and winter visitor. 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	3935	2982	2023	1218	1227	1578	1707	3700	3846	4230	4469	3947
Chichester Hbr	233	280	220	39	49	45	50	24	213	402	350	448
Medmerry	62	32	nc	45	29	22	34	24	81	205	288	177
Pagham Hbr	114	114	104	69	95	154	34	112	214	138	183	185
Arun Valley	803	617	506	405	578	776	605	960	874	1240	826	690
Bewl Water	245	208	nc	nc	nc	nc	nc	354	488	410	564	463
Rye Bay	764	559	443	122	116	109	246	864	679	573	759	574

The peak county total of 4469 birds occurred in November, which given that temperatures were still in single figures and therefore not especially cold, suggests that the upturn in wintering numbers over recent years is being maintained. Chichester Hbr, the Arun Valley, Bewl Water and Rye Bay were the strongholds for wintering visitors, whilst the Arun Valley held a resident population of 400 to 750 birds throughout the year. Sizeable resident populations were also present at Bewl Water and Rye Bay. August concentrations of eclipse birds increased the Arun Valley population to 960, Rye Bay to 864 and Angmering Decoy Ponds to 664. On 10 Nov 195 birds were at Arlington Res.

As usual Mallards were found across the county, with records from 330 tetrads across the year. During the SWBS Mallards were recorded in 29 of the 100 1-km squares surveyed during the first winter period and in 33 of the 114 1-km squares surveyed in the second winter period.

Breeding was confirmed in 32 tetrads across the county. The first breeding record of the year was at Arundel WWT on 16 Apr. On 21 Apr a nest with five eggs, seven feet up in a conifer at Itchingfield, was destroyed by a Rook. At Medmerry it was noted that broods were later than usual with the first ducklings on 23 May and the last hatchlings on 2 Jul. At Pagham Hbr there were 10 nests/broods and at Rye Hbr there were 22 nests or broods. A brood of eight ducklings was at Arundel WWT on 20 Jun and two adults with 14 ducklings were at Knepp MP on 24 Jun, although it was unclear whether these were one or two broods. The last breeding record was five ducklings at Arundel WWT on 11 Aug.

Seawatch records were typically low with only 61 in total recorded over the whole year; 17 E in March and 32 E in April accounted for the majority of the sightings. The maximum count was 16 E past Splash Point (Seaford) on 8 Apr. [JRC]



Pintail, Rye Harbour, January 2013 (Roger and Liz Charlwood)

Pintail

Anas acuta

Fairly common winter visitor and scarce on observed passage; occasionally summers and has bred. 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	250	531	209	35	-	-	-	-	130	279	290	401
Chichester Hbr	61	130	127	5	-	-	-	-	14	103	25	220
Medmerry	15	5	nc	-	-	-	-	-	-	34	22	8
Pagham Hbr	-	27	16	4	-	-	-	-	108	108	182	22
Arun Valley	161	342	50	13	-	-	-	-	-	11	61	145
Rye Bay	6	15	8	9	-	-	-	-	8	23	-	1

After the 490 peak in 2012, the lowest number for 22 years, the 2013 peak county WeBS total of 531 birds in February was little better, albeit there was no severe winter weather during the two winter periods to attract birds from harsher conditions elsewhere. The only site where numbers exceeded the 290 threshold for a site to be of national importance was the Arun Valley, whilst the peak of 182 at Pagham Hbr, formerly a site of international importance (threshold 600 birds)

was the lowest since 1991-92 when wildfowling ceased there. A significant count not reflected in the WeBS table above was 350 at Pulborough Brooks (Arun Valley) on 22 Dec, when the brooks were flooded.

As always the largest numbers of birds were at the three western sites of Chichester and Pagham Hbrs plus Pulborough Brooks and Amberley Wild Brooks in the Arun Valley. There were small numbers around Rye Bay in both winter periods and on 26 Mar 24 were on Henfield Levels (Adur Valley).

In the first winter period the last three-figure count was 100 at Pulborough Brooks on 16 Feb and by 17 Apr the maximum count in the county had declined to 14 (at Henfield Levels). Thereafter the only bird recorded between 27 Apr and late August was a “most unexpected” male at Laughton Place (Ringmer) on 25 May. The first returning birds were five at Pagham Hbr on 28 Aug with numbers increasing there to 40 by 7 Sep and 108 by 22 Sep. The first returning bird at Chichester Hbr was recorded on 1 Sep and at Pulborough Brooks its first was on 13 Oct. Numbers built up steadily from mid-October at the last two sites.

During the year no less than 325 birds were recorded flying past seawatch sites, making 2013 one of the larger passage years. Spring passage east was heavy with 81 in February, 53 in March and 96 in April making up the majority of the 232 birds seen flying east during the year. The highest daily count east was 76 past Beachy Head on 17 Feb. Autumn passage westwards of 37 in September and 24 in November plus a movement of 21 in January accounted for most of the 93 birds seen flying west during the year. The highest daily count west was 30 past Worthing on 30 Sep. [JRC]

Garganey

Anas querquedula

Scarce passage migrant; very scarce summer non-breeder and rare breeder. Amber listed species of medium conservation concern.

The first confirmed record of the year did not occur until 23 Mar when a pair was at Pagham Hbr. This was 19 days later than the average first arrival date over the last 10 years. However, it was rapidly followed by 3 E past Selsey Bill on the 24th, five at Pett Level on the 25th-26th, four at Henfield Levels on the 26th-27th and a pair at Medmerry which stayed until 10 Apr. By the end of March 24 birds had been recorded with a single at Arlington Res on the 28th and two females and five males at Pulborough Brooks on the 29th.

April started with seven flying past Hastings on the 1st (with a flock of Pintails), and new arrivals were recorded almost every day up to 17 Apr when 44 new birds had been recorded on land or flying past coastal sites. These included three at West Rise Marsh (Eastbourne) on the 5th which had increased to six by the 12th, and a pair at Pett Level for most of the month. New arrivals slowed down towards the end of the month with only another seven recorded between the 21st and the end of April, including at least three at Rye Hbr. Up to 12 May four new birds were recorded (for a day only) at Pulborough Brooks, Cuckmere Haven and Medmerry (a pair), making a total of about 81 seen during the spring migration. On 28 May one was at Arundel WWT and in June singles were seen for a day only at Pagham Hbr on the 1st, Pulborough Brooks on the 7th and at Ferring on the 9th. These may all have been wandering summering birds.

Successful breeding was confirmed at Rye Hbr, where on 30 May a brood of four young with an adult was seen. Also during May up to four birds were regularly recorded at Pett Level, although there were no records of successful breeding there.

Twelve birds were recorded on autumn migration. The first sign of return migration was one at Pett Level on 21 Jul. In August one flew east past Selsey Bill on the 20th, one was at Pulborough Brooks on the 27th, one flew west past Selsey Bill on the 29th and one was at Arlington Res on the 31st. In September three were at Pulborough Brooks on the 1st and two flew east past Selsey Bill on the 28th. In October one flew west past Selsey on the 13th and the last bird of the year was at Pulborough Brooks on 20 Oct, twenty days later than the 10-year average.

Indeed with the first arrival date 19 days later than the 10-year average and the last departure date 20 days later, 2013 can be considered to have been a late year for Garganey. [JRC]

Shoveler

Anas clypeata

Very scarce breeder and scarce summer non-breeder; common winter visitor; scarce on observed passage. 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	839	897	478	325	47	39	28	61	144	236	719	537
Medmerry	68	41	nc	44	16	6	3	7	5	23	18	12
Pagham Hbr	4	21	36	16	-	-	-	-	-	2	28	27
Chichester GP	77	10	111	37	-	-	nc	nc	-	14	64	114
Burton & Chingford Ponds	-	-	-	-	nc	nc	nc	5	21	10	1	6
Arun Valley	181	267	35	84	11	10	-	10	31	21	121	86
Ouse Valley	5	49	21	7	-	-	-	-	1	1	4	11
Barcombe Res	47	28	1	-	-	3	-	4	6	-	9	2
Eastbourne Lakes	174	203	101	-	-	-	-	-	22	41	229	162
Pevensey Levels	-	2	35	23	-	-	-	-	-	-	-	-
Rye Bay	275	271	130	109	20	20	25	34	53	111	242	105

The recent upward trend in wintering numbers was maintained with a new WeBS peak for Sussex of 897 in February (the previous peak was 844 as recently as February 2011). At Eastbourne Lakes the November WeBS count was also the highest ever for this site. Other significant counts not in the WeBS numbers included 34 at Lewes Brooks on 24 Feb, 24 at Henfield Levels on 17 Apr and 30 at Lidsey Lodge on 4 Nov.

As usual wintering visitors had departed by May leaving only a small number of birds to summer.

At Medmerry a few birds were present throughout the summer and a female with a well grown duckling was present on 2 Jul but probably did not breed at this site. However there were three instances of confirmed breeding in the county; at Arundel WWT a female and four young were recorded on 9 Jun, and at Pett Level two broods of seven and four birds were recorded on 17 and 20 Jun. At Rye Hbr small numbers of birds were present from April to June but breeding was not proven and although there were records of up to three birds at Pagham Hbr and seven at Pulborough Brooks during May and June there was no suggestion of breeding at these sites either.

Birds started returning for the second winter period in late August with 12 at Waltham Brooks on the 24th, four at Barcombe Res on the 25th and 26 at Rye Hbr on the same day.

Recorded movements past seawatch sites totalled a high 488 across the year with a heavy spring passage of 420 E and 29 W between February and May. Maximum counts were 90 E past Worthing on 22 Mar and 76 E past Splash Point (Seaford) on 8 Apr. Autumn movements were typically much lighter with 10 E and 23 W between August and December; the maximum count being 7 E and 3 W past Worthing on 26 Aug, whilst 2 W in January and 4 E in June completed the seawatch records. [JRC]

Red-crested Pochard

Netta rufina

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

There were records of three birds in the first winter period, one in the spring and two in the autumn. One was at Rye Hbr on 29 Jan followed by a pair at Pett Level on 24 Feb. In May a male was at Arlington Res on the 24th, and in September a female was at Ivy Lake (Chichester GP) on the 24th and 25th. There was a long-staying bird at Swanbourne Lake (Arundel) which was recorded during WeBS counts on 26 Aug and 23 Sep and on 14 Oct at the adjacent WWT. This was confirmed as a full-winged bird not from the Arundel WWT collection (*pers. comm.*). [JRC]

Common Pochard

Aythya farina

Very scarce breeder: scarce summer non-breeder and fairly common winter visitor. Very scarce on observed passage. 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	340	547	146	45	7	29	287	427	225	141	204	343
Chichester GP	104	128	41	15	1	7	nc	nc	-	11	28	129
Burton & Chingford Ponds	10	28	4	-	nc	nc	nc	-	-	-	5	9
Petworth Park	-	1	5	-	-	-	-	-	6	18	7	-
Arun Valley	35	39	30	4	1	9	1	6	6	8	5	20
Weir Wood Res	3	18	12	-	-	-	-	-	-	-	1	10
Barcombe Res	9	2	1	-	-	-	2	4	-	5	9	20
Eastbourne Lakes	3	35	2	1	-	-	-	-	4	1	-	4
Rye Bay	149	256	43	21	5	13	284	417	209	91	141	139

The maximum monthly WeBS count of 547 in Feb was well below the 5-year average of county maxima of 702 for 2008-12. As usual Chichester GP and Rye Bay (particularly Long Pit and Scotney GP) were the wintering strongholds. Numbers in the Arun Valley were notably low, particularly at the Arundel strongholds of Swanbourne Lake and Arundel WWT. Notable counts not reflected in the WeBS table above were 130 at Chichester GP on 27 Jan and 38 at Bewl Water on 26 Jan.

Most February WeBS counts were carried out between the 10th and 12th, and shortly after that the numbers rapidly declined as wintering birds started to depart to breeding grounds. Of 137

records between 19 Mar and 19 Jul only seven had counts in double figures, the highest being 21 at both Pett Level on 14 Jun and Chichester GP on 4 Jul, the summering strongholds.

It was a very good year for breeding with nine broods at four sites. *The Birds of Sussex* (Thomas 2014) notes that there were only 31 successful breeding attempts during the 17 years 1994-2011. At Drayton Pit (Chichester GP) a brood of four nearly fully grown chicks was recorded on 4 Jul and three broods of seven, six and three ducklings were recorded on 10 Aug. At Arundel WWT a female and two ducklings were seen on 19 May. At Pett Level there were two broods and at Rye Hbr two broods were seen at Castle Water in June.

Returning wintering birds arrived in force on 27 Jul when 237 were recorded at Scotney GP as part of the Rye Bay WeBS count. Indeed, during late July, August and September the majority of the county population was in the Rye Bay area (particularly at Scotney GP) and it was not until mid-October that (small) numbers started appearing at many central and western sites and December before more substantial numbers appeared.

Only nine birds were recorded flying past seawatch sites during the whole year, a typically low number for this species, with 6 E in March and April and 3 W in May. The highest daily count was 3 W at Selsey Bill on 23 May, a late date. [JRC]

Tufted Duck

Aythya fuligula

Fairly common resident although scarce breeder; fairly common winter visitor and scarce on observed passage. 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	1137	1246	845	589	441	297	322	552	823	660	1056	901
Chichester Hbr	28	31	12	10	12	4	4	4	22	21	124	22
Pagham Hbr	24	35	42	33	47	41	-	11	38	51	33	21
Chichester GP	218	279	249	147	45	34	nc	nc	10	81	207	207
Burton & Chingford Ponds	17	22	28	16	nc	nc	nc	11	129	22	21	40
Arun Valley	130	112	94	89	92	63	22	58	41	41	93	113
Ardingly Res	17	25	60	7	-	4	nc	4	4	15	13	2
Barcombe Res	27	10	22	18	29	21	52	102	33	39	43	28
Eastbourne Lakes	46	81	116	27	-	-	1	1	27	19	23	42
Bewl Water	249	263	nc	nc	nc	nc	nc	69	149	63	106	123
Rye Bay	221	200	111	185	193	108	198	276	289	150	243	172

The peak WeBS count was in February and at 1246 was slightly higher than the average 5-year maximum of 1178 for 2008-12. Chichester GP and Rye Bay were again the main wintering strongholds. Following on from the high numbers at Bewl Water in the second winter period last year numbers remained particularly high there in the first winter period of 2013. Notable records not reflected in the WeBS table above were 266 at Bewl Water on 26 Jan and 148 at Southwater CP on 22 Mar.

Based on WeBS counts summering numbers were about 25% of the winter peak, with Chichester GP, Arundel (Swanbourne Lake and WWT) and Rye Hbr being the major locations,

but Pagham Hbr, Petworth Park, Warnham LNR, Barcombe Res and Pett Levels also held double figure counts of birds. The first successful breeding of the year was recorded at Arundel WWT where there were nine ducklings on 4 Jun (as well as at least two more broods later on). Breeding was also recorded at Chichester GP (three broods), Chingford Pond, Warnham LNR, Barcombe Res, Bewl Water, Pett Level (four broods of four, four, three and two) and Troutbeck (Eridge). At Medmerry and at Rye Hbr four and 13 territories were recorded respectively although breeding success was not reported. The last breeding record of the year was of four adults and three un-aged juveniles at Knepp MP on 21 Aug.

Wintering birds returned in force on 25 Aug when there were WeBS counts of 102 at Barcombe Res (a “very high count for this time of year”) and 147 at Scotney GP (a part of Rye Bay where few Tufted Ducks summer).

The total of 89 birds recorded passing seawatch sites over the year meant that observed passage movements were high when compared to the more typical 20-30 per year. Seventy nine of these birds were recorded moving east in March and April, of which 47 past Selsey Bill on 22 Mar equals the highest ever day count of this species on spring passage, the previous occasion being 45 years ago on 27 March 1968, also past Selsey Bill on that date (Thomas 2014).

On 21 May a male hybrid Tufted Duck x Pochard was recorded at Swanbourne Lake (Arundel). [JRC]

Greater Scaup

Aythya marila

Scarce winter visitor and passage migrant; rare non-breeder in summer. Red listed species of high conservation concern. Schedule 1 species.

The minimum monthly numbers recorded, in what started as a better year than 2012, were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul		Oct	Nov	Dec
No. of birds	5	3	2	1	-	1	1		1	1	4

During the first four months a minimum of 11 birds was recorded, including five on 20 Jan on a farm reservoir at Bilsham (Yapton), which one observer described as “a plastic-lined lake with no vegetation”, an unusual location. On 3 Feb one was at Chichester GP and up to two were seen at Scotney GP between the 4th and 17th. In March one flew east past Telscombe Cliffs on the 10th and another flew east past Birling Gap (Beachy Head) on the 23rd. In April one was at Arundel WWT on the 15th-16th.

A female recorded on Pagham Lagoon on 24 Jun stayed until 3 Jul. During the autumn and second winter period only six birds were recorded: 1 W at Selsey Bill on 28 Oct; one at Glyne Gap (Bexhill) on 11 Nov; two were recorded off Goring on 1 Dec and presumably these were seen flying west at Selsey Bill the same day; one at Rye Hbr on 15 Dec and presumably a different bird at West Langney Lake (Eastbourne) on the 17th. [PD]

Common Eider***Somateria mollissima***

Scarce winter visitor and passage migrant; very scarce non-breeder in summer. Amber listed species of medium conservation concern.

The following table, based on an analysis of the counts from the main seawatch sites, shows the low numbers of this species seen passing the county or resting offshore.

	Jan	Feb	Mar	Apr	May		Sep	Oct	Nov	Dec
East	-	-	56	53	5		-	2	8	35
West	1	1	1	16	1		2	-	28	5
Offshore	1	1	-	2	-		-	-	31	11

Away from the main sites during the first four months of the year the only record greater than three birds was of seven drakes at Brighton Marina on 5 Mar. Unusually, there were no records in the summer months.

The first birds recorded in the autumn were 2 W at Selsey Bill on 21 Sep but the next record was not until a month later of 2 E (drakes) at Splash Point (Seaford) on 20 Oct. However, following 24 at Glyne Gap (Bexhill) on 11 Nov numbers increased significantly as birds were recorded daily from the 17th to the 30th. The highest counts included 11 offshore at Worthing on 18 Nov and ten offshore at Church Norton on the 23rd which increased to 16 on the 26th, up to eight of them remaining into December. The highest counts during the final month were seven in Pagham Hbr on 1 Dec (probably some of the Church Norton birds) and 30 at East Head (West Wittering) on 7 Dec. The final count for the year was three offshore at Church Norton on 29 Dec. [PD]

Long-tailed Duck***Clangula hyemalis***

Very scarce to scarce passage migrant and winter visitor; rare non-breeder in summer. Schedule 1 species.

This was a better year for this species compared with 2012. The minimum monthly numbers recorded were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul		Oct	Nov	Dec
No. of birds	2	-	5	1	1				1	8	9

The earliest sightings were of a female off Pilsey Island on 24 Jan and presumably a different one off Widewater (Lancing) from the 24th to the 26th. The one flying east at Worthing on 3 Mar was assumed to be different from the one seen at Church Norton two days previously but three at Rustington on the 23rd had to be different. A single bird was seen at Scotney GP between 21 and 30 Apr and was probably the same one seen there on 7 May.

The first autumn bird was 1 E at Selsey Bill on 25 Oct. On 3 Nov one was recorded at Scotney GP and seen on at least 12 days until 29 Dec. One was at nearby Rye Hbr on 10 Nov and here too the species occurred on several dates until the year's end with two noted on 16 Nov, 14 and 16 Dec. The records do not reveal whether the same individual was moving between sites although

there were days when one was seen at both locations. Four were offshore at Church Norton on 25 Nov and thereafter up to five were seen there until 11 Dec with smaller numbers until the 30th. Elsewhere a female was noted off Widewater on 25 Nov, a first winter female was seen at East Head (West Wittering) on 1 Dec and another female was at West Langney Lake (Eastbourne) from the 3rd to the 13th. [PD]



Long-tailed Duck, Rye Harbour, December 2013 (Neil Buchanan)

Common Scoter

Melanitta nigra

Common spring passage migrant and fairly common winter visitor to the coast: usually scarce in summer and autumn. Very scarce inland. Red listed species of high conservation concern. Schedule 1 species.

The monthly WeBS counts for this species are not tabulated as they are not representative of the real numbers in the county; the only notable counts being 166 in Rye Bay in April and 210 at Glyne Gap (Bexhill) in November.

Feeding flocks move between sites and are often difficult to observe in inclement weather or because of their distance from the shore. However, during the first winter period there were numerous records of flocks either loafing or feeding at favourite offshore sites with peak counts of 120 off Selsey Bill on 2 Jan and 19 Mar, 130 off Widewater (Lancing) on 21 and 28 Jan and 150 there on 1 Feb, 300 off Glyne Gap on 28 Jan and 170 in Rye Bay on 11 Feb with 300 there on 10 Mar. With double figures at several other offshore sites the total wintering population probably exceeded 600.

Most Common Scoters were recorded from seawatching sites, particularly during the spring, where the monthly totals, computed on the assumption that the highest number seen at a single site

was the maximum in the county that day and that birds seen on subsequent days were different, were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
East	127	37	1114	8826	3742	1013	229	224	190	144	86	58
West	112	69	60	132	257	63	17	40	98	76	791	74

A more comprehensive summary of the eastbound spring passage, as recorded at the principal seawatching sites, was as follows:

	Mar	Apr	May	Total	No. per hr Mar-May	Peak movement
Selsey Bill	605	5060	3918	9583	17.4	2530 on 9 Apr (6 hr)
Worthing	335	4668	1587	6590	48.8	3752 on 9 Apr (5hr)
Telscombe Cliffs	123	810	152	1085	17.2	447 on 9 Apr (2 hr)
Splash Point	923	8384	1452	10,759	45.8	4478 on 9 Apr (8 hr)
Birling Gap	306	2042	1325	3673	43.7	764 on 7 Apr (5 hr)

Although there were signs of eastbound passage as early as 3 Mar with 98 in 3½ hr off Selsey Bill and 86 in 3½ hr past Splash Point on the 5th, migration did not begin in earnest until 21 Mar. The clear peak, however, was from 7-9 Apr, at least three weeks earlier than in 2012 but close to this century's average, followed by a smaller peak on 4-5 May. Totals of eastbound passage on the nine days when maximum passage was observed from at least one of the principal seawatching sites (with hours watched rounded and in parentheses) were as follows:

	21 Mar	22 Mar	24 Mar	7 Apr	8 Apr	9 Apr	4 May	5 May	27 May
Selsey Bill	24 (5)	103 (4)	146 (7)	480 (11)	754 (8)	2530 (6)	510 (12)	359 (15)	635 (7)
Worthing	16 (3)	22 (2)	45 (2)	269 (4)	101 (2)	3752 (5)	250 (2)	249 (3)	256 (2)
Splash Point	246 (3)	137 (4)	225 (5)	805 (8)	1448 (10)	4478 (8)	231 (3)	218 (7)	nc
Birling Gap	94 (3)	nc	nc	764 (5)	728 (4)	nc	332 (4)	488 (9)	53 (1)

The total of 13,682 between March and May was the highest for many years and almost double the average of 7330 for the 28 years 1985-2012. The peak count occurred at Splash Point with 4478 in 8 hr on 9 Apr (the day of maximum passage in this spring), a rate of 560 birds per hour. The size of the passage is highlighted with two sites having spring totals of over 9500 with peak days of over 2500 recorded at the three sites. Additionally three sites had overall rates exceeding 40 birds per hour which is unprecedented in recent years. Eastwards passage continued, sporadically, throughout June.

Counts of 400 in Rye Bay on 23 Jun, 105 off Birling Gap on 25 Jun, 94 in Cuckmere Haven on 20 Jun and 60 off Hastings on 12 Jul were perhaps more likely to be summering birds. As usual, westbound autumn passage, first noted on 20 Aug at Selsey Bill, was much shorter and lighter. It took place mostly between late October and mid-November with a marked peak of 362 W off Splash Point on 11 Nov. In the second winter period the highest counts were of 350 in Rye Bay on 5 Nov with 300 there on 20 Dec and 210 off Glyne Gap on 11 Nov. There were no inland reports this year. [WGH]

Velvet Scoter*Melanitta fusca*

Scarce passage migrant and winter visitor along the coast: rare inland. Amber listed species of medium conservation concern. Schedule 1 species.

Offshore movements recorded at the principal seawatching sites computed on the assumption that the highest number seen at any site was the maximum for the county and that birds seen on subsequent days were different, were as follows:

	Jan	Feb	Mar	Apr	May	Nov	Dec
East	5	-	4	64	15	8	-
West	4	2	6	-	-	6	-

Those recorded from January-March were almost certainly offshore wintering birds on feeding flights. Birds seen offshore included two at Selsey Bill on 2 Jan, then six on the 12th and two at Church Norton the following day; one at Widewater (Lancing) on 22 Jan; two at Selsey Bill on 31 Mar and one at Ferring on 6 Apr. In East Sussex, there were occasional records of birds in Rye Bay: one on 2 Feb increased to a maximum of eight on the 17th; there were three on 24 Mar and six on 9 May, the latest spring record.

Spring passage was noted from 7 Apr and peaked a week later with 17 off Splash Point on 14 Apr and another 11 off Selsey Bill the next day but was effectively concluded by the 21st. However, there was a short resurgence in early May with 15 E off Splash Point on the 7th.

The first returning wintering birds were 3 W off Selsey Bill on 3 Nov. Passing birds were then recorded in small numbers on 18 dates to 4 Dec with a maximum of five which settled offshore at Church Norton on 28 Nov, and the only other records were up to three there for the first four days of December. [WGH]

Goldeneye*Bucephala clangula*

Scarce winter visitor; rare non-breeder in summer. Amber listed species of medium conservation concern. Schedule 1 species.

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	26	37	16	2	-	-	-	-	2	14	8	26
Chichester Hbr	14	8	-	-	-	-	-	-	-	13	2	10
Chichester Canal	-	-	-	-	-	-	-	-	1	1	-	-
Pagham Hbr	2	10	5	-	-	-	-	-	-	-	6	11
Barcombe Res	-	-	-	-	-	-	-	-	1	-	-	-
Eastbourne Lakes	-	1	1	-	-	-	-	-	-	-	-	-
Bowl Water	-	2	nc	nc	nc	nc	nc	-	-	-	-	-
Rye Bay	10	16	10	2	-	-	-	-	-	-	-	6

The January total shown for Chichester Hbr was reasonably consistent throughout the month but exceeded on 11 Jan (21) and 30 Jan (15). At Pagham Hbr there were higher counts of 19 on 5

Jan and 7 on 21 Jan. There were two at Shinewater Lake (Eastbourne) on 15 Jan and one on the R. Adur at Coombes on 21 Jan. In February Chichester Hbr numbers peaked at 14 on the 21st, and there were 18 at Rye Hbr on 8 Feb, while the WeBS totals were the peak counts from Pagham Hbr, Eastbourne Lakes and Bewl Water. There were three at Scotney GP on 11 Feb. Two males were at Chichester GP from 12 to 24 Feb with a single on Piddinghoe Pond (Newhaven) on 11 Feb.

In March there were two males at Bewl Water on the 27th with two birds east off Splash Point on the 5th and one east off Selsey Bill on 3 Apr. The last birds of spring were two at Rye Hbr on 14 Apr and one at Tilgate Park (Crawley) on 28 Apr. There were no reports of summering birds.

The first returning birds were on Barcombe Res on 20-22 Sep and Chichester Canal on 21 Sep (and 12 Oct). The only other October records were from Weir Wood Res on the 17th and at Pagham Hbr from the 29th to 2 Nov. The main arrivals took place in the second half of November with four at Fishbourne Channel (Chichester Hbr) on the 15th, three at Pagham Hbr on the 18th peaking at ten there on the 27th and two at Rye Hbr on the same day. There were 3 W off Selsey Bill on 20 Nov and one offshore there on the 22nd. A single bird flew east off Worthing on 20 Nov.

The WeBS counts represent the peak counts at the principal sites with additional singles at Darwell Res on 14 Dec and Scotney GP on 29 Dec. [WGH]

Smew

Mergellus albellus

Very scarce winter visitor, mainly to the east of the county. Amber listed species of medium conservation concern.

This was generally a poor year for this species. The year began with a redhead offshore at Church Norton on 4 Jan but all subsequent records were from East Sussex. Three redheads flew east at Rock-a-Nore (Hastings) on 23 Jan and up to seven redheads were at Weir Wood Res on the 26th and 27th. But in the Rye Hbr area, usually this species' most favoured site, only a single bird was recorded on three dates, 11 and 20 Jan and 4 Mar. Elsewhere, a single bird flew east past Birling Gap on 5 Mar. The only bird for the second winter period was a male at West Langney Lake (Eastbourne) from 11 Dec which remained to the end of the year. [WGH]

Red-breasted Merganser

Mergus serrator

Fairly common winter visitor and passage migrant along the coast; rare non-breeder in summer. Rare inland.

The monthly WeBS counts at the two principal sites are given in the table below. In the first winter period these counts represent the peaks until April with Chichester Hbr predominant as usual, when there were up to nine between 14 and 19 Apr and the last two redheads on 8 May. Pagham Hbr is much less important but if the groups feeding off Church Norton are included there were an additional five on 4 Jan, 20 on 9 Feb and 16 on 9 Mar. The second most important wintering site is off Worthing (extending west to Ferring). This site is not included in WeBS and it would be difficult to do so since the visibility of the feeding flock varies with sea conditions and its distance from the shore. The peaks here were 43 on 14 Jan, 105 on 22 Feb, 196 on 20 Mar and 85 on 3 Apr. The last flock counted here in the first winter period was 70 on 6 Apr. From mid-March to mid-April offshore flocks are likely to include resting migrants.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	111	103	153	5	-	-	-	-	-	10	126	98
Chichester Hbr	109	97	136	4	-	-	-	-	-	9	126	93
Pagham Hbr	-	6	13	1	-	-	-	-	-	1	-	5

In addition there were seven at Widewater (Lancing) on 7 Jan with 13 on 12 Jan, two off Climping on 15 Jan, a single at Rye Hbr on 24 Feb and 3 Mar and peaks of 41 on 26 Jan, 32 on 2 Feb, and 75 on 17 Mar off Selsey Bill. There were no records from further inland.

The table below shows the monthly totals and directions of flight from the main seawatching sites. In most of the winter periods these totals probably reflect the considerable interchange between feeding sites in response the movement of food supplies, tides and general weather conditions. Spring migration (eastwards) began in earnest around 17 Mar and continued until mid-April. Small movements, mostly with single figures, continued until 11 May. A single redhead flying east there on 3 Jul was probably over-summering along the Channel coast.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
East	52	23	374	305	11	0	1	0	0	7	66	84	923
West	69	58	136	73	1	0	0	0	0	42	119	134	632

The autumn migration (westwards) began with a single west off Worthing on 2 Oct, singles west and east off Selsey Bill on the same date and the first in Chichester Hbr on 12 Oct with up to ten between 18 Oct and 7 Nov. Larger numbers began moving later in October and well into November. Offshore there were peak counts of 41 off Selsey Bill on 25 Nov, 50 off Church Norton on 24 Nov and 77 off Worthing on 25 Nov. As usual there were few records from East Sussex with 7 E at Rye Bay on 11 Nov involving the most birds.

The WeBS totals again emphasise the predominance of Chichester Hbr as the main wintering site. Widewater had its first two on 21 Nov and numbers built up steadily to eight on 27 Dec. Offshore December peaks were 185 off Worthing on the 2nd, 20 off Church Norton on the 17th and 48 off Selsey Bill on the 19th. [WGH]

Goosander

Mergus merganser

Scarce winter visitor and passage migrant.

The approximate minimum monthly totals, which demonstrate a very ordinary year with no major influxes, and numbers split between offshore sites and those inland with fresh or brackish water, were as follows:

	Jan	Feb	Mar	Nov	Dec
No. of birds	11	13	1	18	18
Offshore sites	3	-	1	5	12
Inland sites	8	13	-	13	6

In the first winter period there were records on 13 dates from 1 Jan to 28 Feb, with a long gap from 31 Jan to 23 Feb, from five inland and two offshore sites. The largest groups were five at

Arlington Res on 24 Jan and ten at Chichester GP on 23 Feb. The last inland sighting was a female on Bewl Water on 28 Feb. Offshore, a pair flew west off Worthing on 1 Jan and there were singles east past Selsey Bill on 20 Jan and 27 Mar; the latter was the only record in March. There were no records between April and October.



Goosander, Widewater, November 2013 (Marc Read)

The first returning birds were single redheads flying offshore at Cuckmere Haven on 4 Nov and a young female which took up residence at Widewater (Lancing) until the 27th. There were records on 29 dates in the second winter period from six inland sites and six offshore sites. Most were single birds but ten flew SW over Salehurst on 5 Nov and two were on Lurgashall MP on 18 Nov. In December there were up to five redheads usually offshore at Church Norton from the 2nd to the 11th and again on the 26th, which were the last reported in 2013. There were three redheads at both East Head (Chichester Hbr) on the 1st and on the R Adur near the Toll Bridge on the 14th, when there were also four redheads in Petworth Park.

All other records were of single birds. It is interesting to note the numbers which have no objection to being on salt water. [WGH]

Ruddy Duck

Oxyura jamaicensis

Scarce and declining resident and winter visitor; subject to culling to reduce numbers.

Once again there were only two regular sites. The West Sussex location had three females on 15 Jan, two on 12 Feb and one on 17 Mar and thereafter one bird on two dates to 11 Apr with no further records during the year. At the East Sussex site there was a single on New Year's Day then one or two between 3 Feb and 6 Jun. Three birds were noted on 23 Jun and 14 Jul and four on 27

Aug. Thereafter numbers varied between one and three until finally three were noted on 19 Dec. There was no evidence of breeding.

The only other records were of singles at Swanbourne Lake (Arundel) on 6 Jan, Rye Hbr on 13 Feb and 1 Jun, Arlington Res on 10 Aug and Scotney GP on 15 Dec. [WGH]

Red-legged Partridge

Alectoris rufa

Common introduced resident; population augmented annually by captive-bred stock.

This species was recorded from 80 tetrads, slightly down from 88 in 2012. During the first winter period, the highest counts were ten at Burpham on 17 Jan and eight at West Dean Woods on 18 Mar. During the early SWBS it was recorded in only six of the 100 1-km squares surveyed. There was a surprising urban record of a bird running along Hollingbury Rise in Brighton on 11 Mar.

Wild breeding was not confirmed, but was probable in ten tetrads. These sites included Medmerry, with an increase to five pairs on local farmland, the Norfolk Estate, where 150 pairs were recorded, and Rye Harbour with two or three pairs.

In the second half of the year, 500 were recorded as arriving on 23 Jul “for the shooting season” at Thorney Island. Other than that, the highest counts were a covey of 35 at Cradle Hill (Seaford) on 23 Aug and a minimum of 50 at three sites; Pagham Hbr on 29 Sep, Spithurst (Barcombe) on 6 Oct and Castle Hill (Falmer) on the 17th. [PRJH]

Grey Partridge

Perdix perdix

Scarce resident; much declined but benefitting locally through conservation effort. Red listed species of high conservation concern.

The number of tetrads in which Grey Partridge was recorded decreased markedly from 57 last year to 37 (mainly in West Sussex) in 2013. During the first winter period, the highest counts were 30 at Thorney Island on 3 Jan and at The Burgh (Burpham) on the 13th. Elsewhere, the highest count was ten at Rye Hbr on 19 Jan. A displaying pair was noted near Sefton Fm (Rose Green) on 22 Feb.

Breeding was confirmed at just two sites, Lidsey Rife (Barnham) and Lancing College Fm, and was probable in a further six. These included Medmerry (where there were four coveys of 25 birds suggesting a good breeding season on local farmland), Amberley Wild Brooks (where 12 juveniles were seen on 14 Jul), Itchingfield, the Norfolk Estate (where 252 pairs were recorded, a substantial decrease from last year's 377) and Rye Harbour (where there were at least six pairs).

During the autumn and second winter periods, the highest count was 1725 individuals on the Norfolk Estate on 1 Sep. Elsewhere, the only sites where ten or more birds were recorded were: Applesham (Coombes) with 11 on 5 Sep; Lancing College Fm with 39 on the 20th (comprising three coveys including young birds, an increase on 2012) with 12 including 4-5 young birds on 21 Nov; West Itchenor with two on 2 Dec; and South Heighton (Newhaven) with 25 on the 20th. [PRJH]

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.

This was a very poor year in Sussex for this secretive summer visitor. It was only recorded at three sites, all in early July, with one singing at Sidlesham Ferry Field on 2 and 10 Jul, one singing from pea fields at East Guldeford Level on the 2nd and another at Wepham Down on the 7th. There were none reported from the Norfolk Estate or from downland near Cissbury Ring, both normally reliable sites for this species. [PRJH]

Common Pheasant

Phasianus colchicus

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

This species was only recorded from 344 tetrads which seems to indicate substantial under-recording.

In the first winter period, the highest counts were 56 at Boxgrove (Chichester) on 4 Feb, 39 at Cocking on the 7th and 50 at Arundel Park on the 12th. During the early SWBS, a total of 308 was recorded from 39 of the 100 1-km squares surveyed. Two male pheasants (never recorded previously) took up residence in this writer's suburban Horsham garden during the heavy snowfall of 11 Mar and stayed until the 20th. The only other report of unusual behaviour was of a male bird seen walking along the pavement in West Tarring (Worthing) on 25 Mar.

Wild breeding was only confirmed in three tetrads and was probable in a further 21. The highest autumn count was 55 at Warningcamp (Arundel) in September. A leucistic (white) form was seen at Maresfield on 29 Oct. In the second winter period, the highest counts were 35 at Bosham on 26 Nov, 45 at Warningcamp on 10 Dec and 47 at Church Norton on the 20th. During the late SWBS a total of 502 was recorded from 66 of the 114 1-km squares surveyed with a maximum of 47. [PRJH]

Red-throated Diver

Gavia stellata

Fairly common winter visitor and passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

The estimated annual total of 3416 was not only a welcome increase on the 2012 figure of 1909 but also an increase on the 10-year rolling average of 1923.

The estimated monthly totals are shown in the table below. These have, as in previous years, been arrived at by taking the largest daily count of birds moving either west or east along the coast during the month plus the largest 'offshore' record together with inland records.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
446	551	1003	892	62	1	-	-	6	8	126	321

The monthly totals for coastal passage at five seawatching sites and estimated totals for all seawatching records were as follows:

	Jan	Feb	Mar	Apr	May	Jun		Sep	Oct	Nov	Dec
<i>Monthly total*</i>	378	491	933	847	60	1		5	6	111	281
<i>Selsey Bill</i>	88	59	206	316	55	-		3	3	68	220
<i>Worthing</i>	160	251	161	124	7	1		-	4	118	198
<i>Telscombe Cliffs</i>	79	-	86	60	1	-		-	-	3	2
<i>Splash Point</i>	60	139	488	805	15	-		1	1	1	-
<i>Birling Gap</i>	288	238	687	258	12	-		-	-	-	-

*adjusted to compensate for duplication

The year started relatively slowly with birds moving back and forth along the coast. An interesting occurrence on 24 Jan involved a party of 60 birds off Goring Gap which were disturbed by a passing hovercraft and flew off westwards. It was not until 14 Feb that the first major movement was recorded with 137 E off Birling Gap. Easterly movements continued in March with 172 E past Rock-A-Nore (Hastings) on the 2nd and a total of 211 E off Birling Gap on the 5th and 6th. During this period the largest offshore concentrations were in the east of the county and included 68 off Glyne Gap (Bexhill) on 28 Jan and 70 in Rye Bay on 13 Mar.

The largest movement of the year occurred on 7 Apr when 388 moved east past Splash Point (Seaford). Numbers in May were predictably lower with the only double figure count being 14 E past Selsey Bill on the 3rd. The last spring record was of 1 E past Splash Point on the late date of 11 Jun.

The first returning bird was one off Worthing on 13 Sep but there were no double-figure counts until mid-November. Those that did occur before the end of the year were all in the west of the county and included 22 E off Worthing on 17 Nov, 46 W also off Worthing on 14 Dec and 65 W past Selsey Bill on 19 Dec. Offshore concentrations during this second winter period were disappointingly low with a peak count of just 40 in Rye Bay on 1 Dec.

There were four records during the year of single birds away from the open sea or tidal harbours: Ivy Lake (Chichester GP) on 10 Apr, Mewbrook Park Lake (Littlehampton) on 11 Apr, Long Pit (Rye Hbr) on 14 Apr and Southwick Canal on 24 Oct. [DHH]

Black-throated Diver

Gavia arctica

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

The estimated 2013 total of 141 was 25 lower than that of 2012 but still above the 10-year rolling average of 126. The lower figure, compared to that of 2012, was largely due to the reduced numbers recorded on spring passage. The estimated monthly totals, which have been derived using the same method as for the previous species, are shown below.

Jan	Feb	Mar	Apr	May		Sep	Oct	Nov	Dec
8	11	22	40	24		1	-	22	13

The monthly totals for coastal passage recorded at five seawatching sites together with the estimated totals of all seawatching records were as follows:

	Jan	Feb	Mar	Apr	May		Nov	Dec
Monthly total*	5	9	20	39	23		13	7
Selsey Bill	-	2	9	22	9		2	7
Worthing	1	-	4	8	1		2	2
Telscombe Cliffs	4	-	2	4	2		9	-
Splash Point	-	7	6	18	3		-	-
Birling Gap	-	-	4	1	14		-	-

*adjusted to compensate for duplication

Numbers in January were typically low with no more than three birds being seen on any given day. This situation continued throughout February although a total of 7 E was recorded off Splash Point (Seaford) between the 10th and the 16th. The largest offshore count during these two months was of three birds at Glyne Gap (Bexhill) on 28 Jan.



Black-throated Diver, Princes Park (Eastbourne), December 2013 (Sandra Palme)

Spring passage was light with no more than three moving east on any date in March and totals for April of only 22 E at Selsey Bill and 18 E at Splash Point. Numbers in May were similarly low with just 11 E past Birling Gap during the first six days of the month. The last spring bird was 1 E at Birling Gap on 27 May which is five days later than the 10-year average.

The first returning bird was one offshore at Climping Gap on 29 Sep (14 days earlier than the 10-year average) but there were then none until 7 Nov when one was off East Head (Chichester). With the exception of 9 E past both Brighton Marina and Telscombe Cliffs on the 30th, numbers remained low in November. In December up to five lingered off Church Norton from the 1st to the 6th with five also off Lancing on the 3rd.

The only record of a bird away from the open sea or tidal harbours was of one on the lake in Princes Park (Eastbourne) from 8-15 Dec. [DHH]

Great Northern Diver

Gavia immer

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

The approximate monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	Jun		Oct	Nov	Dec
Monthly total	7	5	11	11	11	1		1	11	9
Max. off Selsey Bill	6	5	9	11	11	1		1	9	7

As in previous years the major site for this species was Selsey Bill. It is assumed that birds recorded moving off Selsey Bill were involved in feeding flights which in turn accounted for sightings between Chichester Hbr and West Worthing. It also appears that the accumulation of birds at this locality in recent years may in part at least be due to good feeding opportunities, as a number of birds were observed through this and previous years to be feeding voraciously on crabs, crustaceans and small fish.

During the first winter period the number of birds recorded off Selsey Bill varied from day to day rising from two on 1 Jan to six on 13 Jan but with a maximum February count of only five on the 24th.

In line with what is now the normal pattern, numbers rose at the end of March with ten present on the 29th and 30th. Numbers remained high until mid-May with peak counts of 11 on both 11 Apr and 10 May. Two lingered until the end of May with the last record on 9 Jun which is 13 days later than the 10-year average.

The first record of a returning bird involved 1 W past Selsey Bill on 29 Oct (nine days later than the 10-year average). Numbers offshore there then increased to maxima of nine on 17 Nov and seven on 1 Dec.

There were remarkably few records away from the Selsey Bill area, examples including one off Glyne Gap (Bexhill) on 28 Jan, two off Shoreham Beach on 5 Mar, and singles off Lancing on four dates between 26 Nov and 6 Dec. The only record of a bird away from the open sea or tidal harbours was one at Scotney GP on 29 Dec. Rather surprisingly there were no records of migrant birds passing any of the seawatching sites east of Selsey. [DHH]

Diver species

The difficulties of identifying distant divers in flight are well documented. As a result of those difficulties, one in seven of all divers seen in flight in 2013 was reported as ‘Diver spp’.

The number of divers recorded at five seawatching sites during the periods January to May and October to December are shown in the table below.

The totals for each site have been calculated by adding the monthly totals of birds recorded moving both east and west to the numbers seen on the sea. No allowance has been made for duplication either at or between sites so the columns should not be totalled. [DHH]

	Diver spp.		R-t Diver		B-t Diver		Total		No. per hour	
	J-M	O-D	J-M	O-D	J-M	O-D	J-M	O-D	J-M	O-D
Selsey Bill	329	47	739	302	47	17	1115	366	1.9	1.7
Worthing	36	48	710	334	18	10	764	392	4.3	3.7
Telscombe Cliffs	14	-	230	5	14	9	258	14	3.0	0.8
Splash Point	456	-	1549	2	38	-	2043	2	7.6	0.1
Birling Gap	-	-	1508	-	19	-	1527	-	15.6	-

Fulmar

Fulmaris glacialis

Scarce breeding species and passage migrant; resident on coastal cliffs from November to September. Amber listed species of medium conservation concern.

No complete surveys were carried out during 2013 but the number of birds recorded at sea cliffs during the breeding season included 12 at Rottingdean, 28 at Newhaven Fort and 23 at Cliff End (Pett Level).

The decommissioning of the long sea outfall at Telscombe Cliffs resulted in a dramatic reduction in the number of birds feeding in the area with a maximum of 60 in May compared to a peak of 300 in 2012. Despite that, the major movements (all considered to be feeding movements) recorded during the year were all centred on this area. The two peak movements both occurred in March involving 19 E and 119 W on the 15th and 731 E and 197 W the following day. The figure of 731 E on 16 Mar is a county record exceeding the 670 E off Brighton Marina on 12 May 2005.

The numbers reported in the period July to September were particularly low with no more than seven on any one day. The last bird left the breeding ledges at Telscombe Cliffs on 7 Sep (two days earlier than the 10-year average) with the first bird returning on 8 Nov (two days later than the average). At Fairlight the first birds returned on 13 Nov. By December the numbers at Newhaven Fort had increased to 31 on the 3rd with 15 at Cliff End on the 19th.

There were no inland records of Fulmars during the year. [DHH]

Manx Shearwater

Puffinus puffinus

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

The estimated total of 137 in 2013 was not only a disappointing reduction compared to the 487 recorded in 2012 but also below the 10-year rolling average of 248. The monthly totals at four seawatching sites are shown in the table below.

The first record of the year was of 1 W past Selsey Bill on 3 Apr but there were only singles recorded on a further three days during that month. The species was recorded on nine dates in May with peak counts of 8 W at Selsey Bill on the 12th, 12 W there on the 14th and 9 E at Splash Point (Seaford) on the 15th. The largest counts continued to be at Selsey Bill during May with 8 W on the 14th and 26 W on the 22nd. As shown in the table, numbers then remained low throughout July, August, September and October with the last record being 1 W off Worthing on 22 Oct. [DHH]

	Apr		May		Jun		Jul		Aug		Sep		Oct	
County totals*	4		45		55		10		5		9		9	
	E	W	E	W	E	W	E	W	E	W	E	W	E	W
Selsey Bill	-	3	8	36	4	47	-	-	2	2	-	1	-	-
Worthing	-	-	-	-	-	5	-	-	-	-	-	-	-	3
Splash Point	-	1	13	-	2	-	1	6	-	-	8	3	6	-
Birling Gap	-	1	-	-	-	-	-	3	-	-	-	-	-	-
Other sites	-	-	1	-	-	-	-	-	-	1	-	-	-	-

*adjusted to compensate for duplication using the same method as for Red-throated Diver; #1 W off Southwick in May and 1 W off Hove in August

Balearic Shearwater

Puffinus mauretanicus

Very scarce spring to autumn visitor. Red listed species of high conservation concern. Considered critically endangered by IUCN.

This was a very good year for this species. Typically the first records were in July but it was on 31 Aug that the county's largest ever movement was recorded off Selsey Bill. The species then continued to be recorded throughout September (three dates) and October. The last record was of one on the late date of 23 Dec (AH, SH).

The table below gives a full list of sightings and shows that, as in previous years, the majority of records came from Selsey Bill.

Date	Numbers, direction, location and observers
27 Jul	1 W Birling Gap (DC, BK)
29 Jul	1 W Worthing (RAI)
30 Jul	1 W Splash Point (MRE) & 2 W Birling Gap (RHC)
17 Aug	1 W Selsey Bill (JA, CRJ)
30 Aug	2 E Selsey Bill (GAH)
31 Aug	50 E & 26 W Selsey Bill (AH, OM <i>et al</i>)
1 Sep	9 E Selsey Bill (JA, CRJ)
2 Sep	2 W Worthing (DIS)
18 Sep	2 W Worthing (DIS)
2 Oct	1 W Selsey Bill (AH, OM)
19 Oct	1 W Selsey Bill (GAH)
20 Oct	2 W Worthing (RAI)
25 Oct	1 W Selsey Bill (JA)
23 Dec	1 W Selsey Bill (AH, SH)

With birds moving both east and west off Selsey Bill on 31 Aug it is difficult to arrive at an accurate annual total. The minimum number of birds involved was 52 but the actual total may have been much higher. The previous highest day count was 23 W at Selsey Bill on 19 Jul 2008. [DHH]

Storm Petrel*Hydrobates pelagicus*

Very scarce visitor; mainly in mid-summer and after autumn gales. Amber listed species of medium conservation concern.

The five records this year were all of single birds and all in June: three off Selsey Bill and two off Worthing. At Selsey Bill there was 1 W on 13 Jun (GAH *et al.*), another moving west the following day (GAH, OM) and 1 E on 16 Jun (JA *et al.*). At Worthing there was 1 W on 16 Jun (DIS) and 1 W on 23 Jun (RAI). The times of the birds passing Worthing and Selsey Bill on 16 Jun suggest that they were separate individuals. [DHH]

Gannet*Morus bassanus*

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

Numbers in the period January-July were generally lower than those in 2012, with those in August-December showing an increase. The movements recorded at five seawatching sites are shown in the table below:

	Jan-Feb		Mar-May		Jun-Jul		Aug-Oct		Nov-Dec	
	E	W	E	W	E	W	E	W	E	W
Selsey Bill	108	38	3514	3273	1170	770	1660	2768	154	1317
Worthing	73	101	654	606	338	327	602	1882	159	670
Telscombe Cliffs	84	32	568	53	100	30	135	145	-	-
Splash Point	391	40	2332	156	239	20	814	201	482*	-
Birling Gap	165	3	1359	47	-	-	-	-	-	-

*single day count only on 11 Nov

During January there were just three daily counts of more than 100 birds and no such counts in February. Those in January were in East Sussex with 129 E at Splash Point (Seaford) and 236 E at Rock-A-Nore (Hastings) on the 12th and 120 E at Splash Point the following day. A similar pattern emerged in March with three-figure daily totals again confined to the east where there were three such counts at Splash Point and one at Birling Gap, all involving birds moving eastwards. In April the picture became more confused with observers at Selsey Bill recording three-figure totals on three dates in the second half of the month but with numbers divided almost equally between birds moving east and those moving west. This pattern was also noted at Worthing. At that time the largest daily counts involved birds moving east off Birling Gap (120 on 8 Apr) and Splash Point (134 on 9 Apr).

The focus moved to West Sussex in May with observers at Selsey Bill recording three-figure counts on 17 dates with numbers moving east and west again being almost equal. Again, a similar pattern was recorded at Worthing. The largest single movement in May occurred on the 9th with 626 E at Splash Point and 327 E at Birling Gap. Numbers were unusually low in both June and July although Selsey Bill observers did record more than 100 birds on six dates in June but none in July.

Numbers remained low in both August and September and it was not until October that any significant westerly movement was recorded including 725 past Selsey Bill and 910 off Worthing

on the 20th. Westerly movements continued to be recorded in the last two months of the year with 460 passing Selsey Bill on the 2 Nov but conversely, there were 482 E off Splash Point on the 11 Nov.

The largest offshore feeding parties recorded during the year were at the extreme ends of the county with 75 in Rye Bay on 25 Jan and 118 there on 28 Jun while off Selsey Bill there were 100 on 5 Sep and 200 on 19 Oct. [DHH]

Cormorant

Phalacrocorax carbo

Fairly common but localised resident and common winter visitor.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	457	681	685	489	537	569	471	452	460	773	448	471
Chichester Hbr	18	22	16	7	9	4	3	9	27	48	66	37
Pagham Hbr	21	171	104	46	52	17	41	35	47	167	23	17
Chichester GP	21	41	110	89	126	195	nc	nc	2	24	32	34
Burton & Chingford Ponds	38	5	-	-	nc	nc	nc	-	1	4	1	8
Arun Valley	28	24	15	1	-	3	4	2	2	1	9	11
Upper Adur Levels	23	19	10	nc	nc	nc	nc	nc	nc	nc	nc	nc
Weir Wood Res	28	26	50	24	17	11	24	32	26	21	20	31
Ouse Valley	13	22	45	5	2	-	-	8	8	10	16	22
Barcombe Res	7	3	3	1	3	4	5	10	79	19	14	6
Arlington Res	9	35	20	5	2	5	6	12	8	3	8	1
Eastbourne Lakes	12	13	15	13	8	9	23	11	34	10	3	3
Pevensey Levels	9	9	12	5	1	2	-	4	5	34	14	42
Wadhurst Park	-	7	7	3	-	-	-	-	8	57	-	-
Bewl Water	22	18	nc	nc	nc	nc	nc	8	63	22	41	28
Rye Bay	141	175	187	243	276	277	348	282	82	257	120	158

During the first winter period the largest concentrations were seen at Chichester GP, Pagham Hbr and in Rye Bay. The largest single count was 184 at Rye Hbr on 10 Mar. This year, however, the highest WeBS count, at Rye Bay of 348 in July, just failed to reach the 1% threshold level of 350 for a site of national importance.

In the breeding season breeding was confirmed at four sites: Chichester GP, Arundel WWT, Iford Brooks and Rye Hbr. Attended nests were recorded as early as 16 Feb at Iford Brooks which had increased to 19 by 3 May. At Chichester GP, at least 97 occupied nests were counted on 12 May. At Arundel WWT an adult with chicks was noted on 14 May. However, the largest numbers were at Rye Hbr where, on 14 Apr, 115 nests were counted in two separate colonies in willows on islands at Castle Water. At Rye Harbour the majority of pairs are considered to be of the continental subspecies *P.c. sinensis*, but these are very difficult to determine in the field. The nesting dates were approximately a month later than in 2012.

Throughout the rest of the year small numbers were seen widely across Sussex while larger concentrations of 50 or more were recorded at several suitable sites, particularly at Pagham Hbr and in Rye Bay. The largest count at the former site was 166 on 20 Oct while the largest count of

the year, 282 birds, was seen at Rye Hbr on 21 Jul. Notable groups of 79 and 63 were seen inland at Barcombe Res on 20 Sep and at Bewl Water on 22 Sep, respectively.

Roosting birds were noted at several sites during the year including 49 at Steyning Levels on 5 Apr, 69 at Firehills (Hastings) on 14 Sep and 62 at Burton MP on 22 Dec. During the second winter period small groups were seen widely across Sussex. Notable records away from the main sites included 132 W at Selsey Bill on 23 Dec and a flock of 125 at Worthing on 31 Dec. [RJE]

Shag

Phalacrocorax carbo

Scarce winter visitor and passage migrant; rare away from coast. Amber listed species of medium conservation concern.

Monthly totals at three of the main seawatching sites (and other sites) were as follows:

		Jan	Feb	Mar	Apr	May	Jun		Sep	Oct	Nov	Dec
Selsey Bill	E	-	-	3	3	1	-		2	8	-	2
	W	-	-	-	1	2	-		-	4	-	-
	o/s	10	-	-	1	9	-		2	21	-	2
Worthing	E	-	1	-	-	-	-		-	-	-	-
	W	-	-	-	-	-	-		-	-	-	-
	o/s	-	3	2	-	-	-		-	-	5	-
Splash Point	E	-	-	-	4	2	-		-	-	-	-
	W	-	-	-	-	-	1		-	-	-	-
	o/s	-	-	4	1	1	2		1	-	-	-
Other sites	E	-	-	-	4	5	-		-	-	-	-
	W	-	-	-	-	1	1		-	-	-	-
	o/s	2	-	1	-	-	-		-	-	-	-

*the figures in the o/s rows represent the number of bird/days, the sum of all the observations

As usual, most were recorded at Selsey Bill where the first Shag of the year was sighted on 10 Jan, followed by a group of nine at the same location offshore on the 13th. Throughout the rest of the winter between one and three were seen along the coast. Sightings during the rest of the year were mainly of small numbers, except for groups of eight and five seen at Selsey Bill on 5 May and 9 Oct, respectively. The last sighting of the year was also at Selsey Bill where three birds were seen on 31 Dec. [RJE]

Eurasian Bittern

Botaurus stellaris

Scarce winter visitor; rare outside winter months. Red listed species of high conservation concern. Schedule 1 species.

Numbers were similar to recent years, though there was a noticeably wide spread of locations right across the county during the cold spell in the first winter period. Although Rye Hbr was the only location to have two birds regularly recorded there were two at Burton MP on 11 Jan, Shinewater Lake (Eastbourne) on 21 Jan and Beeding Brooks on 3 Mar.

	Jan	Feb	Mar	Apr	May		Sep	Oct	Nov	Dec
County total	13	12	9	3	1		1	-	5	6
Chichester GP	-	-	1	-	-		-	-	-	1
Burton MP	2	1	-	-	-		-	-	-	1
The Mens	-	1	1		-		-	-	-	-
Arundel WWT	1	1	-	-	-		-	-	1	-
Waltham Brooks	-	1	-	-	-		-	-	-	-
Pulborough Brooks	1	-	-	-	-		-	-	-	-
Wisborough Green	-	1	-	-	-		-	-	-	-
Steyning MP	1	-	-	-	-		-	-	-	-
Beeding Brooks	-	1	2	-	-		-	-	-	-
Henfield Woods Mill	-	1	1	-	-		-	-	-	-
Weir Wood Res	1	-	-	-	-		-	-	-	-
Cuckmere Haven	-	1	-	-	-		-	-	-	-
Eastbourne	2	-	1	1	-		-	-	1	2
Pevensy Levels	1	1	-	-	-		-	-	-	-
Filsham LNR	1	-	-	-	-		-	-	-	-
Pett Level	1	1	1	1	-		1	-	1	1
Rye Hbr	2	2	2	1	1		-	-	1	1

A booming male was heard on a few occasions at Rye Hbr in early May, but there was no further sight or sound after the 9th.

There was a very early autumn record from Pett Level, where a bird was seen on three dates between 2 and 8 Sep. There was then no further record until November, when one was seen at Shinewater Lake on the 10th, heralding a small influx, with records of birds from Arundel WWT on the 13th, Rye Hbr on the 14th and Pett Level on the 17th. The only new birds in December were singles at Chichester GPs on the 10th and Burton MP on the 19th. [AH]

Little Egret

Egretta garzetta

Formerly rare but has bred since 2001 and is a scarce but increasing resident and probably scarce autumn visitor; status as winter visitor uncertain. Amber listed species of medium conservation concern.

The monthly WeBS counts at the principal locations are shown below in the table below.

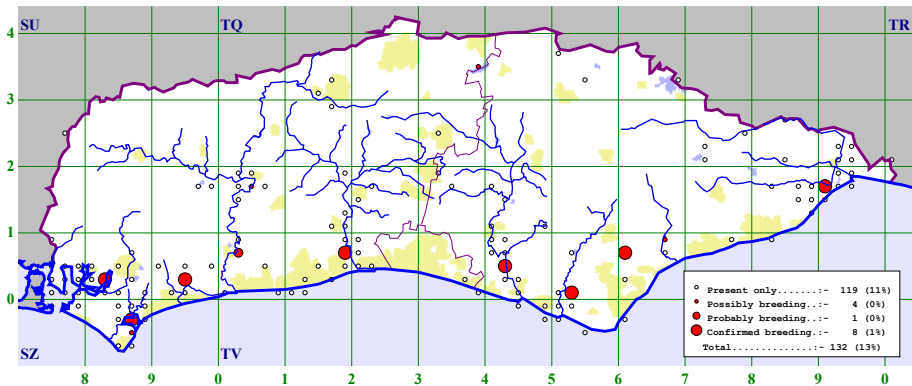
In addition to the WeBS counts there were 16 in the roost at Rye Hbr on 26 Jan (with 15 there on 13 Mar), ten at Pagham Hbr on 3 Feb, eight at Lewes Brooks on 9 Mar and six at Pevensy Levels on 6 Feb.

At least 53 occupied nests were found at eight sites during the breeding season as follows: Old Park Wood (Bosham) 13, North Wall (Pagham Hbr) 16, Hoe Fm (Flansham) 5, Applesham (Coombes) 7, Southease 5, Charleston 1, Glynleigh (Lusteds) 3, Winchelsea 3. This is a big increase from last year's record number of 44-45. There were again no records from Pebsham Wood.

During the autumn migration peak significant counts in addition to the WeBS were 27 at Rye Hbr on 16 Jul, 26 in the Lower Cuckmere Valley on 1 Sep, 24 at Ferring Rife on 26 Aug and 15

at Worthing Beach on the 14th. In the second winter period the only count greater than the WeBS count was 20 at Cuckmere Haven on 19 Nov, and on the 10th a roost count at Thorney Island produced a total of 56.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	54	57	47	69	53	70	130	158	384	330	163	87
Chichester Hbr	27	29	26	25	24	24	40	52	252	219	101	38
Medmerry	4	3	nc	6	3	3	5	5	8	5	3	4
Pagham Hbr	2	2	0	9	8	16	53	50	76	65	29	11
Arun Valley	2	0	2	11	8	7	3	0	0	0	0	1
Adur Valley	3	3	3	nc	nc	2	5	12	13	7	6	3
Ouse Valley	4	3	3	6	4	nc	nc	4	Nc	2	3	5
Cuckmere Haven	1	9	6	nc	nc	nc	nc	nc	8	8	3	6
Pevensey Levels	4	1	1	8	3	8	2	0	2	3	3	6
Rye Bay	7	7	6	2	1	9	9	22	21	16	13	10



All records from the inland reservoirs were during the autumn peak; the highest counts were nine at Bewl Water on 25 Aug, four at Weir Wood Res on 21 Jul and two at Arlington Res on 1 and 6 Aug. At Pulborough Brooks and Warnham LNR birds were present for most of the year however, with maximum counts of ten on 16 and 26 May at the former site and six on 25 Jul at the latter. [CJRB]

Great White Egret

Ardea alba

Rare vagrant.

2010: The record of one at Glynde Reach on 2 Apr has been withdrawn.

2013: There was a big jump in the number of records this year, with a minimum of 13 and possibly as many as 18 birds involved, well over the previous record of six in 2011. This continues the steady rise in the number of sightings, although birds do wander widely and it is possible that the same individuals were involved in some of the reports.

The first record was of one on Pevensey Levels from 6-14 Jan (CB), followed by up to three at Rye Hbr (and intermittently at Pett Level) from 26 Jan until 14 Mar (RB, GK *et al.*). One visited Arundel WWT on 8 Apr (PS), one flew east off Selsey Bill on 19 Apr (JA), one paid a brief visit to Waltham Brooks on 4-5 May (MG, JW) and two came in off the sea at Selsey Bill on 2 Jun (BJ, SR).

Rye Hbr again hosted one on 22 Sep and then up to two from 1 to 6 Oct (KT *et al.*) with one also at Pett Level on 29 Sep (PR). One was reported at Pagham Hbr on 2 and 3 Oct (BGRI), one at Warnham LNR on 4 Oct (JJE) and another called in at Arundel WWT on 2 Nov (RT). There were sightings of single birds at Rye Hbr on 8 Nov (SM) and Pett Level on the 18th (PEJ), and the year ended with once again up to three at Rye Hbr from 26 Nov to 12 Dec (PJ *et al.*). [CJRB, DHH]

Grey Heron

Ardea cineria

Fairly common resident.

Grey Herons were recorded from 260 tetrads across the county. 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	71	76	95	78	62	66	93	103	136	106	95	87
Chichester Hbr	8	4	8	8	7	4	9	9	15	10	14	9
Pagham Hbr	-	2	-	-	1	7	11	4	15	10	4	8
Burton & Chingford Ponds	4	-	-	-	nc	nc	nc	-	10	--	-	1
Arun Valley	10	8	8	10	10	13	12	14	11	7	5	7
Ardingly Res	3	5	5	12	7	4	nc	9	5	2	2	1
Weir Wood Res	3	11	24	22	19	16	27	20	14	9	4	2
Ouse Valley	2	6	14	1	2	-	1	5	2	5	1	-
Cuckmere Haven	1	4	5	nc	nc	nc	nc	nc	4	4	3	1
Eastbourne Lakes	-	5	1	1	-	3	4	4	3	3	2	2
Pevensey Levels	4	3	4	4	3	4	5	5	6	8	8	8
Wadhurst Park	-	2	6	3	-	-	-	-	4	7	-	-
Bewl Water	1	3	nc	nc	nc	nc	nc	7	10	7	14	9
Rye Bay	14	7	-	2	4	8	8	15	11	9	12	12

During the breeding season 212 nests were counted at 26 sites (235 nests at 31 sites in 2012) and another five sites previously occupied had no nests. Counts for individual heronries, listed from west to east, were as follows: Westbourne 0, Forest Mere 4, Fishbourne 5, Pagham Owl Copse 6, Church Norton nc, New Pond (Midhurst) 1, Flansham 7, Warningcamp 3, Parham 11, Angmering 0, Knepp 3, Warnham 17, Henfield 0, Coombes 3, Cophall Wood, Ifield 0, Burgess Hill 2, Ardingly 18, Weir Wood Res 27, Rodmell 6, Firle 7, Hempstead Wood (Uckfield) 1, Charleston 6, Hadlow Down 11, Eridge 11, Hampden Park (Eastbourne) 3, Glynleigh 20, Wadhurst Park 2, Horsebridge Road (Wartling) 8, Burwash 12, near Icklesham 0, Winchelsea 10, Leasam 8.

Away from the heronries, large reservoirs and harbours, most reports during the rest of the year were of single birds or two or three birds at ponds, streams and marshy areas. [ABW]



Grey Heron, Widewater, November 2013 (Dorian Mason)

Purple Heron*Ardea purpurea**Rare vagrant. Schedule 1 species.***2010:** The record of one at Weir Wood Res on 8 Apr has been withdrawn.**2013:** There were only two records: an adult which flew SW over Beachy Head on 25 May (RHC) and a juvenile at Pagham Hbr on 4 Aug (CM *et al.*). These bring the total for 2000-2013 inclusive to ten and the county total to 58. [JAH]**Black Stork***Ciconia nigra**Very rare vagrant.***2008:** The record of one at Weir Wood Res on 5 Jun has been withdrawn.**2013:** The only record was of one over Cinder Hill, near Horsted Keynes, on 25 May (MM). The record has been accepted by the BBRC and the county total is now thirteen. [DHH]**Glossy Ibis***Plegadis falcinellus**Rare vagrant.*

After a minimum of six in 2012 there were only four recorded this year. The first was one photographed at East Worthing on 20 Feb (CB, MG). In April there was one at Pulborough Brooks on the 1st (GJB, JSW *et al.*) followed by one at Warningcamp from the 10th to the 22nd (SPS *et al.*). There were no further records until 24 Oct when one was on the Breach Pool at Pagham Hbr (AH). These four records bring the county total up to approximately 63. [DHH]

Spoonbill*Platylea leucorodia**Very scarce visitor, most frequent in spring and autumn. Amber listed species of medium conservation concern. Schedule 1 species.*

It is likely that around 20 birds were seen in the county during the year, but it could easily be half as many again due to the roaming nature of the species and the difficulty of excluding duplicates. The first bird of the year was at Pulborough Brooks, present from 23-27 Mar and may well have accounted for a run of records further east in early April. Likewise the two seen at Pulborough Brooks and Southwick on 9 Apr and flying west over Seaford seafront and at Pett Level on the 11th could constitute anywhere between two and ten birds. The only other records from seawatching sites came from Worthing, where singles were observed going east on 1 and 5 May. Two were seen at Rye Hbr on 30 May; a group of three (the biggest flock of the year) were at Cuckmere Haven on 12 Jun, and an adult was in the Pagham Hbr area from 1-14 Jul.

The first autumn bird was seen from 15-20 Sep at Rye Hbr, and then one, or possibly two, took up residence at either end of the county for the autumn. A first-winter was seen regularly in the West Wittering area of Chichester Hbr and in Pagham Hbr from 23 Sep until 11 Nov, and then it, or another, commuted between Cuckmere Haven and Newhaven Tide Mills from 19 Nov into 2014. The only second winter period record away from these sites was of a single bird on Pett Level on 1 Dec. [AH]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>County total</i>	-	-	2	10	6	-	1	-	2	1	2	3
Chichester Hbr	-	-	-	-	-	-	-	-	1	1	-	-
Pagham Hbr area	-	-	-	2	-	-	1	-	1	1	1	1
Pulborough Brooks	-	-	1	2	-	-	-	-	-	-	-	-
Climping to Shoreham coast	-	-	-	1	1	-	-	-	-	-	-	-
Newhaven	-	-	-	-	-	-	-	-	-	-	1	1
Splash Point	-	-	-	1	-	-	-	-	-	-	-	-
Cuckmere Haven	-	-	1	1	3	-	-	-	-	-	1	1
Eastbourne	-	-	-	1	-	-	-	-	-	-	-	-
Pevensey Levels	-	-	-	1	-	-	-	-	-	-	-	-
St Leonards-on-Sea	-	-	-	-	-	-	-	-	-	-	-	-
Pett Level	-	-	-	2	-	-	-	-	-	-	-	1
Rye Hbr	-	-	-	1	2	-	-	-	1	-	-	-



Spoonbill, Newhaven Tidemills, December 2013 (Dorian Mason)

Little Grebe

Tachybaptus ruficollis

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

Little Grebes were recorded from 83 tetrads across the county in suitable habitats. The monthly WeBS counts at the principal sites were as shown in the table below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	177	190	83	58	30	30	34	59	120	184	234	189
Chichester Hbr	34	56	14	4	4	2	6	6	33	47	67	63
Pagham Hbr	12	24	19	4	2	2	-	10	13	32	26	20
Chichester GP	4	10	11	4	8	8	nc	nc	-	10	17	11
Widewater Lancing	17	24	10	14	-	-	-	-	-	6	17	24
Cuckmere Haven	26	15	-	nc	nc	nc	nc	nc	-	6	13	2
Bewl Water	7	2	nc	nc	nc	nc	nc	12	37	18	19	13
Rye Bay	44	37	9	15	5	8	8	18	23	41	49	33

Peak counts in the first winter period not included in the WeBS counts were 32 on the Cuckmere Meanders on 16 Jan, 24 at Widewater (Lancing) on the 25th, 18 there on 18 Mar and 18 at Cuckmere Haven the same day.

The approximate monthly minimum numbers, taking the largest count at a site as the minimum, were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	222	164	131	105	47	46	48	71	158	248	282	261
No. of sites	32	28	37	34	17	18	17	17	23	35	34	35

Breeding was confirmed in three tetrads and was probable in another one. The earliest report of breeding behaviour was of a bird displaying at Pett Level on 28 Mar. The first sighting of fledged young was not until the relatively late date of 10 Aug when at least four pairs with young were seen at Chichester GP. Five pairs or territories were recorded at Pagham Hbr while at Rye Hbr there was relatively little evidence of Little Grebes during the breeding season although at least two broods of fledged young were present on the Beach Reserve in late August and at least one pair was present at Castle Fm.

The largest counts of the autumn were 37 at Bewl Water on 22 Sep, 40 at Pagham Hbr on 10 Oct rising to 52 on the 17th and 34 at Rye Hbr on the 13th.

High counts continued into the second winter period, the largest being 40 at Pagham Hbr on 2 and 29 Nov and 38 at Rye Hbr on 10 Nov. Groups of 20 or more were also seen regularly at Chichester Hbr, Widewater and Cuckmere Haven. [RAB]

Great Crested Grebe

Podiceps cristatus

Fairly common resident, passage migrant and winter visitor.

2012: A record count was made from a boat at Bewl Water on 3 Sep of 394, comprising 57 broods, 153 juveniles, 125 non-breeders and one still sitting.

2013: Great Crested Grebes were recorded from 103 tetrads across the county. The monthly WeBS counts at the principal sites were as shown in the table below.

High counts not included in the above WeBS counts included: 142 at Glyne Gap (Bexhill) on 28 Jan and off Hastings CP on 6 Feb; 100 in Rye Bay on 28 Jan and 13 Feb, 283 on the 17th (the highest count), 180 on 5 Mar, 150 on the 10th and 150 on 1 Dec.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	307	283	155	159	125	166	133	482	562	398	305	208
Chichester Hbr	36	41	22	9	4	16	1	-	8	15	27	14
Pagham Hbr	12	2	9	11	3	7	2	7	30	21	8	12
Chichester GP	21	16	19	26	11	11	nc	nc	17	50	44	33
Goring Gap	1	-	8	1	nc	nc	nc	3	-	-	nc	-
Ardingly Res	6	6	11	21	16	15	nc	13	11	4	8	6
Weir Wood Res	30	26	38	31	42	67	68	86	60	52	22	38
Arlington Res	46	29	12	12	14	18	32	35	24	21	8	8
Eastbourne Lakes	8	8	10	10	9	8	7	4	22	19	11	3
Bewl Water	130	119	nc	nc	nc	nc	nc	305	331	173	120	81
Rye Bay	9	31	11	25	19	15	18	9	28	12	20	10



Great Crested Grebes, Chichester Gravel Pits, April 2013 (Mick Davis)

Monthly counts at the five principal seawatching sites were as shown in the table below.

During the first winter period movements, either eastwards or westwards, were fairly small and offshore counts of resting birds were also fairly low except at the traditional site at Worthing, where counts included 110 on 9 Feb and 116 on 3 Mar.

Breeding was confirmed in 14 tetrads and was probable in another five. The first record of a bird in breeding plumage was at Barcombe Res on 24 Feb. Birds sitting on a nest were first seen at Patching Pond on 27 Mar and the first record of fledged young was from this pair on 12 May. One pair bred at Halsey's Fm (Sidlesham), at least four pairs were recorded at Pagham Hbr and four at Rye Hbr with one of the pair recorded sitting on the nest on the 27th of that month. The

first young of the year was recorded at the same place with a single chick seen with two adults on 12 May. Young were also seen at Chichester GP, Burton MP, Knepp MP, Ifield MP, Scaynes Hill, Arlington Res and Weir Wood Res, where there were at least six families.

		Jan	Feb	Mar	Apr	May	Jun		Sep	Oct	Nov	Dec	Peak counts offshore
Selsey Bill	E	11	-	21	26	7	2		-	1	20	10	
	W	13	4	4	12	7	5		3	24	21	45	
	o/s	20	2	13	7	2	2		-	8	12	12	10 on 30 Mar
Worthing	E	4	-	3	-	3	-		2	-	6	-	
	W	-	4	-	-	7	-		1	-	-	10	
	o/s	35	340	418	77	-	-		-	3	421	952	224 on 9 Dec
Telscombe Cliffs	E	3	-	-	-	-	-		-	-	-	-	
	W	4	-	5	-	-	-		-	-	-	-	
	o/s	43	-	177	41	-	-		-	-	-	-	109 on 9 Mar
Splash Point	E	4	24	53	21	-	-		-	-	-	-	
	W	3	2	17	1	-	-		-	-	-	-	
	o/s	1	12	49	20	-	-		-	-	-	-	21 on 22 Mar
Birling Gap	E	12	2	15	4	1	-		-	-	-	-	
	W	2	-	4	1	2	-		-	-	-	-	
	o/s	-	1	24	10	-	-		-	-	-	-	7 on 18 Mar

*o/s figures show the sum of counts for each day

During the second winter period significant counts included 120 at Bewl Water on 10 Nov, 150 in Rye Bay on 1 Dec and, at the favoured site off Worthing, 155 on 17 Nov and a peak of 224 on 9 Dec. [RAB]

Red-necked Grebe

Podiceps grisegena

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

The minimum monthly totals were as follows:

	Jan	Feb	Mar	April	May		Sep	Oct	Nov	Dec
No. of birds	4	4	2	4	1		1	4	3	6
No. of sites	3	2	2	2	1		1	1	2	3

The first sighting of the year was of one bird seen in Chichester Hbr on 4 Jan which was, presumably, the same one still there on the 21st. Two were offshore at Telscombe Cliffs on the 22nd with one still there two days later. On the 27th a single was at Scotney GP.

In February one was at Selsey Bill on the 12th and 1 E was recorded on the 24th while other singles were at Worthing on the 23rd and 24th. In March a bird was seen offshore from various points between Ferring and Lancing between the 2nd and the 4th and one was seen from Selsey Bill on the 30th. In April one was offshore at Selsey Bill on the 7th and 13th and two were observed from Splash Point (Seaford) flying east on the 15th. The last spring bird was seen at Selsey Bill on 6 May.

The first bird of the autumn was seen on the Cuckmere Meanders on the morning of 10 Sep. All four of the October sightings were from Selsey Bill: records included 1 E on the 19th, one offshore on the 25th and 1 W on both the 27th and 28th. The next sighting was of a single bird at Pagham Hbr on 10 Nov and a juvenile off Worthing from the 17-19th with probably a different one there on the 24th. As is typical of the species, all were solitary and not associating with other grebes.

In December a bird was seen at Worthing on the 1st and the 10th which might have been one of the two seen at Widewater (Lancing) on the 9th and 12th. Other single birds were noted at Chichester GP on the 4th and 5th and in the Selsey Bill/Church Norton area on the 1st and 4th, flying west there on the 15th and offshore on the 17th, probably involving three birds. [RAB]

Slavonian Grebe

Podiceps auritus

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

The number of bird-days, the number of days and the number of sites (consistent with the second table) were as follows:

	Jan	Feb	Mar	Apr	Oct	Nov	Dec
No. of bird-days	51	44	63	61	1	161	231
No. of days	19	14	20	15	1	15	18
No. of sites	6	6	5	6	1	5	6

The approximate minimum monthly numbers, taking the largest count at a site as the minimum, were as follows:

	Jan	Feb	Mar	Apr	Oct	Nov	Dec
Chichester Hbr	4	5	2	-	-	1	1
Selsey Bill – Church Norton	7	10	9	7	1	26	30
Littlehampton – Worthing	-	1	3	5	-	1	6
Lancing	-	-	-	-	-	1	2
Splash Point	-	1	4	15	-	-	-
Arlington Res	1	1	-	-	-	-	-
Birling Gap	-	-	2	5	-	-	-
Rye Bay	5	1	-	-	-	-	-
Other sites	1	-	-	1	-	-	-

As usual, the majority of records were from West Sussex, particularly the stretch of offshore waters from Selsey Bill to Church Norton. During the first winter period, at Chichester Hbr numbers peaked at five on 12 and 17 Feb and the last sighting there was of two birds on 23 Mar. Sightings in the main area from Selsey Bill to Church Norton began with two on 1 Jan with a peak monthly count of 7 W on the 27th. Numbers remained low there during the rest of the winter with a peak of only ten on 9 Feb (which compares poorly with recent peaks for the area of 65 in 2012 and 35 in 2011). The peak count at this site in March was nine on the 2nd while five seen in Pagham Hbr the same day may have been part of the same group. The highest count in April there

was seven on the 10th. Elsewhere, counts were generally low. Away from the coast a single bird was seen at Arlington Res in January and February. At Splash Point (Seaford), observers recorded 3 E on 8 Apr followed by 12 E, in four groups of threes, the next day, possibly some of the Selsey Bill area birds migrating. Small numbers were also recorded in the Rye Bay area. The last bird of the first winter period was seen at Selsey Bill on 29 Apr.

The first bird of the second winter period was also seen at Selsey Bill, on 25 Oct. Counts between Selsey Bill and Church Norton were higher in the second winter period than the first. From a single bird offshore on 1 Nov numbers built to 26 by the 27th with 24 seen offshore at Church Norton the next day. In December numbers peaked at 30 on the 15th but declined thereafter. The highest counts elsewhere were of two at Ferring and three at Worthing on 1 Dec. The last sighting of the year was of 13 W past Selsey Bill on 29 Dec. [RAB]

Black-necked Grebe

Podiceps nigricollis

Very scarce winter visitor and passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

The approximate minimum monthly totals were as follows:

	Jan	Feb	Mar	Apr	May		Aug	Sep	Oct	Nov	Dec
No. of birds	2	2	4	37	1		1	2	-	5	1
No. of sites	1	1	4	8	1		1	2	-	4	1

The first sightings of the year were on 4 Jan and 2 Feb, both of two birds in Chichester Hbr.

On 10 Mar two birds were seen with Black-headed Gulls on the main water body at Lewes Brooks. Later in the month a bird was seen at Arlington Res on the 23rd, a single bird was seen at Cuckmere Haven from the 28th to the 30th and on the 29th another was seen at Shoreham.

Spring migration was fully in evidence in April which was a good month for sightings, starting with the bird still at Cuckmere Haven until the 6th. On the 9th a single bird was seen offshore at Worthing and there were six offshore at Selsey Bill, two of which were in summer plumage; possibly the same six were seen at Splash Point (Seaford) flying east. On the 10th single birds were seen at Brighton and Birling Gap and two, both in summer plumage, offshore at Selsey Bill but the highest count of the day, and indeed of the year, was of seven offshore at Worthing in the company of Great Crested Grebes. On 12 Apr three flew east past Splash Point and two were at Arlington Res and on the 19th three were offshore at Worthing. Two were off Birling Gap on 21 Apr and on the 25th there were five at Bewl Water including three in full summer plumage which was a first for the site. In May a single bird, presumably the same individual, was seen frequently in the Rye Hbr area between the 2nd and the 17th.

The first returning autumn migrant was one at Arlington Res on 28 Aug followed by singles at Bewl Water on 20 Sep and at Arlington Res on 26 Sep. There were then no further sightings until one was seen on 10 Nov at Pagham Hbr. There were a number of sightings of up to two between Ferring and Worthing on 17 and 18 Nov and one in the Church Norton/Pagham Hbr area from the 24th to the 25th was probably that seen at Selsey Bill also on the 25th. At the end of the month one was seen on Pett Level Pools on the 23rd until 4 Dec, the last sighting of the year. [RAB]



Black-necked Grebes, Bewl Water, April 2013 (Malcolm Freeman)

Honey-buzzard

Pernis apivorus

Very scarce breeding summer visitor and passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

2011: The record of one at Weir Wood Res on 22 Jul has been withdrawn.

2013: The group who monitor Honey-buzzards in the south-east provided the records for all known breeding pairs. There were three successful pairs, all of which raised two young. The nesting trees used were Hemlock, Lodgepole Pine and Silver Birch. There was pair activity at two other locations but without clear evidence of breeding.

In the spring a migrant was seen briefly at Warnham LNR (SC, JJE) on 31 May. There were no further records until 31 Aug when a dark morph male was photographed at Pulborough Brooks (JLL). One was seen at Beachy Head on 3 Sep (PNP) and an obliging female was observed at Thorney Island (CBC) for 15 mins on the morning of 20 Sep before gaining height and flying off to the south-west. On 23 Sep a female flew over Wiggonholt Church (GB) and finally another female flew over Beeding Cement Works on 6 Oct (DGB). [MEK]

Black Kite

Milvus migrans

Rare vagrant.

After an absence of one year, there were two records: one in Angmering Park on 28 Apr (RAI, DM, DIS), a typical spring over-shoot; a second bird, also an adult, seen at The Midrips on 13 Nov (MEC, RHC) was seen next day at Rye Hbr (KH) and subsequently in the Dungeness area.

Following a review, the county total is now 35 birds seen since 1970 with monthly totals of nine in April, 16 in May, four in June, two in July, two in August and two in November. [JAH]

Red Kite

Milvus milvus

Scarce breeding resident and fairly common visitor. Amber listed species of medium conservation concern.

There are two main populations of Red Kites in the county. The first is the well-established population in the west which has been referred to previously as the West Sussex study area, which encompasses the downland area between Harting Down in the west and the villages of Singleton and Charlton in the east. The second population encompasses the downland area between the Arun Valley in the west and the A280 Long Furlong road. In this second area many of the Red Kites reported are seen in and around The Burgh and so in the table below the whole area is referred to as The Burgh. The Red Kite study team undertook winter roost counts for these two populations and recorded a minimum of 26 in the West Sussex study area on 8 Dec and a minimum of 31 in The Burgh area on the 12th. Roost counts are very helpful when trying to estimate the numbers of Red Kites in any given area, but they will generally under-estimate the true numbers as most breeding pairs in Sussex remain in their nesting woods all year round and do not join a communal roost in the winter. It is very likely that at least 40 Red Kites were present in the study area in December 2013.



Red Kite, Burpham, April 2013 (Wendy Ball)

Away from these two main populations a total of 242 casual records was submitted, 164 in West Sussex and 78 in East Sussex. The annual total for the county was estimated at a minimum of 342 which far exceeds any previous estimates. This species is doing very well indeed.

Of the 453 records submitted only one indicated confirmed breeding in East Sussex for the first time on record. None indicated probable/possible breeding. Despite the lack of nesting data for 2013, the study team estimated the breeding population to be a minimum of 15 pairs but with little detailed knowledge of fledging success.

The estimated minimum monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	15	22	56	84	34	48	34	26	26	29	29	63
Study area	1	2	9	8	0	4	3	11	2	6	18	26
The Burgh	7	12	10	10	9	10	6	10	14	7	8	31
Elsewhere	7	8	37	66	25	34	25	5	10	16	3	6

The table shows the usual fine weather movement between March and July with peak activity occurring in April.

Multiple sightings of note were seven at Burpham on 3 Mar, five at West Dean Woods on 9 Mar, 11 at The Burgh on 9 Jun, six at Beachy Head on 27 Jul, five at Angmering Park on 29 Aug, six at The Burgh on 19 Sep, five at Chantry Hill on 24 Sep, five at Rackham Hill on 15 Oct, five at the Burgh on 25 Nov, six at Cocking Hill on 29 Nov and six at Burpham on 14 Dec. The Beachy Head record was especially noteworthy as five of the birds came from the direction of the sea and were most likely cross-channel migrants. Historically there have been many spring records of birds migrating cross-channel but a July date has never previously been recorded.

Three tagged birds were recorded. The first was at Shermanbury on 15 Jun when both wing tags were thought to be white, therefore an East Midlands bird tagged in 2011. The second was seen at West Dean Woods on 12 Dec with white tag 33 left wing, red tag 33 right wing; this was also an East Midlands bird, tagged on 9 July 2012 at Thorpe Waterville (Northants). A third bird seen at Uppark (Harting) on 22 Dec was tagged yellow/orange, a 2005 Sussex-tagged bird. [MEK, CBC]

White-tailed Eagle

Haliaeetus albicilla

Formerly a rare vagrant (50 old records) but only two recorded since 1929.

2012: A juvenile present in the Walland Marsh area (Kent) from 14 to 16 Feb also visited East Guldeford on the 16th where it was photographed (MCC *et al.*). The two previous records since 1929 were of an adult fishing off Selsey Bill on 30 Jul 1961 and a juvenile at Amberley Wild Brooks on 11 and 12 Dec 2010. [DHH]

Marsh Harrier

Circus aeruginosus

Scarce spring and autumn passage migrant and very scarce winter visitor; very scarce breeder since 2004. Amber listed species of medium conservation concern. Schedule 1 species.

Records were received for every month of the year, with the highest number recorded during September when birds were presumably at their most mobile with numbers supplemented by juveniles.

In the first winter period birds were recorded at 12 broad sites, at seven of which only one was seen. Two females were seen at Thorney Deepes on 20 Mar and another two birds at Pevensy Levels on 10 Feb. However, the highest counts during this time were from Pett Level where, between 1 Jan and 17 Mar, birds roosted in the reedbeds with a maximum of nine on 13, 18 and 25 Jan. The highest daytime count there was three females and three males on 22 Jan. At Rye Hbr, between 1 Jan and 18 Mar, one to three were usually recorded but a maximum of four (two of each sex) occurred on 13 Mar.

During the spring and to the end of June, birds were recorded at some 19 widespread sites. The highest count during this period was four at Pett Level. Probable spring migrants were recorded at Selsey Bill with birds in off the sea on both 28 Mar and 2 Apr; a female was also observed flying north at Worthing on 1 May and single birds were also recorded in the Arun, Adur and Ouse valleys. Additional records of birds, probably passing through, came from Ashdown Forest and Crowhurst.

Breeding was confirmed from two sites. At one site a pair fledged three young around the first week of July. At the second location, one pair was seen displaying and copulating on 6 Apr, with two pairs displaying on 15 Apr. At this same site a pair was recorded at a nest by the end of the month and on 16 Jun an adult was seen carrying food into the nest site. Probable breeding was recorded from another two sites but no details of these were received.

Marsh Harriers were recorded throughout the summer and autumn months with single birds seen across a wide range of the county, probably post-breeding wanderers or birds migrating. The highest numbers were recorded at Pett Level with five on 23 Jul and 24 Sep, four were at Pulborough Brooks on 4 Sep (a good count for that site), five at Rye Hbr on 12 Oct (and fours on 1, 20 and 24 Oct) and three at Medmerry on 27 Sep. Observers at Beachy Head recorded singles heading out to sea on both 27 Aug and 15 Sep and another was present on 25 Sep. Birds recorded from other coastal areas during this time were 1 E at Sheepcote Valley on 20 Aug and 1 E at Worthing on 29 Sep.

During the second winter period records were received from some 13 disparate locations, most of them of single birds. Observers at Pett Level again returned the highest counts with a day-count of nine on 18 Nov and 11 going to roost in the reedbeds on 15 Dec. [DB]

Hen Harrier

Circus cyaneus

Scarce winter visitor and passage migrant. Red listed species of high conservation concern. Schedule 1 species.

Records were received from 59 tetrads, an increase on the 42 in 2012. Ashdown Forest was the location of 29% of the records. The sum of the monthly totals was 55, one fewer than in 2012 and fewer than the 88 in 2011, 68 in 2010 and 78 in 2009. As usual, the highest monthly total was in January. The minimum monthly totals are shown in the table below but as birds roam widely, some double counting may have occurred.

Hen Harriers were seen at all of the usual sites during the first winter period. The New Year began with a male and a ringtail seen at a roost on Ashdown Forest on 1 Jan and again on the 5th. Most sightings were of single birds but twos were seen at Horse Eye Level (Pevensy) on 6 Jan, at Pulborough Brooks on 22 Mar and at Sidlesham Tramway on 9 Apr. One at Scotney GP on 3 Jan may have been that seen at East Guldeford Levels on the 14th. A ringtail seen at Beeding Brooks on 23 Jan and 20 Feb may have been the one(s) seen in the Arun Valley on nine dates in January, eight in February and into March. Birds ranged over Ashdown Forest into April; one was

seen harrying Reed Buntings at Roman Road (Ashdown Forest) on 7 Feb. A male, perhaps one of the Ashdown birds, was seen at Wadhurst on 17 Apr and another flew north at Thorney Deepes on 25 Apr. Three birds were seen in May: one at Ditchling on the 3rd, one in off the sea at Selsey Bill on the 17th and one at Barnham on the 22nd, the last bird of the spring, nine days later than the 10-year average departure date.

	Jan	Feb	Mar	Apr	May		Aug	Sep	Oct	Nov	Dec
County total*	11	8	5	5	3		1	3	6	8	5
Chichester/Pagham Hbrs	-	1	-	2	1		-	-	1	1	-
West Sussex Downs	1	1	1	-	-		1	1	1	-	-
West Sussex Commons	1	-	-	-	-		-	-	-	1	-
Arun Valley	1	1	2	-	-		-	-	1	2	1
East Sussex Downs	1	-	-	1	1		-	1	1	-	2
Ouse Valley	1	1	1	-	-		-	-	-	-	-
Ashdown Forest	2	1	1	1	-		-	-	2	2	2
Pevensey Levels	2	1	-	-	-		-	-	-	1	-
Rye Bay	1	1	-	1	-		-	-	-	1	-
Scotney GP/Camber	1	-	-	-	-		-	1	-	-	-
Other sites	2	1	-	1	1		-	-	-	1	-

*monthly totals are not necessarily the sum of locations totals as some 'other sites' birds may be the same as birds seen elsewhere

The first returning bird was seen at Cissbury Ring on 27 Aug (3 days earlier than the 10-year average arrival date) and was probably the one seen the next day at Steep Down (Lancing). There were six records of probably three birds in September: records from Brighton, Westmeston and Offham between the 1st and 4th are likely to be the same bird; one was at Scotney GP on the 4th and one at Burpham on the 29th. The first bird to return to Ashdown Forest was seen on 1 Oct at Wrens Warren. A ringtail seen flying west at Lancing on 30 Oct may have been the one at Pagham Hbr the next day.

In November two were seen at Pulborough Brooks on the 23rd with singles on other dates. A male and a female were seen on several dates on Ashdown Forest throughout the month. Other November sightings were at West Lavington, Waltham Brooks, Steyning, Pevensey Levels and Pett Level.

Most December records were from Ashdown Forest; two males were seen on Christmas day and singles on six other dates. A ringtail was seen at Alciston on the 6th and a male at Falmer on the 12th. A ringtail was seen near Barnham between the 8th and 19th and was probably the one at nearby Shripney on the 9th. [MJC]

Montagu's Harrier

Circus pygargus

Very scarce spring and autumn visitor; last bred successfully in 1962. Amber listed species of medium conservation concern. Schedule 1 species.

2007: The record of one at Weir Wood Res on 20 Apr has been withdrawn.

2012: A female was present at The Midrips from 20 Aug to 9 Sep (MCC).

2013: There was just one accepted record: a juvenile bird in the Ashcombe Bottom area, WNW of Lewes, on 4 Sep (CAH). Again, no breeding records. [JAH]

Goshawk

Accipiter gentilis

Very scarce resident. Schedule 1 species.

The pair recorded as successfully breeding in 2009, 2010, 2011 and 2012 at an undisclosed site built a fresh nest in a Larch tree but failed in their breeding attempt. The study team that monitors this species in the county recorded displaying birds at two other locations but follow-up visits failed to provide any convincing evidence of breeding birds. One nest was found but it had been abandoned. Otherwise, there were three sightings at a fourth location in West Sussex on 17 and 21 Feb and 5 Mar. The first February sighting was considered to be an adult female and quite probably all three sightings were the same bird. [MEK]

Sparrowhawk

Accipiter nisus

Common resident and passage migrant.

As in previous years, records were received from across the county with the majority relating to single birds from 259 tetrads. High counts for the first half of the year were of four at Verdley Wood (Fernhurst) on 30 Mar and three each at Pett Level on 17 Feb, Alexandra Park (Hastings) on 10 Mar and Warnham LNR on 14 Apr. There was an interesting record of one flying out to sea in search of migrants at Selsey Bill on 7 Apr and one was seen to fly in off the sea, also at Selsey Bill, on 26 May.

The earliest record of display was of two at Church Norton (Pagham Hbr) on 2 Feb and then at High Cross Fm (Uckfield) on 15 Feb. The earliest records of confirmed breeding were of an occupied nest at Beech Fm (Cuckfield) on 23 May and young were noted in a nest at Hindleap Warren (Ashdown Forest) on 18 Jun. There were only three tetrads with confirmed breeding recorded and 12 with probable breeding but as this is a species for which breeding is secretive and difficult to prove this is not a true indication of breeding success.

In the latter half of the year five were seen at Church Norton on 15 Oct and four were seen at Beachy Head on 12 Oct and on the same date at Hastings during the Hastings Migration Watch and at Blackdown (Fernhurst) on 19 Oct. In addition three were seen at the following sites between July and December: Pagham Hbr, Blackdown, Ladywell (Coombes), Peacehaven Heights, Beachy Head and Pett Level. Prey species recorded were: Feral Pigeon, Woodpigeon, Blue Tit, Great Tit, Starling, Blackbird, Fieldfare, Meadow Pipit, House Sparrow, Chaffinch, Yellowhammer and an unidentified small mammal. [MJC]

Common Buzzard

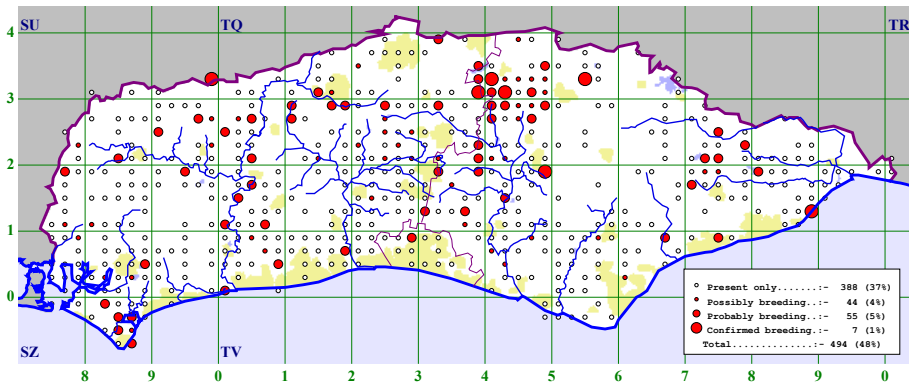
Buteo buteo

Fairly common and increasing resident and probably scarce passage migrant.

Common Buzzards were distributed right across the county and recorded in 493 (47%) tetrads; the continuing spread of the species into East Sussex is shown in the map below.

During the early SWBS 72 birds were encountered in 45 of the 100 1-km squares surveyed with a maximum of four at Billingshurst on 3 Feb. During the first winter period there were five

double-figure counts from four West Sussex sites including 26 at Runcton (Chichester) on 23 Feb, 18 at Blackdown (Fernhurst) on the 22nd and 12 at Burpham on 3 Jan. Although some 89% of records were of one to three birds there were 45 (9%) counts from four to nine. Similar numbers were recorded during the spring with the highest being 30 at Patching on 7 Apr.



Breeding was confirmed in only seven 1-km squares but was probable in a further 62. There were many records of territorial and displaying birds from January to April. The first confirmed breeding record was of one carrying food at Lumbston Stone (Ashdown Forest) on 21 Apr; a nest with young was seen on 19 Jun at Troutbeck (Eridge) and the first fledged youngster was recorded on 4 Jul at Thorney Deeps where two young were successfully fledged.

During the autumn numbers were much as in earlier periods with 90% of records for one to four birds and the highest count was of 20 at Blackdown on 29 Sep. During the second winter period recorded numbers were not so great, there being only three double-figure counts with a high of 11 at Bosham on 26 Nov and at Wakehurst Place on 8 Dec and over 96% of counts were of one to four birds. During the late SWBS 88 birds were encountered in 49 of the 114 1-km squares surveyed.

Food items recorded include a Blackbird and several rabbits, carrion of unknown type and unidentified invertebrates. Apart from being mobbed by the inevitable Carrion Crows and Jackdaws, other mobbers included Herring Gulls and a Lapwing. It appears that the spread and colonisation of Sussex has continued with the possibility that the population might be reaching saturation point. [JAH]

Rough-legged Buzzard

Buteo lagopus

Rare winter visitor.

1997: The record of one at Gatwick Manor on 18 Dec has been withdrawn.

There were no records of this species in 2013 with the last sighting being of one which spent the 2011-2012 winter at The Burgh (Burpham). [DHH]

Osprey*Pandion haliaetus*

Scarce passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

2012: The last recorded date was 25 Oct at Warnham LNR, not 14 Oct as stated.

2013: There were approximately 42 different birds recorded during the year, although it is difficult to be certain of the exact number in Chichester Hbr where they were most frequently recorded, particularly in August and September. There were more records for September than any other month. During the autumn, birds heading south tend to remain for longer than on their northerly spring migration, which increases the likelihood of duplication of records. The annual total for 2013 is slightly lower than in recent years, which has decreased annually since the 58 recorded in 2010.

The first record for 2013 came from Chailey Common where one was seen flying over on 5 Apr, a day later than the previous year but over two weeks later than the 10-year average date of 20 Mar. On 14 Apr one was seen at both Pagham Hbr and Weir Wood Res and one was at Pulborough Brooks on the 19th. The first record from the Chichester Hbr area, on the 21st, was followed by possibly the same bird which stayed from 30 Apr to 6 May. Other May sightings were from Pulborough Brooks, Arlington Res and Weir Wood Res and included the only bird seen to arrive from over the sea this spring, 1 NE at Beachy Head on 26 May. In June birds were recorded in Chichester Hbr and Arlington Res with the last spring passage observed on the 13th at the latter site.

Although records of 51 bird-days were received from the Chichester Hbr complex there were some 22 other sites at which birds were recorded. These included ten bird-days at Pagham Hbr and nine bird-days Arlington Res. Most records were of single birds and the only multiple counts were from Thorney Island where two were seen on 1, 7, 9 and 22 Sep and three on 5 and 15 Sep.

Autumn passage began with the first seen in Pagham Hbr on 12 Aug. In Chichester Hbr an adult and a juvenile were observed together on at least two occasions during September (the 5th and 9th), whilst 1 SW there was followed by two flying together in the same direction on the 15th. Others seen heading out to sea involved singles at Selsey Bill on 29 Aug and at Rye Hbr on 13 Sep. A juvenile at West Itchenor (Chichester Hbr) on 28 Oct was the last in 2013, a date very much in line with the previous year and just four days later than the 10-year average date of 24 Oct. [DB]

Kestrel*Falco tinnunculus*

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

Kestrels were recorded in 333 tetrads (30%) revealing a widespread distribution. Although recorded in more tetrads than Sparrowhawk (259) this species was recorded in fewer tetrads than Common Buzzard (493). During the early SWBS 26 birds were encountered in 21 of the 100 1-km squares surveyed, a reduction on the numbers encountered in 2012 which might indicate a further reduction in population. All but five records during this period were for no more than two and the highest count was four at Pevensey Levels on 10 Jan.

Breeding was confirmed in five 1-km squares and was probable in a further 16. A pair bred at Pagham Hbr and another pair used a nest box beneath the A27/Shoreham interchange viaduct.

One pair used a nestbox at Arlington Res and another used an old owl box in a barn near Haywards Heath. At least one pair bred in the industrial estate at Rye Hbr. Although nesting material was seen being carried at Arlington Res on 15 Apr it was dropped into a blackthorn hedge, but a pair was visiting a probable nest site there on 19 May. The first fledged young (four) were recorded at Troutbeck (Eridge) on 25 Jun. A nest with young was recorded at Salehurst on 4 Jul and fledged young were seen at High Cross Fm (Uckfield) the next day.



Kestrel, Beachy Head, March 2013 (Dave Cooper)

The majority of records (67%) during late spring and summer were of one bird; the highest count was of eight, i.e. four pairs, at Thorney Island during the breeding season. Similarly, during the two summer months, there were only 12 records of three to four birds. Also, in the autumn and second winter period, while 84% of records were of single birds there were only two records of more than three: eight was the highest count, at Barnham on 16 Nov, followed by four at Pett Level on 25 Oct. During October a total of seven was recorded at Selsey Bill on five dates with a maximum of three on the 1st.

Food items recorded included a lizard being passed on the wing by a female to its young, a shrew, dragonflies and (unidentified) prey robbed from a Barn Owl. Kestrels were seen to be mobbed by not only the inevitable Carrion Crows but also Barn Swallows. One record involved a male bird harrying a Barn Owl such that they both fell to the ground but the owl got up first and flew to a post to preen while the Kestrel just flew off. [JAH]

Merlin*Falco columbarius*

Scarce winter visitor and passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

Recorded in 40 tetrads, most records came from coastal sites, principally Pagham and Rye Hbrs, or in the main river valleys, especially the Arun at Pulborough Brooks. Records were received from January to May and September to December. During the first winter period up to 32 different birds were sighted at 16 locations with multiple sightings during the period from Barnham, Pagham Hbr, The Burgh (Burpham), Pulborough Brooks, Pevensy Levels, Pett Level, Rye Hbr and East Guldeford Level. The only record of more than a single bird was of two at Rye Hbr on 11 Jan.

Spring migration involved five or six different birds; the first recorded was at Beachy Head on 10 Apr, followed by Ticehurst on the 14th, Pett Level on the 17th, Pulborough Brooks on the 22nd, and possibly another at Pett Level on 5 May. The last spring record was at Pagham Hbr on the 11th.

One near Cissbury Ring on 1 Sep was the first in the autumn followed by another at Pett Level on the 2nd, but there was then a hiatus until the third record at Pulborough Brooks on the 22nd following which there was a steady stream of records to the end of the year. Several observations during the latter part of the year related to birds in off the sea. The first such record was of one at Rottingdean on 27 Sep flying through from S to N (but seen off by three Kestrels). At Hastings, six were recorded between 2 and 24 Oct. On 20 Oct a female flew in from the sea at Splash Point (Seaford) and then flew east just offshore. A bird seen at Selsey Bill on 27 Oct was possibly hunting over the sea, which leads one to speculate whether some at least of these winter birds recorded in off the sea had in fact also been hunting in this manner. This was followed by another bird in off the sea at Selsey on 15 Nov and another (or possibly the same) on the 17th.

Between September and December birds were recorded from 14 sites, of which Pagham Hbr, Pulborough Brooks and Rye Hbr returned the highest number of sightings. Approximately 58 different birds were recorded during this period. The only sighting of more than a single bird was of two at Pagham Hbr on 28 Nov. An estimated minimum total of 90 birds (32 in the first winter period, 58 in the second) was recorded during 2013, very similar to the 84 in 2012, numbers which are broadly in line with recent trends for Merlin in Sussex.

The only observed prey item noted was a Skylark caught at The Burgh on 24 Jan, and another bird at Barnham was also seen chasing a Skylark on 26 Feb. [DB]

Hobby*Falco subbuteo*

Scarce breeding summer visitor and regular passage migrant. Schedule 1 species.

Records for Hobby came from 151 tetrads. The first returning bird of the year was observed at Poundgate (Ashdown Forest) on 10 Apr, slightly later than in 2012 (7 Apr) and the 10-year average date of 5 Apr. Subsequently, birds were recorded from Arundel (12 Apr) and Pett Level (14 Apr) and then on most days through the spring migration period. Twelve birds were recorded at coastal sites in April and 51 in May (including a total of ten at Selsey Bill, five at Lottbridge Lake (Eastbourne) on the 25th and, at Rye Hbr, six on the 26th and eight on the 31st, the highest day count of the year) although the May total may include some duplication of birds remaining at sites for more than one day. Migrants continued to be logged into early June, with one at Beachy Head on the 3rd.

Evidence of breeding was scarce, as usual. Breeding was confirmed at just two sites, both on Ashdown Forest, and was probable at a further eight sites, including four territories or pairs identified in West Sussex during the *Thames Basin and Wealden Heaths Breeding Bird Survey* (see page 220). Fledging was confirmed from one site on 14 Aug, whilst two juveniles were observed near another probable breeding site on 19 Aug.

During the annual migration watch at Hastings nine Hobbies were recorded on eight days between 19 Aug and 2 Oct. Most autumn counts were of single birds although there were four at Broadbridge Heath on 23 Sep.

In line with recent trends the last record for the year was on 24 Oct at Seaford Head, three days earlier than in 2012 but two days later than the 10-year average date of 22 Oct. [DB]

Peregrine

Falco pergrinus

Scarce breeding resident. Schedule 1 species.

Peregrines were recorded throughout the year from 142 tetrads. Although the distribution of observation was widespread they were predominately from coastal and river valley locations.

Breeding was confirmed for ten pairs, although the amount of detail recorded varied widely. This probably represents about one third of the Sussex breeding population, estimated in 2009 as 27 occupied territories (SxBR 62:p.76 and *British Birds* 104:p.57).

The pair at Chichester Cathedral laid their first egg on 23 Mar and the fourth on 1 Apr from which three young fledged, the first on 14 Jun. At a site at Durrington (Worthing) a young bird was first seen on 9 Jul and a second on the 11th. A pair, present all year at a site near Shoreham, raised two young. At Shoreham Power Station the parents were feeding a chick in a nestbox on the chimney on 22 May and a chick fledged on 24 Jun. At a downland site in West Sussex, an adult was seen to be carrying food into a nesting site on 2 Jun. The Sussex Heights pair in Brighton laid four eggs between 23 Mar and 1 Apr (identical dates to the Chichester pair) from which two chicks hatched on 2 May and the fourth three days later. The first chick fledged on 14 Jun whilst all four had done so by the 17th, representing three males and one female raised successfully. At a site near Lewes three juveniles were seen on 29 Jun while at another East Sussex site young were seen in the nest on 10 Jun. A bird was seen carrying food at Pett Level on 10 Jun. A pair in Littlehampton were considered to be non-breeders, with the female perhaps not fully adult.

Although a number of observers reported one or more Peregrines chasing other birds, the only reported prey items were Feral Pigeons, Turnstone and probably a Moorhen. Two encounters which must have brightened up the respective observers' days were from Pagham Hbr, where one or more Peregrines were mobbing an Osprey on 12 Aug and from West Dean where an adult female was harassing a ringtail Hen Harrier on 12 Nov. [DB]

Water Rail

Rallus aquaticus

Probably very scarce resident, scarce winter visitor and passage migrant.

This was a much better year for Water Rails in the county than 2012, perhaps an outcome of the severe winter weather. The species was reported from 60 tetrads (41 last year). The approximate monthly totals were as shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	87	36	42	43	8	10	5	12	15	49	77	61
2012	49	44	30	10	11	3	5	4	17	24	50	56

Monthly maxima at Pett Level were:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6	5	2	8	1	2	1	3	1	8	10	3

Breeding was proved in three tetrads, at Warnham LNR (where there were two juveniles early in July), at Waltham Brooks (where a juvenile was seen on 1 Aug) and at Pett Level (with a youngster trapped and ringed on 25 Jul). It was probable in two others (at Arundel WWT and at Rye Hbr). However, the species is notoriously difficult to survey and birds were calling throughout the breeding season at Medmerry, Amberley Wild Brooks (at least three pairs) and Pulborough Brooks (at least two pairs).

Birds were concentrated in traditionally favoured sites. Seven squealing by the Breech Pool (Pagham Hbr) on 3 Dec represented a considerable increase in the numbers of one or two reported there in the previous weeks. Water Rails do turn up at most unexpected locations, especially on migration: on 2 Sep one was patrolling a stream by a bus stop in Hassocks, and one was “scuttling around” in the bushes at Sheepcote Valley (Brighton) on 24 Oct. They return to spots which they find congenial, e.g. to a spring just north of Poynings and to Glottenham Stream (Mountfield). In January one spent nearly a fortnight foraging under feeders in a garden near Ferring Rife. A bird which regularly appeared on a small pool outside the visitor centre at Pulborough Brooks often showed well and gave much pleasure to many observers during its stay. It was probably present from the beginning of the year until 4 Apr but did not return in the autumn. [CB]

Spotted Crane

Porzana porzana

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

One at Arundel WWT on 24 Oct (RT) was the first record since 2008 and raises the county total for this century to 16. Occurrences have been in February (1), April (1), May (1), August (4), September (6) and October (3). [DHH]

Corncrake

Crex crex

Rare passage migrant; formerly bred. Considered vulnerable by IUCN. Red listed species of high conservation concern. Schedule 1 species.

One was found at Shooters Bottom (Beachy Head) on 15 Apr where it stayed until the 18th (RB *et al.*), enabling many people to see this normally elusive species in Sussex for the first time. At times it was remarkably confiding coming out on the grassy rides to feed. This was the first live bird recorded since 2006, although a dead one was found in 2009. Including this one, eight live birds have now been seen in the county since the beginning of 2000 including three at Beachy Head. [JAH]



Corncrake, Beachy Head, April 2013 (Matt Eade)

Moorhen

Gallinula chloropus

Very common resident; possibly fairly common winter visitor but status uncertain.

Moorhens were recorded from 244 tetrads: this represents a continuing decline from the peak years of atlas recording (*cf.* 256 in 2012 and 429 in 2009) but is probably due to observer effort.

Monthly WeBS counts from the principal sites were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	562	610	422	264	179	204	228	364	617	665	651	577
Chichester Hbr	55	84	25	3	5	1	2	6	28	32	63	33
Chichester Canal	57	67	66	41	32	32	43	38	73	95	79	100
Pagham Hbr	42	32	53	15	13	11	4	7	20	13	26	13
Arun Valley	103	120	66	70	56	71	95	107	148	161	147	141
Brooklands Worthing	28	58	32	25	15	13	10	14	41	40	38	42
Weir Wood Res	9	13	8	5	3	6	4	10	34	27	17	12
Bewl Water	38	18	nc	nc	nc	nc	nc	88	110	66	39	21
Rye Bay	62	59	19	22	13	30	37	36	30	40	34	43

In the early SWBS, 43 birds were found in 18 of the 100 surveyed squares; the late year surveys produced 81 birds in 25 of 114 squares. There were no reports of unusual or weather-related behaviour.

Breeding was confirmed in 26 tetrads and was probable in a further 11. The first fledged young were found at Skipper's Hill (Five Ashes) on 6 Apr and at Brooklands (Worthing) on the 18th. The last chick to be noted was at Waltham Brooks on 21 Aug.

BBS records for 2013 showed that the maximum counts from two surveys totalled 102 birds from 51 squares of the 156 1-km squares surveyed, and analysis shows an insignificant 2% decline from 2012. The maximum count was seven at Marsh Fm (Sidlesham).

Interesting counts in November and December included: 31 in Alexandra Pk (Hastings) on 9 Nov, 20-22 at Hammonds Mill Fm (Burgess Hill) during this period and 20 at Old Salts Fm (Lancing) on 26 Dec when 25 were at Poling Fishing Lakes (a site where disturbance was believed to have been responsible for previous low counts). It would be useful to have further counts for these sites. [CB]

Coot

Fulica atra

Fairly common resident and common winter visitor.

Records of Coots were submitted from 132 tetrads. These totals represent a further decline, perhaps in observation as well as in actual presence. Some decline is suggested by the monthly WeBS counts which were as follows at the principal sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	3715	3388	1451	923	585	891	816	1353	2120	3897	3861	3979
Chichester Hbr	122	140	130	26	20	10	38	36	89	114	211	161
Pagham Hbr	59	55	61	55	43	55	4	69	134	151	155	143
Chichester GP	1608	1343	361	283	150	283	nc	nc	33	1651	1695	1537
Arun Valley	176	159	123	105	100	76	74	108	238	237	207	157
Eastbourne Lakes	197	182	106	38	15	17	30	43	138	168	100	92
Bewl Water	246	273	nc	nc	nc	nc	nc	229	513	563	385	361
Rye Bay	900	838	355	173	86	240	424	551	555	600	731	1087

Counts in Chichester Hbr were generally lower than in 2012. At Chichester GP, the September count represents a fall from the 1447 of 2012, but totals for October and November exceeded those in 2012, so perhaps the birds were just late in returning there. Interestingly, the number of Coots in the county was probably greater than in e.g. 2009, with the exception of August and September and in 2008, with the exception of July and September.

High counts early in the year included 284 at Scotney GP on 13 Jan. In the early year SWBS, 60 birds were found in nine of the 100 surveyed squares. The maximum counts from the two BBS surveys totalled 50 birds recorded in 17 squares (cf. 48 birds recorded in 22 squares in 2012 and 42 in 16 in 2011).

Breeding was confirmed in 24 tetrads and probable in a further eight, whilst breeding surveys on nature reserves included 33 pairs at Rye Hbr, eight at Pagham Hbr and two pairs at Medmerry. Occupied nests were found at Selsey West Beach on 2 Apr and at Troutbeck (Eridge) and Ifield MP on the 7th. The Troutbeck site has been in use for a number of years; in 2013 the pair failed. There was a chick at Brookfield Pk (Rustington) on 12 Apr.

In the late year SWBS, 97 birds were found in eight of the 114 surveyed squares. Counts in excess of 100 came from a number of sites not included in the WeBS table: Brooklands (Worthing), Thorney Deeps, Swanbourne Lake and Pett Level.

No report of interesting or unusual behaviour was received for 2013. [CB]

Crane

Grus grus

Rare vagrant. Amber listed species of medium conservation concern.

Three birds were recorded during the year. An adult bird at Horse Eye Level (Pevensey) on 24 Jan (RSK) was seen two days later at Scotney GP (DC, JFC, BK). In the autumn, two were seen flying west at Birling Gap on 20 Sep (RHC, BP, JPP). The county total for this century moves on to a possible 57. [JAH]

Oystercatcher

Haematopus ostralegus

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

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	1979	2324	1339	1029	639	689	982	1536	2358	1505	2026	1699
Chichester Hbr	1164	1451	950	514	270	360	655	763	1940	863	1401	1174
Pagham Hbr	229	204	165	90	121	136	85	244	198	175	215	137
Climping	17	70	6	-	-	-	nc	-	-	110	4	10
Cuckmere Haven	-	4	1	nc	nc	nc	nc	nc	-	100	1	5
Rye Bay	539	592	213	412	238	185	239	522	218	253	402	371

In addition to the WeBS counts in the first winter period there were 560 at Rye Hbr on 10 Jan and 400 there on 1 Mar, and 200-300 at Pett Level and 300 at Pagham Hbr throughout. The only other notable count was 50 at Littlehampton on 20 Jan.

Small numbers were noted passing offshore in spring, the largest day count being 19 E at Splash Point (Seaford) on 11 May.

At least 60 territories were reported in the breeding season, an average total for recent years. At Rye Hbr 27 pairs were counted, though success was low, and there were 13 pairs at Pagham Hbr. A pair returned to nest on a warehouse roof in Shoreham for its fourth year, raising two chicks, and there was also a pair on the tennis club roof in Rye, another traditional site for some years. At Arundel WWT a pair raised two young and at Pett Level there were probably two pairs and two young were seen. At the latter site a pair was seen incubating on the late date of 13 Jul, and a pair with a small chick was seen at Cuckmere Haven on 6 Aug, again quite late. At Medmerry there were five pairs but no chicks were seen, and in Chichester Hbr there were two nests at South Stakes Island and two pairs holding territory at each of North Stakes Island, Thorney Deepes and Pilsey Island. A pair was also noted at Lewes Brooks on several dates in April and May.

From September onwards the only count in excess of the WeBS count in the west of the county was 300 at Pagham Hbr on 6 Oct, but in the east there were again several high totals not reflected by the WeBS, with 600 at Rye Hbr on 9 Sep and 800 there on 4 Nov and at Pett Level 540 on 13 Nov and 500 on 1 Dec. Elsewhere, the high tide roost at Telscombe Cliffs held 150 on 19 Nov (the only count this year). There were 100 at Cuckmere Haven on 5 Dec and a flock of 70 E at Splash Point on 20 Oct was also notable.

The only inland sightings, apart from the breeding birds at Arundel WWT and Lewes Brooks, were single birds at Bewl Water on 14 Mar and Pulborough Brooks on 31 Jul, and unusually five on the Downs at Bury Hill on 16 Mar. [CJRB]

Avocet

Recurvirostra avosetta

Scarce winter visitor and passage migrant; 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
55	64	132	105	107	111	106	29	15	11	79	86

The regular wintering flocks in the western harbours remained from 2012, with peak counts of 38 in Chichester Hbr on 9 Feb and 20 in Pagham Hbr on 18 Feb. The only other winter records were of up to five at Rye Hbr from 24 Jan to 17 Feb and one at Pulborough Brooks on 24 Feb. Offshore spring passage was once again very low, with a total of only 14 logged at seawatching sites in March and April. However, peak counts of 50 at Rye Hbr on 10 Mar and 27 at Pagham Hbr on the 25th indicate that good numbers were passing through. Up to six lingered on the scrape in the lower Cuckmere Valley from 17 Mar until 14 Apr, two were seen at Widewater (Lancing) on 24 Mar and single birds were reported from Arundel WWT, Goring Gap and the lower Adur valley.

A total of about 40 pairs bred, similar to recent years. In the Rye Bay area around 32 pairs raised at least 19 young at two sites, and at the other end of the county about eight pairs bred at one site, though some were predated by foxes and only two young fledged. At Sidlesham Ferry there were up to five summering birds from late March right through to early June, with a migration peak of 32 on 3 July as dispersing birds passed through, and a single bird was seen at Waltham Brooks on the 22nd.

The wintering flock at Chichester Hbr built up throughout November to a peak of 55 on the 26th and there were 62 at Thorney Island on 5 Dec, a new site record for the second year running. In December at Pagham Hbr there were also good numbers, with a maximum of 23 on the 27th. Four flying west at Selsey Bill on 20 Nov and one, also flying west, at Widewater on 7 Dec were the only records from elsewhere. [CJRB]

Stone-curlew

Burhinus oedicnemus

A rare passage migrant. Formerly a scarce breeding summer visitor, which since 2006 has tentatively started to recolonise the county. Amber listed species of medium conservation concern.

During 2013, the RSPB Sussex Stone-curlew project continued to work with a small team of licensed volunteers to survey as much suitable habitat as possible, and to work intensively with local landowners, farmers and gamekeepers to create the conditions needed to assist returning and passage birds to stay and breed.



Stone-curlew, Hodcombe, April 2013 (Roger and Liz Charlwood)

During 2013, the RSPB Sussex project team located one pair in an area where habitat management and regular monitoring were possible. Through working closely with landowners, management of the breeding site and surrounding area was adjusted to best suit the species' needs. The pair was initially seen during April but then were not seen again until early June when they were relocated a few kilometres away. The pair consisted of one unringed bird and one which had been ringed as a nestling in the area in 2011. The pair nested relatively late in the year and a detailed programme of monitoring established two eggs had been laid and one chick was seen

from shortly after the expected hatching date for two weeks. Unfortunately, after this time the chick could not be relocated and it is assumed that it was predated. The pair remained close to the nest site until late July and it is likely that it was this pair which was sporadically seen in the general area until late October.

Elsewhere at a site that has seen annual nesting attempts since 2006, but has also suffered significant disturbance from birders, a single bird was present for only a short period in the spring. Elsewhere a likely spring migrant responded to tape once at a downland location in late spring.

The SOS also received reports of two migrant birds in the spring with one bird accidentally flushed by a farmer from downland on 27 Mar and one present for an hour at Hodcombe (Beachy Head) on 7 Apr which was the observer's eighth record of this species at this site since 1960.

The decision in 2009 to publish the details of this species' return to Sussex was prompted by the fact that the birds at one site suffered significant disturbance from a small number of birdwatchers, including trespass on private land. Such activity directly jeopardises breeding success and the project's relationship with farmers and gamekeepers. Unfortunately this disturbance continued in 2013 with individuals wilfully trespassing in order to watch the birds from a close perspective.

The RSPB Sussex Stone-curlew project, actively supported by the Sussex Ornithological Society, remains indebted to the support of the landowners, farmers and gamekeepers whose efforts have allowed the breeding success we have seen so far.

There is a long way to go to before the re-colonisation of Sussex is assured, and the RSPB and SOS urge everyone to place the welfare of the birds first. Stone-curlews are specially protected under Schedule 1 of the Wildlife and Countryside Act (1981) and the EU Birds Directive, making it an offence to disturb or tape-lure them without a licence. At this stage it is recommended that birdwatchers do not go out purposely attempting to find Stone-curlews in Sussex, but if birds are stumbled upon by accident it would be greatly appreciated if records could be passed onto the project team at RSPB Brighton and the Hon. Recorder so that efforts can be made to ensure the maximum success of any breeding attempt. [DG]

Little Ringed Plover

Charadrius dubius

Scarce breeding summer visitor and passage migrant. Schedule 1 species.

The minimum monthly totals were as follows:

	Mar	Apr	May	Jun	Jul	Aug	Sep
No. of sites	4	8	7	7	8	8	5
No. of birds	9	19	20	35	47	28	11

Numbers returned to average this year, although about 97% of the records came from just six traditional sites, mostly coastal and on managed reserves. The first arrival was one at Rye Hbr on 7 Mar, only one day after the earliest record on 6 Mar 1990.

Records of confirmed breeding came from only four sites. Seven pairs bred at Rye Hbr and at least one pair was successful at another East Sussex site. At Medmerry five pairs raised eight young and at Pulborough Brooks at least one, possibly two pairs, bred. There was no record from any sandpit sites; these now seem to have been abandoned.

As migrants moved through there were high counts of 13 at Pulborough Brooks on 28 Jun, 11 at Medmerry on 14 Jul, 12 at Rye Hbr on the 24th, and seven at Pett Level on the 27th. Birds were recorded on most days in July and August including three at Arlington Res on 25 Aug. In September four were at Rye Hbr on the 3rd and 11th and two at Medmerry on the 7th. The last of the year were two at Rye Hbr on the 12th and two at the more unusual location of West Wittering on the 14th. [CJRB]



Ringed Plover, River Cuckmere, September 2013 (Roger and Liz Charlwood)

Ringed Plover

Charadrius hiaticula

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

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	81	192	111	143	337	54	16	768	449	79	51	148
Chichester Hbr	77	97	62	51	100	8	8	512	220	57	42	89
Pagham Hbr	-	69	19	49	191	26	2	116	45	2	1	3
Climping	-	4	6	4	3	3	nc	35	-	3	-	-
Goring Gap	-	15	1	-	nc	nc	nc	55	59	13	nc	41
Newhaven	-	3	nc	nc	-	2	-	22	-	-	-	12
Rye Bay	-	4	22	36	37	9	2	24	117	1	6	1

The only counts to exceed the WeBS in the first winter period were 300 at Pagham Hbr on 2 Jan, 35 at Rye Hbr on 10 Jan and 32 there on 5 Feb. The highest count at any other site was 41 at Brighton Marina on 18 Feb.

At least 49 breeding pairs were recorded, a great improvement on last year's 35. There were at least 26 pairs at Rye Hbr, though success was low, and Pagham Hbr held 13 pairs. There were five pairs at Pilsey Island, and at Medmerry four pairs fledged five young between them. A pair managed to fledge two chicks on a public beach at Brighton Marina, but unusually there were no reports of breeding birds from any of the other traditional sites along the coast apart from a single sighting at West Beach (Littlehampton).

The autumn migration peak produced several counts higher than the WeBS. Goring Gap held good numbers throughout, with 97 on 20 Aug and 80 on 22 Sep, and there were 133 on the beach near Brooklands (Worthing) on 21 Aug, 100 at Pagham Hbr on 2 Sep and the same at Rye Hbr on the 6th. By far the largest count was 2000 at Pilsey Island (Chichester Hbr) on 24 Aug, one of the highest ever Sussex totals for a single site.

In the second winter period Goring Gap again enjoyed consistently good numbers with 67 on three dates: 21 Oct and 22 and 31 Dec. Counts at East Head (West Wittering) regularly exceeded the WeBS, with 100 on 22 Oct, 140 on 7 Nov and 119 on 19 Dec, and there were 250 at Pilsey Island on 1 Oct. At Rye Hbr there were 20 on 25 Oct and 70 on 16 Dec. Elsewhere the highest counts were 50 on the beaches at both Brooklands on 10 Oct and Lancing Beach on 6 Nov, probably the same birds.

Birds were present at Pulborough Brooks on 19 days between 9 Mar and 27 Jun, with a maximum of 14 on 26 May, and there were five there on both 29 Jul and 24 Aug. The only other inland records were of single birds at Arlington Res on 9 Aug and Bewl Water on the 13th, with two at the latter site on 15 Sep. [CJRB]

Semipalmated Plover

Charadrius semipalmatus

Very rare vagrant. Breeds in Alaska and across northern Canada to Baffin Island and Newfoundland and winters from Atlantic shores of southern USA to southern South America.

One which was first seen at Hayling Is (Hampshire) on 17 Oct was discovered at Pilsey Sands (Chichester Hbr) on 18 and 19 Oct (CBC). It was then seen again over the next two days (DC, RJF *et al.*) before it apparently returned to Hayling Is where it remained until 29 Oct. The record has been accepted by the BBRC and is the first sighting of the species in Sussex raising the county list to 399. An account of the finding of the bird appears on pages 230-232 of this report. [DHH]

Kentish Plover

Charadrius alexandrinus

Very scarce spring and autumn passage migrant; formerly bred. Schedule 1 species.

Two were seen at Flat Beach, Rye Hbr from 25 Mar (KB, MC) until at least 2 Apr, one of which remained until the 6th. One of the birds bore colour rings showing that it had been ringed as an adult at St Peter-Ording, Schleswig-Holstein, Germany on 25 May 2009. The county total this century is now 26. The annual average for this century remains at 1.8 which is lower than the averages for the final three decades of the last century (2.8, 8.2 and 3.2). [JAH]

American Golden Plover

Pluvialis dominica

Very rare vagrant.

A first year bird was seen and photographed at Cuckmere Haven from 11 to 14 Jun (MRE *et al.*), an early date for an American vagrant. This was only the third Sussex record for this species, the previous ones having been on 16 Sep 2010 and 14-17 Sep 1988. The breeding habitat of this species is Arctic tundra in northern Canada and Alaska. They migrate, post-breeding, mostly over the western Atlantic and Caribbean Sea to wintering grounds in Patagonia. It has one of the longest known migratory routes of over 40,000 km of which 3900 km is over open ocean. [JAH]



American Golden Plover, Cuckmere Haven, June 2013 (Jake Everitt)

Golden Plover

Pluvialis apricaria

Common winter visitor and passage migrant, rare non-breeder in summer. Amber listed species of medium conservation concern.

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	1006	924	856	25	-	-	1	109	418	1583	594	2624
Chichester Hbr	620	558	493	-	-	-	-	1	41	318	163	252
Medmerry	-	-	nc	-	-	-	-	-	11	35	200	122
Pagham Hbr	330	363	363	-	-	-	-	-	-	200	138	600
Rye Bay	50	3	-	25	-	-	1	107	366	1030	92	1650

At Rye and Pagham Harbours the counts made between WeBS dates often produced much higher numbers; these are shown below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pagham Hbr	1300	700	500	-	-	-	-	-	6	250	500	700
Rye Hbr	700	550	260	80	1	1	35	145	290	1200	1500	2000

The year began with 1500 at Scotney GP on 1 Jan, the highest count of the first winter period, but the maximum at Thorney Island was only 500 on 28 Feb, rather lower than usual. The largest numbers elsewhere, in the first winter period, were 70 at Pulborough Brooks on 24 Mar, 63 at Barnham on 24 Feb and 40 at Steyning Levels on both 24 Jan and 25 Mar. Hard weather in late January produced sightings in some less usual places, with 100 at Climping and 200 at Earnley on 19 Jan. On the following day there were 22 W at Goring and 25 on the beach at Selsey, 12 were on the Rother Levels on the 24th, and up to four were at Newhaven from the 23rd to the 27th.



Golden Plovers, Rye Harbour, October 2013 (Barry Yates)

There were still 40 at Barnham on 6 Apr, and the last spring record at Thorney Island was 18 on the 9th and at Rye Hbr there were 25 on the 14th. There was evidence of birds on the move in April, with a flock of 30 on the Downs at Burpham on the 1st, and in the same area there were 12 at Patching and 23 at The Burgh on the 7th. There was one on the beach at Goring on the 14th and 20 flew north at Selsey Bill on the same day. The only records for May and June were of single birds at Rye Hbr on the 7th and 4th respectively.

Autumn arrivals began abruptly at Rye Hbr with 35 on 24 Jul, but at the other end of the county the first returning bird was not until 5 Aug at Pagham Hbr, and there were no double-figure counts in West Sussex until mid-September. Autumn movements were shown by several sightings at

Beachy Head; 23 E on 29 Sep, nine on 6 Oct and six on the 18th, with two at Seaford Head on 1 Oct. Single birds flew over Cissbury on 23 Aug and Sheepcote Valley on 29 Sep and 11 and 22 Nov.

At the end of the year the highest counts came from Rye Bay and Pagham Hbr as in the tables above. Numbers at Thorney Island were once again low, with a maximum of only 84 on 19 Oct, but the highest count within Chichester Hbr was 500 at West Wittering on 21 Nov and there were 200 at Medmerry on the 10th and 40 there on 15 Dec. Numbers at Scotney GP peaked at 425 on 15 Dec, and at Pulborough Brooks the highest count was nine on 13 Dec. Occasional sightings in single figures were reported from a few other scattered locations. [CJRB]

Grey Plover

Pluvialis squatarola

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

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	1586	920	2248	368	102	111	81	303	650	539	879	1811
Chichester Hbr	616	450	1271	168	82	97	81	208	541	356	655	1222
Pagham Hbr	852	371	919	195	18	14	-	95	109	182	192	550
Goring Gap	-	50	-	-	nc	nc	nc	-	-	-	nc	28

The table shows that as usual most of the birds were to be found in the western harbours. The only high count in the first winter period additional to the WeBS was 500 at Pagham Hbr on 2 Feb, but there were some sizeable groups along the West Sussex coastline, with 75 at West Worthing on 12 Feb and counts of 59 at Climping on 15 Jan and 55 at Worthing on the 13th. In East Sussex the highest total was 61 at Rye Hbr on 4 Jan.

Small numbers were noted passing offshore through most times of year; the monthly totals from the main seawatching points are shown below.

		Jan	Feb	Mar	Apr	May		Oct	Nov	Dec	Total
Selsey Bill	E	-	-	-	14	2		-	-	-	16
	W	70	-	-	1	8		5	7	14	105
Worthing Beach	E	-	-	2	30	-		-	-	-	32
	W	-	8	-	-	-		4	15	-	27
Splash Point	E	-	-	-	9	5		-	-	nc	14
	W	-	-	-	-	-		-	-	nc	-

There were still 50 at Climping on 8 Apr, and regular counts at Pilsey Island (Chichester Hbr) showed that there were good numbers of birds summering in Chichester Hbr, with a peak of 150 on 16 Jun. There were also up to 20 in Pagham Hbr and up to seven at Rye Hbr throughout the spring and summer. There were no inland records during the first half of the year.

Autumn brought a few reports from more unusual locations, with single birds at Pulborough Brooks on 29 Aug and at Cuckmere Haven on the 16th, with two lingering at the latter site from 15 to 29 Sep.

The only count exceeding those shown in the WeBS table during the second winter period was 35 at Goring on 26 Nov but 84 at Winchelsea Beach was a good total for the east and the highest count of the year outside the western harbours, no doubt the result of the new saltmarsh creation work at Rye Hbr. There were three at Lidsey on 1 Oct (only two miles from the coast but quite far inland for this species), and there was another wandering bird at Cuckmere Haven on 6 Dec. [CJRB]

Lapwing

Vanellus vanellus

Scarce or fairly common but declining resident and very common winter visitor. Red listed species of high conservation concern.

Lapwings were recorded in all months of the year. The monthly WeBS counts at the principle sites were as follows and suggest numbers recovered strongly in 2013 with a 49% increase in the county total compared to 2012. 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	11642	8455	2937	294	215	434	1052	1625	1641	3075	4900	15517
Chichester Hbr	1417	996	87	12	14	47	64	112	251	421	642	1514
Medmerry	575	122	nc	56	66	69	52	27	45	755	1275	825
Pagham Hbr	2406	4107	368	22	7	52	57	83	205	266	464	2509
Arun Valley	1556	987	1200	95	48	69	83	118	172	165	431	1856
Upper Adur Levels	100	51	200	nc	nc	nc	nc	nc	nc	nc	2	-
Newhaven	404	570	nc	nc	-	-	-	-	-	-	110	125
Ouse Valley	255	500	88	8	8	-	-	-	40	60	7	1249
Pevensey Levels	1994	163	364	31	21	63	27	3	3	101	36	620
Bowl Water	24	-	nc	nc	nc	nc	nc	24	119	35	12	49
Rye Bay	2538	691	564	63	51	133	738	1219	756	1118	1770	6104

During the first winter period there were several counts additional to the WeBS counts of a thousand or more individuals, including 2500 at Pagham Hbr on 31 Jan, 2000 at Amberley Wild Brooks on 3 Feb and 2000 at Pevensey Levels on 3 Mar.

Breeding activity was first noted at Pulborough Brooks with birds calling and displaying on 2 Mar and at Thorney Deeps (Chichester Hbr) six pairs were displaying on 13 Mar. Breeding was confirmed in 11 tetrads and was probable in a further 21 tetrads. Nesting was confirmed on 22 Mar at Arundel WWT and chicks were observed on 25 Apr. Elsewhere five pairs were breeding on 17 Apr in the Upper Adur Levels and nesting was under way on 19 Apr at Rye Hbr where 28 pairs bred although fledging success was low. At Medmerry, nine pairs bred, fledging 21 chicks. Within Pagham Hbr about 16 pairs bred.

The first reported post-breeding aggregation was 358 noted on 21 Jul at Pett Level which increased to 800 on the 28th. Initially all the highest numbers were from East Sussex until 400 occurred at Pagham Hbr on 28 Sep. Then there were 1000 at Pagham Hbr on 18 Nov, 2500 on 9 Dec and 2000 at Pulborough Brooks on the 14th. The highest count in the second winter was 3000 at Pagham Hbr on 19 Dec. [WEC]

Knot*Calidris canutus*

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

2011: The record of one at Weir Wood Res on 18 Aug has been withdrawn.

2013: The WeBS counts for the principal sites were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	778	1305	1919	64	11	1	1	9	37	7	33	1696
Chichester Hbr	328	137	363	27	8	1	1	2	32	6	-	1146
Pagham Hbr	382	1167	1450	36	1	-	-	6	-	-	33	550
Rye Bay	66	1	106	1	2	-	-	1	5	1	-	-

The sum of each month county total from the WeBS increased by 49% compared to 2012, with the highest numbers recorded, once again, from the West Sussex harbours.



Knot, Cuckmere Haven, September 2013 (Matt Eade)

Birds were noted in every month of the year with, as usual, most recorded during the winter months. At Pilsey Sands, the main roosting site in Chichester Hbr, notable counts additional to the WeBS were 800 on 2 Jan, 750 on the 15th, 600 on 28 Feb and 1 Mar, 450 on the 26th and 1000 on 24 Nov. Elsewhere, there were 500 at Pagham Hbr on 4 Jan and 1000 there on 29 Jan, 13 Nov and 22 Dec. At Rye Hbr there were 180 on 4 Jan and 74 on 28 Feb. Numbers reduced considerably during March following 1450 at Pagham Hbr on the 10th and the last significant count of 450 at Pilsey Sands was on the 25th, as birds departed for their breeding grounds.

Recorded spring coastal movements were unremarkable. There were 9 E on 16 Mar at Telscombe Cliffs, 22 E on 22 Mar and 15 E on 1 Apr at Rock-A-Nore (Hastings) and 12 E on 8 May at Splash Point (Seaford). In the latter part of the year, apart from 2 E at Worthing on 1 Oct, the only other record was of 30 W at Selsey Bill on 31 Dec.

Birds in summer plumage were noted at Pagham Hbr on 19 May (1), on 8 Jun at Rye Hbr (2) and on 23 Jul at Church Norton (4). The first significant count in the autumn was of 30 on 21 Sep at Chichester Hbr but numbers remained low until mid-November when the first high count was of 1000 on the 13th at Pagham Hbr. Thereafter, in the second winter period, there were numerous counts of several hundreds, up to 1000 in both Chichester and Pagham Hbrs, but the highest of the few records from East Sussex was of 12 on 20 Dec at Rye Hbr. [WEC]

Sanderling
Calidris alba

Fairly common winter visitor and passage migrant. Very rare away from coast.

There were records for every month of the year with overall numbers down compared to 2012. The majority of records were from or near the coast. The exceptions were single birds at Pulborough Brooks on 19 Jan, at Weir Wood Res on 27 May and Arlington Res where single birds were noted on 14 Apr and again on 27 May, but with ten there on 1 Jun feeding on the dam edge.

The WeBS counts for the principal sites were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	84	81	108	163	72	2	44	13	1	58	24	190
Chichester Hbr	21	5	84	162	71	2	44	12	-	4	20	76
Pagham Hbr	-	-	1	-	1	-	-	-	1	-	-	-
Climping	-	71	13	-	-	-	nc	-	-	-	4	112
Goring Gap	-	1	-	-	nc	nc	nc	1	-	54	nc	-
Rye Bay	63	4	10	-	-	-	-	-	-	-	-	1

However, the WeBS counts above do not accurately reflect the numbers in the county as there were over 20 additional significant records on dates other than the WeBS dates. These higher monthly counts, with dates, were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Chichester Hbr	106	-	-	-	120		60	460	500	606	200
	4th	-	-	-	27th		23rd	30th	8th	2nd	7th
Pagham Hbr	-	-	15	-	-		-	-	20	-	-
	-	-	4th	-	-		-	-	10th	-	-
Climping	45	-	-	77	-		-	-	-	-	-
	17th	-	-	14th	-		-	-	-	-	-
Goring Gap	30	25	14	-	-		-	-	13	-	22
	6th	18th	28th	-	-		-	-	10th	-	26th
Rye Bay	120	60	39	-	-		-	19	-	-	-
	10th	2nd	28th	-	-		-	1st	-	-	-

In addition there were 105 on the beach at Widewater (Lancing) on 2 Jan, 100 at Worthing on the 8th and 20th and 200 there on 6 Dec. The first notable eastwards spring movement was recorded at Selsey Bill on 15 May with 30 E in 8½ hr. Further movements continued until 9 Jun. Birds were first noted in summer plumage on 5 May at Pett Level and on 29 May at Rye Hbr. Counts at the principal seawatching sites were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
East	-	-	12	15	256	89	1	-	12	9	-	1
West	-	1	-	-	52	12	3	14	-	18	-	-

The first 60 returning birds were noted at Pilsey Sands on 23 Jul with 360 there on 1 Aug, increasing to 400 on 14 Aug, 500 on 22 Sep and a period maximum of 606 on 2 Oct. Elsewhere 200 were roosting on Worthing Beach on 6 Dec and 117 on the beach at Widewater on 17 Dec. In East Sussex the only double-figure count during the second winter period was 17 at Rye Hbr on 20 Dec. [WEC]

Little Stint

Calidris minuta

Scarce passage migrant; very scarce in winter.

Six birds were recorded during WeBS counts, one in August and five in September (the latter all at Rye Hbr).

The minimum monthly totals are shown below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	2	1	1	0	3	0	1	5	11	8	0	0

Unusually there were no certain overwintering birds recorded in West Sussex in the first winter period, just single records of individuals at Pagham Hbr on 22 Jan and Fishbourne on the 27th, though these could have overwintered. At Rye Hbr there was one from 2 Feb to 18 Mar and up to two from 5 to 23 May.

The first returning bird was at Rye Hbr on 21 Jul, followed by a string of records there from 15 Aug right through to 31 Oct, with a peak of five on 13 Oct. In the west the first autumn record was not until 21 Aug at Pilsey Island, but all other records were in September, with one at Selsey Bill on the 7th, three at West Wittering on the 14th and up to two at Sidlesham Ferry from the 8th to the 14th. There was one at Arlington Res from 29 Aug to 11 Sep and another (or perhaps the same) also lingered at Cuckmere Haven from 13 Sep to 2 Oct. Pulborough Brooks hosted one on 27 Aug and up to two from 6 to 12 Oct. Unusually there were no records at all after 31 Oct. [CJRB]

Temminck's Stint

Calidris temminckii

Very scarce spring and autumn passage migrant. Red listed species of high conservation concern. Schedule 1 species.

The only accepted record was of three birds at Rye Hbr on 26 May (AP *et al.*). The total for this century moves on to 42. [JAH]



Temminck's Stint, Rye Harbour, May 2013 (Malcolm Freeman)

Pectoral Sandpiper *Calidris melanotos*

Rare vagrant, mainly in autumn.

Only two birds were recorded during the late summer/autumn period. The first was a bird of the year at Pulborough Brooks from 31 Jul to 6 Aug (mo). A second young bird inhabited Sidlesham Ferry Pool on 7 and 8 Sep (AH, CRJ, OM). The county total moves on to 89 with 24 having been seen this century. [JAH]

Curlew Sandpiper *Calidris ferruginea*

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

The estimated minimum monthly totals were as follows:

Apr	May	Jun	Jul	Aug	Sep	Oct
1	3	1	6	16	23	7

The first spring record, in a relatively poor spring passage compared with 2012, was at Rye Hbr on 23 Apr, the only record for that month. The next was not until 19 May when one showing the first signs of summer plumage was seen at Pagham Hbr. There were two there on the 21st when one was also seen at Rye Hbr. There was subsequently one bird at Rye Hbr on 7-8 Jun and at The Midrips on 9 and 10 Jun.

The first returning migrants were a single bird at The Midrips on 26 Jul and five at Rye Hbr on the 28th followed by numerous records of a single bird at Pagham Hbr throughout most of August from the 6th onwards. As usual, however, the peak passage occurred during late August and September, when numbers were three times higher than in 2012, mostly in West Sussex. The highlights included five birds in Pagham Hbr on 30 Aug, 12 there on 3 Sep, three at Exeat on the R Cuckmere on 1 Sep and on several dates from the 3rd to the 15th, five at Rye Hbr on 9 Sep and four there on the 11th and 30th. The highest counts in October were of five at Pagham Hbr on the 6th and four on the 10th. The final sightings of the year were singles at East Head (West Wittering) on 19 Oct and in Pagham Hbr on 20 Oct. [CD]

Purple Sandpiper

Calidris maritima

Scarce winter visitor and passage migrant, very rare in summer. Amber listed species of medium conservation concern. Schedule 1 species.

Birds were recorded at only three sites and the highest monthly counts at each of these were as shown in the table below. During the first winter period the maximum of five double-figure counts at Shoreham Hbr was 13 on 28 Jan and nine on 2 Jan was the peak count at Newhaven Hbr. Numbers at Brighton Marina fluctuated from one on 18 Feb to a maximum of seven on 18 Apr. The final spring record was three at Shoreham Hbr on 28 Apr.

	Jan	Feb	Mar	Apr		Sep	Oct	Nov	Dec
County total	22	9	16	10		1	3	11	26
Shoreham Hbr	13	8	12	3		1	3	5	9
Brighton Marina	-	1	4	7		-	-	-	3
Newhaven Hbr	9	-	-	-		-	-	6	14

The first autumn bird was at Shoreham Hbr on 18 Oct, just two days later than the first in 2012 but over two months later than the ten-year average of 8 Aug. Thereafter, numbers there increased to five on 4 Nov through much of the month, peaking at nine on 16 Dec. At Newhaven, the first record was of two birds on 4 Nov which increased to six on the 11th but it was not until 4 Dec that a larger count of eight was recorded followed by a maximum of 14 on the 15th. The only record at Brighton Marina in the second winter period was of three on 22 Dec. [CD]

Dunlin

Calidris alpina

Very common passage migrant and winter visitor; scarce away from estuaries; scarce non-breeder in summer. Red listed species of high conservation concern.

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	9527	7691	14,170	1689	902	7	190	327	1128	4744	10,687	16,749
Chichester Hbr	8089	5797	12,099	1005	223	7	166	142	537	4226	9706	14,799
Medmerry	7	-	nc	30	12	-	7	-	28	300	125	77
Pagham Hbr	1062	1295	1483	613	559	-	15	99	453	141	666	1568
Rye Bay	246	128	555	35	104	-	2	65	107	66	189	177

Significant counts additional to the WeBS counts at the principal sites were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chichester Hbr	12,000	-	8000	7000	3500	30	2500	1200	700	-	-	-
Medmerry	-	-	-	-	-	-	-	52	-	-	-	-
Pagham Hbr	-	-	-	-	-	20	100	100	-	300	1000	-
Rye Bay	250	500	-	150	150	14	245	220	-	245	-	350



Dunlin, Arlington Reservoir, September 2013 (Gareth Hughes)

The 1% national threshold for this species is 3500 so that Chichester Hbr qualifies as a site of national importance with figures exceeding the threshold in January to May and October to December in both the WeBS and additional counts. In the first winter period, all counts greater than 1000 came from Chichester and Pagham Hbrs, with the highest count of all, 12,000, at Pilsey Sands on 2 Jan. In East Sussex the highest count was 500 at Rye Hbr on 21 Feb. A roost on the beach at Worthing peaked at 600 on 13 Jan.

Spring and autumn passage totals as recorded at the principal seawatching sites were as shown in the table below. The majority were recorded in just three days; 103 E at Splash Point (Seaford) on 23 Mar, 181 W at Selsey Bill on 11 May and 115 W at Worthing on 20 Nov.

Throughout the rest of the year flocks numbering 1000-4000 were regularly seen at Chichester Hbr. One flock of 1000 birds was recorded at Pagham Hbr on 13 Nov. Many records of small numbers came from coastal areas, reservoirs and river valleys. The counts in the second winter period were much lower than those seen earlier in the year at Chichester Hbr. The roost at Worthing Beach peaked at 300 on 13 Dec.

		Mar	Apr	May	Jun		Aug	Sep	Oct	Nov
Selsey Bill	E	-	2	72	6		2	2	10	1
	W	-	5	207	-		14	12	12	40
Worthing	E	4	32	2	-		-	-	-	-
	W	-	-	31	-		6	-	-	225
Telscombe Cliffs	E	3	-	2	2		-	-	-	-
	W	-	-	-	-		-	-	-	-
Splash Point	E	148	78	16	-		2	-	6	11
	W	6	-	1	-		6	-	-	29

Inland records came from Pulborough Brooks (17 on 24 Mar), Henfield Levels (20 on 25 Mar), Arlington Res (eight on 6 Sep) and Bewl Water (three on 13 Sep). [RJE]

Ruff

Philomachus pugnax

Scarce winter visitor and passage migrant. Red listed species of high conservation concern. Schedule 1 species.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	15	30	2	-	-	-	3	20	18	18	9	24
Chichester Hbr	-	1	1	-	-	-	-	-	-	-	-	-
Medmerry	-	-	nc	-	-	-	-	-	12	16	-	-
Arun Valley	12	14	-	-	-	-	1	-	-	-	-	6
Lower Adur Estuary	-	4	-	-	nc	-	-	-	-	-	-	-
Rye Bay	3	11	1	-	-	-	2	17	6	2	9	18

The 1% national threshold for this species is eight, a figure which was exceeded at Medmerry in the autumn months, in the Arun Valley in the first winter months and at Rye Bay in February and August and the late winter months.

The minimum monthly totals, including all records, were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	78	124	48	27	-	1	12	27	31	58	77	31

Birds wintering from the previous year were sighted through January. First winter period observations were from some 16 broad sites, mostly coastal, estuarine or the Arun valley, except for Arlington Res where there was one on 24 Jan. Groups of 20-31 were seen at Pagham Hbr, Pulborough Brooks and Rye Hbr.

During the summer months up to nine birds were recorded. At Rye Hbr there was a maximum of nine on 9 Aug and at East Guldeford Level there were seven on 25 Aug. At Pagham Hbr, Pulborough Brooks, Pevensey Level and Pett Level between one and three were recorded throughout July and August.

During the autumn small groups continued to be recorded from some 11 traditional sites. Single juveniles were seen at Selsey Bill and Chichester and Pagham Harbours. Notably 16 birds were seen at Medmerry on 20 Oct and 29 were recorded at Rye Hbr on the 25th.

During the second winter period groups of one to six were recorded regularly at the main sites. Group sizes at Rye Hbr were notably larger reaching a maximum of 72 birds on 5 Nov, a count which was considerably greater than the highest 2012 count and the largest number since 76 were recorded at Earnley on 20 Dec 1987. Wintering birds remained at the main sites to the year's end. [RJE]



Jack Snipe, Warnham LNR, March 2013 (Jake Everitt)

Jack Snipe

Lymnocryptes minimus

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

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

[illegible]

The minimum monthly totals were as follows:

	Jan	Feb	Mar	Apr	Sep	Oct	Nov	Dec
No. of birds	16	15	9	6	3	12	29	6
No. of sites	8	8	6	6	3	7	6	4

A spell of hard weather in late January resulted in sightings of three birds at Widewater (Lancing), Pagham Hbr and Rye Hbr on 21 Jan, and there were four at Thorney Island and East Head on 9 Feb. All other records in the first winter period were of single birds at another 11 sites, nearly all coastal. One at Warnham LNR from 31 Mar to 5 Apr gave observers a rare opportunity to get close views, and the last spring record was on 17 Apr at Amberley Wild Brooks.

The first autumn record was on 19 Sep at Pulborough Brooks. There were up to four there in September and October, but the largest count in the second winter period came from the traditional site at Thorney Island, with a monthly maximum of 21 on 13 Nov. There were ones and twos at another nine sites, again nearly all coastal. [CJRB]

Common Snipe

Gallinago gallinago

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

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	530	683	347	52	3	-	4	52	95	176	189	339
Chichester Hbr	159	243	49	-	-	-	-	-	3	23	44	35
Medmerry	21	-	nc	3	-	-	-	-	9	25	12	22
Pagham Hbr	36	19	2	2	-	-	3	-	5	1	-	-
Arun Valley	49	71	90	5	-	-	1	31	49	40	35	48
Lower Adur Estuary	183	191	84	4	nc	-	-	-	5	16	42	130
Upper Adur Levels	1	13	3	nc	nc	nc	nc	nc	nc	nc	20	3
Weir Wood Res	-	16	4	-	-	-	-	-	5	13	6	-
Eastbourne Lakes	40	25	52	-	-	-	-	-	6	7	20	35
Pevensey Levels	6	2	12	12	-	-	-	1	2	16	2	7
Rye Bay	6	77	5	9	-	-	-	9	7	31	5	43

From January to March numbers in Rye Bay were higher than the table suggests, with peaks of 145 at Rye Hbr on 21 Jan and 100 at Pett Level on 13 Mar, and there were also good numbers at the Ouse Estuary Project (Newhaven), with 143 on 24 Jan and 58 on 19 Feb. At the other end of the county, Arundel WWT held consistently good numbers with a peak of 62 on 10 Feb. Ones and twos were reported from three sites on Ashdown Forest and more unusually from downland at Poynings on 21 Feb and 10 Mar. The only report suggesting passage was of one at Sheepcote Valley (Brighton) on 27 Mar.

The highest April counts were 20 at both Henfield on the 5th and Amberley Wild Brooks on the 10th, but only nine birds were recorded in May and one in June. The only breeding evidence was

two seen in suitable habitat at Lewes Brooks on 27 Apr and 18 May and one heard drumming on Ashdown Forest on 18 Jun. This is no improvement on last year's record low and sadly it seems that Common Snipe is approaching extinction as a Sussex breeding bird.

During July all records were of 1-3 and all from Pett Level, Pagham Hbr and Pulborough Brooks, apart from an unusual ten at Coultershaw Bridge, near Petworth on the 25th. Waltham Brooks held consistently good counts from late August right through to early November, with a peak of 35 on 5 Oct. The second winter period produced regular double-figure counts again at Arundel WWT, with a peak of 33 on 24 Nov, and Rye Bay again did better than the WeBS suggests, with 64 at Rye Hbr on 7 Oct and 26 at Pett Level on the 11th. Amberley Wild Brooks held 80 on 27 Nov, and there were 50 at Crowhurst on the 19th. [CJRB]

Woodcock

Scolopax rusticola

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

The minimum numbers of birds seen and numbers of sites for the two winter periods are shown below.

	Jan	Feb	Mar		Oct	Nov	Dec
No. of birds	45	24	37		5	16	22
No. of sites	28	18	20		4	13	13

Hard weather with snow in late January produced a surge in sightings, with a string of reports from the coast and the Downs. Most records were of one or two birds, and the only count of more than three was seven at Pett Level on the 23rd. In March there were several sightings indicating movement, with single birds at Seaford Head on the 4th and 14th, and there were 12 at Pett Level on the 24th, the highest count of the year.

The first record of roding was on 20 Mar on Ashdown Forest, and it was a good breeding year, with a total of approximately 62 territorial birds recorded. There were about 42 territories on Ashdown Forest, and the *Thames Basin and Wealden Heaths Breeding Bird Survey* found nine on Ambersham Common and one each at another six heathland sites. Two roding males were recorded at Rewell Wood (Arundel), two in St Leonard's Forest and one at Broadwater Warren. There were two records in August and one in September, all from Ashdown Forest.

In the second winter period the highest counts again came from Pett Level, with four on 25 Nov and 28 Dec. Single birds at Beachy Head on 17 Nov and Cissbury Ring on the 24th indicated movement, and interestingly birds were found dead at Bexhill on 15 Nov and Brighton on the 22nd. [CJRB]

Black-tailed Godwit

Limosa limosa

Fairly common but localised winter visitor and passage migrant; scarce non-breeder in summer. Red listed species of high conservation concern.

The monthly WeBS counts at the principal sites were as shown in the table below. As in previous years, the WeBS counts were dominated by counts at both Chichester and Pagham Hbrs. The low numbers at the two main harbour complexes during January, and to a lesser extent at

Pagham Hbr in November, appear to be related to birds being attracted to favourable habitat in the Arun valley. The 1% national threshold of 430 was exceeded at Chichester Hbr in each of the last three months of the year and in the Arun valley in January. The 1% international threshold of 610 was very nearly reached at Chichester Hbr in December, falling short by just four birds. Marginally behind this was the WeBS count in the Arun valley during January, being 20 short of the international threshold.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	652	152	455	72	-	33	44	340	218	763	856	737
Chichester Hbr	34	147	382	6	-	-	20	263	104	578	581	606
Pagham Hbr	27	-	69	53	-	23	24	69	104	177	98	103
Arun Valley	590	4	-	-	-	10	-	1	-	-	155	20

Significant numbers additional to WeBS included four counts at Pagham Hbr in January, with 1240 on the 1st, a minimum of 1200 on the 3rd and 800 on both the 5th and the 29th. At Amberley Wild Brooks, observers recorded 600 on 3 Feb. Elsewhere six were present at Rye Hbr on 28 Feb, 15 at Pett Level on 17 Mar, 13 on Henfield Levels on the 26th, seven at Cuckmere Haven on the 31st, 150 in Fishbourne Channel (Chichester Hbr) on 1 Apr, and 27 in Pagham Hbr on 22 May. During mid-summer, a maximum of 25 was noted at the latter site on various dates in June, rising to 35 by 7 Jul.

Later in the year, at Pagham Hbr, there were 82 on 29 Aug, 140 on 30 Sep, 200 on 18 Nov and 500 on 27 and 30 Nov, with the latter figure again exceeding the 1% national threshold. Finally, 175 were counted at Pulborough Brooks on 22 Dec.

As usual very few birds were recorded on spring passage from the main seawatching sites, with only 13 E past Splash Point (Seaford) in March and 3 E in April.

Whilst numbers at Chichester Hbr have remained relatively stable, there have been some large increases in both Pagham Hbr and the Arun valley, reflecting the trend for the Icelandic race (*L.l. islandica*), the British wintering population of which has increased by around 50% during the last decade. [DB]

Bar-tailed Godwit

Limosa lapponica

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

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	922	801	517	25	38	45	19	56	64	106	254	1170
Chichester Hbr	703	787	510	11	21	41	19	56	50	96	250	1159
Pagham Hbr	19	13	4	11	11	4	-	-	-	9	3	9
Rye Bay	-	1	3	3	6	-	-	-	13	-	1	2

The WeBS table indicates that Chichester Hbr is again the prime site for the species; Pilsey Island is the principal location within that complex. Counts in five months there exceeded the 1% national threshold of 380, whilst in December 1159 were recorded, falling just short of the 1%

international threshold of 1200. Outside of the WeBS counts, the following notable counts were recorded at Pilsey Island: 800 (24 Jan), 1100 (28 Feb), 750 (6 Mar), 300 (4 Apr), 70 (21 Aug) and 500 (29 Nov).

Observers at the principal seawatching sites noted a similar number of birds moving along the coast as in 2012, with a total of 1515 compared to 1501 the previous year; thus another poor year for the species on spring passage, with fewer than half the average number for the preceding 28 years up to 2011.

Monthly totals of eastbound birds from four seawatching sites were as follows:

	Apr	May	Total	Peak movements in each month
Selsey Bill	27	97	124	17 on 14 Apr; 48 on 6 May
Worthing	446	75	521	434 on 28 Apr; 50 on 3 May
Splash Point	36	725	761	30 on 20 Apr; 269 on 7 May
Birling Gap	63	20	83	60 on 22 Apr; 15 on 4 May

Even in the midst of summer, there were still 40 at Pilsey Island on 24 and 25 Jun. At Pagham Hbr there were three on 14 Jun with at least one displaying on Tern Island.

No significant autumn movements were observed from the main seawatching sites, with just 6 E at Selsey Bill on 27 Sep and four at Splash Point on the 19th. At a few locations passage birds were recorded on various dates: at Cuckmere Haven the maximum was eight on 25 Sep; at Goring Gap there were three on the beach on 20 Sep; and at Rye Hbr the maximum count was 16 on 26 Sep.

Significant records additional to the WeBS counts were, at Pagham Hbr, 30 on 21 Jul and 120 on 6 Oct; these were the highest numbers recorded during those months anywhere in the county.

Observers at Chichester Hbr recorded increasing numbers through the second winter period to reach a maximum yearly count of 1159 during the WeBS count in December but numbers elsewhere were low and did not exceed 18 at Church Norton on the 11th. [DB]

Whimbrel

Numenius phaeopus

Common passage migrant, very scarce non-breeding summering and wintering species. Red listed species of high conservation concern. Schedule 1 species.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	4	1	1	116	41	21	61	37	9	5	3	1
Chichester Hbr	3	1	1	102	20	21	56	26	9	5	2	1
Pagham Hbr	1	-	-	11	19	-	2	8	-	-	1	-

Single birds were recorded at Fishbourne Creek from 1 Jan until 23 Feb, Thorney Island from 11 Jan to 9 Feb and Pagham Hbr on 5 and 13 Jan; all were overwintering birds from 2012.

The first migrants were a very early 2 E past Brighton Marina on 5 Mar, followed by four at Sidlesham Ferry on the 17th, but passage was very light again this year. The totals from the principal seawatching sites are shown below.

		Mar	Apr	May	Jun	Jul	Aug	Total	Peak movement		Hrs watched peak days
Selsey Bill	E	-	98	90	-	-	-	188	37	14 Apr	9.9
	W	-	12	11	2	-	9	34			
Worthing	E	22	42	49	-	-	1	113	21	31 Mar 6 May	4.3
	W	-	4	13	-	-	9	26			
Telscombe Cliffs	E	10	21	-	-	-	-	31	10	3 Apr	1.25
	W	-	-	-	-	-	-	-			
Splash Point	E	37	104	123	2	1	-	268	37	22 Mar 8 May	4.0
	W	-	-	3	-	-	7	10			
Birling Gap	E	-	5	40	-	-	-	45	19	5 May	9.0
	W	-	-	3	1	-	-	4			

There were some good numbers in Pagham Hbr, with a peak of 51 in the North Fields on 1 May, and the maximum count at Pilsey Island was 32 on 25 Apr and at Rye Hbr 37 on the 29th. A flock in the lower Cuckmere valley lingered from 12 Apr to 3 May, peaking at 15 on 27 Apr, and was by far the largest group away from the main harbours this year. The only birds seen inland were two at Bewl Water on 6 May, two at Pulborough Brooks on 24 Apr and singles there on 30 Apr and 4 and 7 May. In June there were up to five at Rye Hbr until the 11th and a handful were noted in Pagham and Chichester Hbrs throughout the month, although counts of 11 at Pilsey Island on the 25th and 29 at Pagham Hbr on the 30th were likely to be early returning birds.

Autumn passage produced mostly single-figure counts; the maximum at Pilsey Island (Chichester Hbr) was 22 on 23 Jul and at Rye Hbr 13 on the 28th, though a flock of 13 flew west at Splash Point (Seaford) on 15 Sep. Single birds lingered in the western harbours until 23 Oct, but there were four at Bosham on the 19th. One at Pulborough Brooks on 25 Aug was the only autumn inland record.

There were intermittent records from four sites in November and December, possibly involving as many as five different birds. There were singles at Fishbourne Creek on 10 and 14 Dec, at Pagham Hbr on 10 and 16 Nov and 3 Dec, and at Bosham on 16 Nov and 7 Dec, plus two at Thorney Island on 24 Nov. [CJRB]

Curlew

Numenius arquata

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

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	2028	1444	1087	386	80	561	1676	1474	2562	1255	1176	1640
Chichester Hbr	1000	915	780	158	74	485	1212	1028	1960	717	842	906
Pagham Hbr	192	236	116	203	4	37	378	343	290	226	128	255
Newhaven	38	10	nc	nc	-	-	-	-	1	2	25	83
Rye Bay	792	250	191	5	-	39	70	81	302	262	170	370

Other counts at Rye Hbr and Pett Level during the year very often exceeded those in the WeBS table; the peak monthly counts are therefore shown separately in the table below. A count of 520 at Winchelsea Beach on 17 Feb was also notable. Winter counts at Rye Hbr are often of birds leaving the Beach Reserve roost at dawn; this was the case with the January count, which was not far short of the record for this roost of 900 in January 1996. The only other figures exceeding the WeBS counts in the first winter period were 59 at Newhaven on 19 Feb and 200 at Pagham Hbr on 5 Mar. The highest count at any other site was 40 at Cuckmere Haven on 1 Jan.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rye Hbr	850	430	139	41	13	21	62	210	400	170	330	280
Pett Level	380	450	350	80	5	50	200	200	200	41	150	200

Small numbers were as usual noted passing offshore; totals from the seawatching sites are shown below. The February Birling Gap total was from a single watch of 3½ hr on the 17th.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selsey Bill	E	-	-	26	26	2	-	-	-	1	2	-	-
	W	-	-	2	10	-	3	-	-	7	2	4	-
Worthing	E	-	7	3	3	1	-	-	-	1	-	-	-
	W	-	1	-	2	4	11	26	9	3	3	6	-
Telscombe Cliffs	E	-	-	3	-	-	-	-	-	-	-	1	-
	W	-	-	1	-	-	-	-	-	-	-	4	-
Splash Point	E	5	49	-	79	2	-	-	-	-	-	3	-
	W	-	-	-	-	-	-	2	-	-	-	2	-
Birling Gap	E	7	96	40	23	-	-	-	-	-	-	-	-
	W	-	-	3	5	-	-	-	-	-	-	-	-

Unusually, the county total during the autumn migration peak was considerably higher than in any of the winter months, and the September count at Chichester Hbr was the only one this year to exceed the qualifying level for a site of national importance (currently 1500). Regular counts at the Pilsey Island roost showed a build-up from five in May to 160 in June, 250 in July, 260 in August and 550 on 21 Sep.

At the end of the year no count exceeded those from the WeBS apart from those at Rye Hbr and Pett Level shown in the table above, and the highest count at other sites was 51 in the lower Cuckmere Valley on 29 Dec.

There were a few reports during the year from inland sites, with single birds flying over Ashdown Forest on 21 Feb, Eridge on 4 Mar and Cissbury Ring on 7 and 19 Aug. At Pulborough Brooks one was in residence from 29 Jan to 11 Mar and single birds called in on 5 Aug and 11 Nov, with four on 1 Apr.

Presumably the same leucistic bird was seen in Pagham Hbr for its fifth year, being reported intermittently between March and November. Over the years it has been seen in all months except May, September and December. [CJRB]

Terek Sandpiper*Xenus cinereus*

Very rare vagrant.

For the second year in succession, Sussex provided the only British record of this species with one at Rye Hbr on 25 May (SHL *et al.*). Although only present for one day it did stay long enough to be seen by many observers. The record has been accepted by the BBRC and is the sixth for the county. The six records have been in May (3), June (2) and July (1). [DHH]

Common Sandpiper*Actitis hypoleucos*

Fairly common passage migrant; very scarce in winter. Has bred at least once. Amber listed species of medium conservation concern.

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	2	1	-	3	15	3	41	54	14	3	1	1
Chichester Hbr	-	-	-	-	-	-	4	-	1	-	1	-
Medmerry	-	-	nc	1	1	-	1	2	3	1	-	-
Pagham Hbr	-	-	-	-	2	1	4	2	-	2	-	-
Ifield MP	-	1	-	-	nc	nc	nc	-	-	nc	-	-
Weir Wood Res	-	-	-	-	3	-	-	7	1	-	-	-
Newhaven	-	-	nc	nc	-	-	-	5	1	-	-	-
Ouse Valley	2	-	-	-	-	-	-	1	1	-	-	1
Bewl Water	-	-	nc	nc	nc	nc	nc	5	4	-	-	-
Powdermill Res	nc	-	-	-	nc	nc	-	nc	3	-	-	-

The approximate monthly county totals were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6	11	6	30	33	10	93	180	52	10	7	3

In the first winter period there were up to three on the R Adur at Upper Beeding and in the lower Ouse valley. Both are traditional wintering locations, and at the former site regular counts showed that there were birds present throughout the year. From mid-January birds were reported more widely, with four at Rustington on 2 Feb, two at Pulborough Brooks on the 17th and single birds at Littlehampton on 19 Jan, Pett Level on 3 Feb and Ifield MP on the 10th.

The first indication of spring passage was one passing west at Splash Point (Seaford) on 22 Mar, followed by ones and twos at various sites between April and June, the highest count being five at Bewl Water on 7 May and three at Upper Beeding on 11 Apr and 5 Jun.

From the end of June there were regular sightings of returning birds at coastal sites, but 26 at Rye Hbr on 21 Jul was the first record of more than three, and numbers there built up to 48 on 9 Aug (the highest total for any one site this year), with 15 at nearby East Guldeford on 25 Aug. At Upper Beeding there were 13 on the 23rd, with 12 still there on 9 Sep, and Arlington Res, another regular autumn site, held a maximum of eight on 10 Aug.

November and December brought regular reports of up to two at both Upper Beeding and the lower Ouse valley, and the only other records were of four at Pulborough Brooks on 1 Dec, two at Rye Hbr on 16 Nov and single birds at Chichester Hbr on 16 Nov and Warnham LNR on 29 Dec. [CJRB]

Green Sandpiper

Tringa ochropus

Scarce spring and autumn passage migrant; more frequent in autumn; scarce in winter. Amber listed species of medium conservation concern. Schedule 1 species.

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	5	2	2	7	1	5	30	32	15	36	8	3
Medmerry	1	2	nc	2	-	-	2	4	3	27	7	2
Arun Valley	-	-	-	-	-	3	11	8	4	2	-	-
Upper Adur Levels	1	-	-	nc	nc	nc	nc	nc	nc	nc	-	-
Ardingly Res	-	-	-	-	-	-	nc	-	-	3	-	-
Weir Wood Res	-	-	-	-	-	-	4	7	4	1	-	-
Barcombe Res	1	-	-	-	-	-	-	1	1	-	1	-
Pevensey Levels	-	-	1	2	-	-	-	3	-	-	-	-
Wadhurst Park	-	-	1	2	-	-	-	-	2	1	-	-
Rye Bay	-	-	-	-	-	1	13	9	1	2	-	-

The 1% national threshold for this species is nine so Rye Bay qualified as a site of national importance with counts of 13 in July and nine in August.

The approximate minimum monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	14	15	11	15	2	12	52	79	35	101	17	8
10-year average	18	13	15	21	3	20	65	90	43	21	17	17

From the first winter period until 9 Jun, sightings of one to four birds were recorded widely across the county, with four being seen at Brede Levels on 2 Feb and at Beeding Brooks on the 18th and three at Pulborough Brooks on 9 Apr. Those single birds which were recorded in May and early June were probably either later migrants or non-breeders. Return migration, typically earlier than most other waders, was evident from 17 Jun when one was seen at Arlington Res followed by a steady flow of mostly ones or twos. Eight birds were seen at Northiam on 10 Jul and Pulborough Brooks on 25 Jul, 14 at Rye Hbr on 24 Jul and 19 at Pett Level on 25 Aug. Sightings of small groups continued from a diverse range of locations throughout the year.

The majority of sightings in the second winter period were of one or two birds. However, at Medmerry, an exceptional 27 were recorded on 29 Oct. It was reported that, during the works involved in the 'managed realignment' and creation of the new RSPB reserve, the breach had been completed and the sea let in. There was a vast amount of newly cut, bare ditch and main tidal channel in and around the old Bracklesham Bay SSSI and reserve to which Green Sandpipers

were drawn like iron filings to a magnet. On certain evenings, for a brief period, the sound of Green Sandpipers filled the night skies. The last sighting of the year, a single bird, was from Pagham Hbr on 17 Dec. [RJE]



Spotted Redshank, Pagham North Wall, August 2013 (Mick Davis)

Spotted Redshank

Tringa erythropus

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

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	5	4	4	-	-	-	-	2	5	4	6	3
Chichester Hbr	4	4	4	-	-	-	-	-	-	2	4	1
Pagham Hbr	1	-	-	-	-	-	-	2	4	1	2	2
Arun Valley	-	-	-	-	-	-	-	-	1	-	-	-
Rye Bay	-	-	-	-	-	-	-	-	-	1	-	-

The approximate minimum monthly totals, including WeBS and all other records, were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8	7	9	6	4	2	2	6	11	7	7	12

As is usually the case, in the first winter period the majority were in the Chichester Hbr areas, where there were up to four in the West Wittering/Thorney Island area, plus one in Fishbourne Channel at Apuldrum. These included a colour-ringed bird at Thorney Deepes on 13 Mar. Elsewhere there were two at Rye Hbr, and singles at Pagham Hbr and Cuckmere Haven. However, numbers generally were slightly down on last year. Birds were seen regularly at these localities through April, and the first confirmed migrant was a single bird at Pulborough Brooks on 9 Apr; indeed this was the only April bird seen away from the Pagham Hbr and Chichester Hbr localities. Unlike last year, spring passage was fairly poor in 2013 and the only May records were singles at Pulborough Brooks, on 3-4 and 8 May (probably involving two different birds), Rye Hbr and Sidlesham Ferry.

There were only two June records, both from Rye Hbr and possibly involving two different birds as they occurred on widely separated dates. The next was not until nearly a month later, in late July, when there were two at Pagham Hbr (birds in different plumages), the only July records in what was turning into a rather poor year for this species. August is normally the peak month for autumn passage, but this year was a very poor showing, with only four seen all month, two at Pagham Hbr, plus one or two at Pett Level in the latter part of the month. In contrast, September was the best month of the year in terms of numbers, with at least seven different birds at Pagham Hbr, plus one at Pulborough Brooks and one or perhaps two at both Rye Hbr and West Wittering/East Head. Up to four remained at Pagham Hbr through the first part of October, but numbers dropped off by mid-month. Elsewhere during October there were just two birds in the West Wittering/East Head area (which included the colour-ringed bird seen earlier in the year), and a single at Rye Hbr.

Numbers during the second winter period were relatively high, with at least nine birds in Chichester Hbr (which included a flock of six at Fishbourne Channel in mid-December), up to two at Pagham Hbr and one at Rye Hbr. [JC]

Greenshank

Tringa nebularia

Fairly common passage migrant; very scarce in winter.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	30	15	25	24	8	8	49	105	113	77	30	22
Chichester Hbr	29	15	25	24	5	7	48	84	99	72	29	22
Pagham Hbr	1	-	-	-	1	-	-	3	6	2	1	-
Rye Bay	-	-	-	-	-	-	-	12	8	3	-	-

Thorney Deepes usually holds the largest numbers of Greenshank in the county and this year was no exception. During the first winter period the peak count there was of 25 on both 11 and 12 Jan, but double figures were regularly reported at this site. Elsewhere in Chichester Hbr numbers were much lower; there were three at East Chidham on 9 Feb and four there on 16 Mar and just ones and twos seen at a variety of other locations. Away from the main wintering site of the Chichester Hbr area the only records during this period were at Pagham Hbr, with a maximum of three on 10 Jan and a single bird reported on a few dates during February and March.

Numbers at Thorney Deepes remained in double figures through to late April, making it difficult to determine when spring passage started at this site, but dropped to single figures in May

and June (the only months when double figures were not recorded here). Away from Thorney, it appears that a single bird at Pulborough Brooks on 12 Apr was the first spring migrant and other migrants noted during April included further birds at Pulborough Brooks (with a high count of four on the 30th), plus singles at Amberley Wild Brooks on the 17th, two at Rye Hbr on the 19th (plus one there on the 29th) and two at Arlington Res, also on the 29th. A minor influx occurred on 1-3 May, with up to nine in Fishbourne Channel (Chichester Hbr), six at Pagham Hbr, and five at Cuckmere Haven. A further, albeit smaller, influx occurred on 7 May with five at Rye Hbr, four at Sidlesham Ferry, two at Pett Level and singles at Lidsey SF and past Splash Point (Seaford). Smaller numbers occurred widely along the coast throughout May and into early June.

With a nine-day gap between one at Pulborough Brooks on 7 Jun and one at Medmerry on 16 Jun, it would seem probable that the former was the last spring migrant and the latter was the first returning bird of the autumn. Following the Medmerry bird on the 16th, birds were seen regularly throughout the rest of June, with a high count of seven at Thorney Deeps on the 23rd and 24th. From this single-figure count, numbers built quickly at Thorney Deeps, reaching 46 on 23 Jul, 82 on 23 Aug and the highest monthly maximum of 93 on 23 Sep, before falling back slightly to 86 on 6 Oct and 64 on 17 Oct. By mid-November, numbers at Thorney had dropped to 26, which presumably was just the wintering flock remaining. Elsewhere, the highest autumn count was an impressive 18 at Rye Hbr on 24 Jul, with 12 at the same location on 9 Aug, but otherwise only single-figure counts were made from various coastal locations, with a few inland, including six at Pulborough Brooks on 8 Aug.

Numbers remained fairly constant at Thorney Deeps during the second winter period, falling slightly from the 26 recorded on 16 Nov to 22 on 7 Dec. Smaller numbers were seen, as usual, elsewhere in Chichester Hbr, and at other coastal localities, with singles at Pagham Hbr and Pett Level, and two at Rye Hbr. [JC]

Wood Sandpiper

Tringa glareola

Very scarce spring and scarce autumn passage migrant; recorded once in winter. Amber listed species of medium conservation concern. Schedule 1 species.

The minimum monthly totals were as follows:

Apr	May	Jun	Jul	Aug	Sept	Oct
1	2	-	10	11	2	3

The first spring record was on 26 and 28 Apr at Pulborough Brooks where a single bird was sighted. During May further singles were seen at Scotney GP on the 7th and Rye Hbr on the 17th.

Autumn passage commenced with one at Northiam on 9-10 Jul. During the remainder of July there were two at Rye Hbr from the 21st to the 24th, two at The Midrips on the 24th, and two at Pett Level and one at Medmerry on the 28th. At Pulborough Brooks there was one from 25 Jul to 18 Aug with two there on 30 Jul. During August there were further sightings from Medmerry, Pett Level and Rye Hbr including three at Pett Level from the 9th to the 15th. An unusual record was of one that flew west calling over Seaford Head on the 25th. The only records for September were of singles at Weir Wood Res from the 6th to the 7th and at Sidlesham Ferry on the 27th but, unusually, there were two records for October: a single at Pett Level on the 11th and up to two at Pulborough Brooks from the 14th to the 25th, over a month later than the 10-year average departure date. [RJE, PJ]

Common Redshank

Tringa totanus

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

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	1818	1720	1448	171	38	114	815	1143	2262	2096	2014	2062
Chichester Hbr	1311	1295	1211	15	8	72	636	825	1953	1684	1686	1712
Pagham Hbr	221	198	42	35	4	12	70	118	162	190	89	114
Rye Bay	171	73	90	69	10	12	70	145	57	95	93	71

As usual, the highest counts by far were in Chichester Hbr, where numbers exceeded the 1% national threshold (1200) in all the late autumn and winter months. There were few significant counts away from these sites during the first winter period, but a monthly maximum of 500 at Pagham Hbr in January, 90 at Rye Hbr and 135 at East Guldeford Level (both on 13 Jan), and 79 in the lower Adur valley on 10 Feb were all noteworthy counts for the county.

As is usual for this species, spring passage was again unremarkable and best indicated by the departure of wintering birds from the main sites, which can be gauged from the WeBS table above. Again, very few were seen at the seawatching sites during the spring; a total of four were recorded east past Worthing during April.

In Chichester Hbr three pairs were seen displaying at Thorney Island, with another pair at Pilsey Island, but there were no other reports of breeding birds there; this does not compare well with the nine pairs reported at Thorney Deepes and three pairs at Pilsey Island last year. There were, however, 19 pairs reported from Rye Hbr, which is seven more than last year and a welcome return to the numbers of two years ago. Also, there were five pairs at the new Medmerry site; at least one of these nested and two adults were later seen with a fledged young. Elsewhere, a pair with four young was seen at Pett Level, two pairs held territory on Pevensy Levels (but success there was not known) and a pair attempted to breed on the lower Adur but were not thought to have been successful as they were not seen after early June.

The first non-breeding birds started returning in late June, but it was not until late July that numbers at Thorney Deepes started building, with a monthly maximum of 450 there by the 23rd. Numbers at this site did not reach the regular four-figure counts that have featured in previous Augusts, with the August high count for this year being 550 on the 21st. In fact there were no four-figure counts at Thorney Island/Deepes during the latter part of the year, with the high count being 880 on 21 Sep.

Other notable autumn/winter counts (in addition to the WeBS table above) included 75 on East Guldeford Level on 13 Oct, 86 in the lower Adur valley on 4 Dec, 45 at Newhaven Tide Mills on 26 Dec, and 62 nearby in Newhaven Hbr on 11 Nov. [JC]

Turnstone*Arenaria interpres*

Fairly common winter visitor and passage migrant; scarce non-breeder in summer. Rare away from coast. Amber listed species of medium conservation concern.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
County total	691	602	449	284	64	38	50	334	327	344	359	387
Chichester Hbr	166	236	309	29	19	21	28	37	1	41	100	125
Pagham Hbr	444	182	42	202	40	13	17	240	68	132	49	85
Climping	28	140	52	-	5	4	nc	37	134	55	127	154
Goring Gap	6	20	12	-	nc	nc	nc	6	1	52	nc	5
Lower Adur Estuary	17	2	29	52	nc	-	-	9	71	25	16	10
Glyne Gap	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	63	nc
Rye Bay	30	16	5	1	-	-	5	2	52	37	-	4

The high January total at Pagham Hbr continued into the rest of the first winter period, with counts higher than the WeBS of 500 on 2 Feb and 160 on 2 Mar. In addition to the Rye Bay totals above, regular counts at Pett Level revealed 50 on 17 Feb and 40 on 10 Mar. Additional high counts were 108 between Hastings and Bexhill on 10 Jan and 100 on the beach at Lancing on the 28th.

There was evidence of migration from as early as mid-March, with 98 on the beach at Selsey Bill on the 15th and 50 at Southwick Beach on the 25th. Small numbers were logged at seawatching sites (by far the highest day counts were 45 E at Selsey Bill on 2 May and curiously 50 W there on the 11th), but good numbers were also seen stopping off along the coast, with 66 at Pett Level on 21 Apr (and 60 still there on 5 May) and 40 at Dell Quay on the 2nd. In June there were still 40 at Pagham Hbr on the 14th and 30 at Rye Hbr on the 13th.

The autumn migration peak also showed some high numbers not reflected by the WeBS counts. There were still up to 50 at Rye Hbr in July and August and in September 120 at Pett Level on the 8th, 100 on the beach at Selsey Bill on the 3rd and 98 at Goring Gap on the 22nd.

In the second winter period the only totals exceeding the WeBS counts were at Pett Level, where again regular counts revealed 80 on 6 Oct, 30 on 3 Nov and 40 on 1 Dec. The highest counts elsewhere were 197 between Hastings and Bexhill on 18 Nov, 100 at Lancing Beach on the 16th, 70 at Selsey Bill on 31 Oct and 60 at Worthing Beach on the 21st.

The only inland sighting was of three at Weir Wood Res on 25 Aug. [CJRB]

Grey Phalarope*Phalaropus fulicarius*

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

There was just one record: an adult at Newhaven Tide Mills from 3 Nov to the 6th (PW *et al.*). This sighting raises the county total for this century to 49. Following a review of records, monthly arrivals since 1948 have been as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
No. of birds	26	2	-	1	0	0	0	2	88	87	76	12	294

These figures illustrate that 85% of birds turn up in the three autumn months, September–November, presumably affected by equinoctial storms. [JAH]

Pomarine Skua

Stercorarius pomarinus

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

It was another poor year for this species with an estimated spring total of just 50 birds. This is even lower than the 75 recorded in 2012 and reduces the 10-year average from 155 to 146.

The monthly totals for eastward spring passage at four seawatching points are shown in the table below.

	Apr	May	Jun	Total	Peak
Monthly minima	6	40	4	50	
Selsey Bill	3	11	1	14	4 on 22 May
Worthing	-	2	-	2	1 on 6 & 14 May
Splash Point	3	31	3	37	9 on 7 May
Birling Gap	-	10	-	10	7 on 6 May

There were no records during the first winter period and the first sighting was not until 14 Apr when there was 1 E off Splash Point (Seaford). Although there were sightings on 14 dates in May, there were no double-figure counts. The only sign of any real easterly spring migration was of 7 E at both Splash Point and Birling Gap on 6 May and 9 E at Splash Point the following day. The only June records were of 3 E at Splash Point on the 13th with the last spring record being 1 E at Selsey Bill on the 16th.

The only other record during the year was at the unusual location of Blackdown where a juvenile was seen flying south-west on 25 Aug (DB). [DHH]

Arctic Skua

Stercorarius parasiticus

Fairly common spring and scarce autumn migrant; very scarce in summer and rare in winter. Red listed species of high conservation concern.

As in previous years, the totals of birds shown in the tables have been compiled on the assumption that the highest number recorded at any coastal site on any day was the minimum in the county on that date and that birds seen on subsequent dates were different. Only those birds for which a flight direction was shown are included in the tables.

This was an extremely poor year for this species with an annual total of just 255. This is less than half of the 2012 total (534) and not only is it well below the 10-year average of 440 but is also the lowest annual total this century.

The approximate monthly totals for which a flight direction was recorded are shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	-	1	4	66	129	17	2	1	24	7	4	-
No. of days	-	1	3	17	26	9	2	1	9	5	3	-
Peak no.	-	1	2	12	21	3	1	1	11	2	2	-
Peak day	-	17th	2nd	12th	5th	3rd	28th	18th	9th	26th	11th	-

There were no records in January and the first of the year was 1 E off Birling Gap on 17 Feb. Although spring migration was quite protracted (from the second week in April to mid-June) there were no really notable movements. In fact, there were only six days on which numbers reached double figures. These occurred twice in April and four times in May with a peak of 21 E past Splash Point (Seaford) on 5 May.

In July the total of just two was typically low but numbers did not increase in August with only a single record. Numbers did improve slightly in September with a total of 24 and a peak of 11 W at Selsey Bill on 9 Sep. As in previous years, numbers were low in October and November. With no records in December, the last record from a coastal site was of 2 E at Splash Point on 11 Nov.

The monthly totals of passage birds at four seawatching sites are shown in the table below.

	Apr		May			Sep	
	E	W	E	W		E	W
Selsey Bill	40	-	100	-		2	17
Worthing	5	-	17	-		6	1
Splash Point	50	1	85	1		2	3
Birling Gap	13	-	37	-		-	-

Small numbers were seen lingering offshore with up to four in Rye Bay in May and September presumably attracted by feeding terns and gulls from the Rye Hbr breeding colonies.

There were two records of the species inland: four over Lancing on 24 Aug and a late bird over The Burgh (Burpham) on 30 Dec. [DHH]

Great Skua

Stercorarius skua

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

There was no repeat of last year's record total of 612 but the 2013 total of 238 was in line with the 10-year rolling average of 236. The minimum monthly numbers of passage birds are shown in the table below and these have been calculated using the same method as for Arctic Skuas. The numbers include only those records for which a direction of travel was given and do not include records of birds lingering offshore.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly total	5	3	4	142	45	3	2	7	7	6	9	5
No. of days	4	2	4	15	20	3	2	6	4	6	4	5
Peak no.	2	2	1	64	8	1	1	2	3	1	6	1
Date	13th	8th	26th	12th	15th	3rd	27th	18th	7th	31st	11th	13th

The first record of the year was of 1 W at Selsey Bill on 1 Jan and records throughout the first winter period were largely of single birds. The only significant spring passage occurred on just two days in April with 64 E at Splash Point (Seaford) on the 12th, a further 10 E at the same site on the 15th with 30 E at Splash Point and 32 E at Birling Gap on the 18th. There were no other double-figure counts in either April or May with the maximum in the latter month being 8 E at Splash Point on the 15th. Numbers throughout the remainder of the year were typically low with 6 E at Splash Point being the exception. The last record was of one in Pagham Hbr on 17 Dec.

Monthly figures for four seawatching sites are shown in the table below.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selsey Bill	E	-	-	1	33	28	1	-	2	1	1	1	1
	W	1	-	-	2	1	-	-	2	1	-	1	-
Worthing	E	-	1	2	4	4	1	-	3	1	1	-	2
	W	-	-	-	-	5	-	-	1	-	-	1	1
Splash Point	E	1	-	-	122	22	1	-	-	2	2	6	-
	W	-	2	1	-	-	-	1	-	3	-	-	-
Birling Gap	E	2	-	-	43	9	-	1	-	-	-	-	-
	W	-	-	-	-	-	-	-	-	-	-	-	-

As in previous years there were few records in the east of the county with just 1 E off Rock-A-Nore (Hastings) on 23 Jan and one to three in Rye Bay in February, May and November. Worthing attracted up to two lingering birds on 14 dates between mid-May and early July with a bird seen vigorously attacking a Gannet for $\frac{3}{4}$ hr on 6 Sep and perhaps another bird seen successfully killing an immature Herring Gull on 3 Dec. [DHH]

Kittiwake

Rissa tridactyla

Common but very localised breeding species: fairly common or common winter visitor and passage migrant. Rare away from coast. Amber listed species of medium conservation concern.

1993: The record of 65 at Weir Wood Res on 25 Jan has been withdrawn.

2013: Birds were recorded during every month of the year, with almost all records relating to movements at seawatching sites. It should be noted that Kittiwakes are not counted at Splash Point (Seaford) once breeding pairs have settled on the cliffs, as birds are ever present and continually flying to and from the cliffs.

Monthly totals from the principal seawatching sites were as shown in the table below. During the first winter period, the largest movements counted were 217 E in $3\frac{1}{2}$ hr at Selsey Bill on 3 Mar, and 112 E in $2\frac{1}{2}$ hr at Birling Gap on 5 Mar. There were no other individual counts of greater than 100 birds during this period, but later in the spring there were 105 E and 300 E at Birling Gap on 7 Apr and 4 May respectively.

The only successful breeding site was on the cliffs at Seaford Head. Nests at Newhaven were reported to be very old and abandoned. Data on the number of apparently occupied nests and on their breeding success was not available although a count of 800 birds was recorded at Seaford Head on 21 Jul.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selsey Bill	E	13	10	222	23	93	26	-	21	2	13	10	35
	W	86	22	11	7	159	22	-	-	-	59	83	582
Worthing	E	2	18	23	9	3	-	-	-	-	-	1	14
	W	7	39	11	-	11	-	-	7	-	8	85	944
Telscombe Cliffs	E	4	-	17	12	11	-	-	-	-	-	-	-
	W	2	-	-	-	-	-	-	-	-	-	-	-
Splash Point	E	18	25	-	-	-	-	-	-	-	14	16	-
	W	-	6	-	-	-	-	-	-	-	-	-	-
Birling Gap	E	-	103	319	105	300	50	-	-	-	-	-	-
	W	6	-	-	-	-	-	-	-	-	-	-	-

There were some moderately large westerly movements recorded at Selsey Bill and Worthing in December. At the former site 164 were noted in 2¼ hr on the 8th and 170 in 4½ hr on the 30th. At Worthing, 450 were noted in 1¼ hr on 14 Dec and 181 in 2 hr on the 16th. There were no records from inland sites. [CD]

Bonaparte's Gull

Chroicocephalus philadelphia

Very rare vagrant.

After a gap of two years there were two records in 2013. The first was a popular long-staying adult on the lake at Princes Park (Eastbourne) from 27 Jan to 26 Feb (DC, DRC, JFC, BK *et al.*). The second bird, a 1st summer, was at Rye Hbr on 20 Jul (RB, GK) but only for one day. Both records have been accepted by the BBRC and bring the county total to seven. There is no pattern to the arrival dates of the seven county records with singles in Jan, Mar, Apr, May and Jun and two in Nov. [DHH]

Black-headed Gull

Chroicocephalus ridibundus

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

The species was recorded from 281 tetrads in 2013, virtually the same as in the previous year. The roost counts of 19,340 and 20,890 at Bewl Water on 30 and 31 Jan respectively were, by a long way, the highest counts during the first quarter. The only four-figure counts were 1400 at Beeding Brooks on 3 Jan, 1000 at Warnham LNR on 23 Jan and 1000 at Brede Levels on 17 Mar.

As usual the largest breeding colonies were in East Sussex. At Rye Hbr the colony was estimated at 1700 pairs, with 1316 on Ternery Pool, 140 at the Quarry and 65 pairs on Harbour Fm pits. Fledging success averaged one bird per nest, up on last year. At nearby Pett Level breeding occurred but with poor fledging success. In West Sussex 133 pairs with nests were recorded at Arundel WWT on 21 May. On 5 Jun there were 103 and 55 apparently occupied nests on North and South Stakes Island (Chichester Hbr) respectively but there were no further records indicating productivity. Eighteen pairs were counted on Church Norton shingle spit (Pagham Hbr) and although birds were present during the breeding season at Chichester GP once again none nested.

Between April and June the highest counts away from breeding colonies involved passage birds with 1075 E at Hastings and 690 E at Telscombe Cliffs on 6 Apr. Other counts were 300 at Wiston Pond (Steyping) on 5 Apr, 330 at Hankham Level (Pevensey) on the 14th and 250 at Warnham LNR on 5 Apr. During the July-September period the only counts greater than 300 were 559 at East Chidham (Chichester Hbr) on 21 Sep and 672 at Pagham Hbr on 22 Sep.

In the final quarter the roost counts at Bewl Water were again notable with 13,000 on 28 Oct, 27,000 on 5 Dec and 28,680 on 22 Dec. Elsewhere the highest figures were 1146 at East Chidham on 7 Dec, 765 at Medmerry on 20 Oct, 700 at Honer Fm (Pagham) on 17 Oct and 600 at Fishbourne on 7 Dec. [TS]

Little Gull

Hydrocoloeus minutus

Fairly common passage migrant, most numerous in spring. Very scarce non-breeder in summer and scarce in winter. Amber listed species of medium conservation concern. Schedule 1 species.

The minimum total for the year was 755, which is slightly more than the 2012 figure, as shown by the following monthly totals:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	3	7	62	313	12	2	3	6	5	10	352	1
No. of days	3	2	9	18	14	5	4	4	4	6	5	1
No. inland	-	-	2	3	1	1	-	-	-	1	-	1

Single birds were seen at Telscombe Cliffs on 1 Jan, at Angmering on 20 Jan and at Glyne Gap (Bexhill) on the 28th. Although there were 5 E at Beachy Head on 18 Feb and 2 E at Splash Point (Seaford) the following day there were no more records until mid-March. Maximum counts during this month were 28 at Rye Hbr on the 19th and 10 E at Splash Point (Seaford) on the 23rd. The table shows that most occurred in April when at least 289 passed the main seawatching points; the details of the eastbound totals are shown in the following table:

	Mar	Apr	May	Peak count (hours watched)
Selsey Bill	6	34	3	17 on 9 Apr (6)
Worthing	3	24	-	11 on 7 Apr (4)
Telscombe Cliffs	1	35	-	31 on 13 Apr (1)
Splash Point	16	280	1	89 on 9 Apr (8)
Birling Gap	5	60	-	41 on 7 Apr (5)

Significant movements from Splash Point, not shown in the table, were 35 E on 7 Apr, 64 E on 13 Apr and 42 E on the 14th. The main passage was over after mid-April with no count greater than four after the 17th. Inland records during the spring came from three sites. At Arlington Res one was seen on 18 and 21 Mar with two present on 24 Mar, up to two were at Chichester GP on 9 and 10 Apr and one was at Pulborough Brooks on 11 Apr.

During the summer an immature was reported from Chichester GP between 20 May and 16 Jun but, as usual, very few were recorded until later in the autumn and then only 11 Nov was

noteworthy. On 11 Nov 254 flew east at Splash Point, 94 flew west over Rye Hbr and 17 W at Worthing. There was one at Arlington Res on 6 Oct and the year was rounded off with a single bird reported from Bewl Water on 5 Dec, the only December sighting. [TS, JAN]



Little Gull, Medmerry, April 2013 (Andrew House)

Mediterranean Gull

Larus melanocephalus

Fairly common winter visitor and passage migrant; scarce but increasing breeder. Amber listed species of medium conservation concern. Schedule 1 species.

Attempts to estimate the monthly numbers of this species are confounded by its mobility and the duplication which inevitably therefore arises. There was a marked bias in records towards West Sussex sites, both coastal and inland, with only 31% from East Sussex. However, whereas records from West Sussex were divided almost equally between the two halves of the year, a large majority (69%) from East Sussex were for the first half of the year.

Records at all sites varied widely within each month and there were often sudden influxes of high numbers which, however, tended to stay for only a few days. This was particularly so in the first five months of the year when peak counts were in three figures, as shown in the table below.

January was a month which typically showed the variability in numbers seen from day to day. The majority were recorded in Pagham Hbr where counts ranged from just single birds to 120 on the 25th. Elsewhere the highest counts were 14 at Climping Gap on the 2nd and ten at Middleton on the 17th. The picture in February was similar; numbers ranging at Pagham Hbr from three on the 1st to 120 on the 19th but elsewhere five at Pett Level on the 17th was the highest count.

Month	Number	Location	Date	Month	Number	Location	Date
Jan	120	Church Norton	25th	Jul	37	Worthing	25th
Feb	120	Church Norton	19th	Aug	300	Chichester Hbr	24th
Mar	220	Pagham Hbr	28th	Sep	420	Chichester Hbr	27th
Apr	313	Pett Level	13th	Oct	35	Selsey Bill	9th
May	132	Pett Level	31st	Nov	60	Selsey Bill	2nd
Jun	80	Brede Levels	18th	Dec	12	Selsey Bill	15th

In March, there was a significant increase in records, numbers and of sites involved but larger counts occurred in East Sussex with peaks of 132 at Rye Hbr on the 21st and 108 at Pett Level on the 22nd. Elsewhere, the highest count at Splash Point (Seaford) was 50 offshore on the 6th, at Shoreham 73 on the 9th and 70 at Brede Levels on the 26th. During April and May there was a similar pattern with the monthly maxima being 313 and 132 at Pett Level on 13 Apr and 31 May, 170 and 36 at Rye Hbr on 19 Apr and 4 May whilst the highest counts in these months in West Sussex were again at Pagham Hbr with 61 on 5 Apr and 80 SW in small groups on 29 May.

Thereafter it was not until August that three-figure counts were again recorded with 300 in Chichester Hbr on the 16th and 24th roosting at low tide, while at Climping 100 on the 29th were with other gulls following a plough. From September to the year's end only isolated records were received for the East Sussex sites but large numbers were recorded in the western harbours with 420 at Ella Nore (Chichester Hbr) on 27 Sep and 170 SE over the sea at Medmerry on the 28th being the highest counts. However, from October, numbers dropped off significantly such that the highest count in December anywhere did not exceed 12 birds.

While most of the above account refers to counts without any indication of movements, assumed therefore to be of stationary groups or flocks, numbers recorded moving past the main seawatching sites were as follows:

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selsey Bill	E	6	1	60	49	2	2	-	-	89	10	1	8
	W	10	1	3	9	4	3	3	1	8	68	83	14
Worthing	E	4	-	93	58	17	2	21	2	-	15	1	-
	W	5	3	8	6	88	19	28	15	7	21	13	4
Telscombe Cliffs	E	-	-	30	105	11	13	-	-	-	-	-	-
	W	-	-	4	-	4	-	-	-	-	-	-	-
Splash Point	E	-	2	37	177	32	12	6	1	-	10	1	nc
	W	-	-	9	-	-	4	-	-	-	-	1	nc
Birling Gap	E	-	2	33	47	11	3	nc	nc-	nc	nc	nc	nc
	W	-	-	-	-	-	-	nc	nc	nc	nc	nc	nc

At Rye Hbr, the steady reduction in breeding numbers continued in 2013 with a minimum of 36 pairs, the lowest number since 2004; most pairs failed early in the season and only one fledgling was noted. At nearby Pett Level breeding occurred but with poor fledging success. One pair was recorded in Pagham Hbr and six pairs were recorded at West Chidham (Chichester Hbr) but with no further details received.

The majority of observations of Mediterranean Gulls at inland sites, more than 5 km from the coast, were also in West Sussex. Most records involved small numbers but ten birds were following a plough near West Marden on 2 Apr and ten were at Arundel WWT on 9 Mar. [JAH]

Common Gull

Larus canus

Very common winter visitor and passage migrant; scarce in summer; bred until 1963 and then in 2006 and in some years since then. Amber listed species of medium conservation concern.

Common Gulls were recorded in 168 tetrads during the year. Nocturnal roost counts at Bewl Water of 54,225 and 56,385 on 30 and 31 Jan underline this site's status as one of international importance. Although the count on 31 Jan was almost double the peak count in 2012 it was considerably lower than the 90,000 recorded on 15 Feb 2006 (*The Birds of Sussex*, Thomas 2014). Elsewhere, high counts in January included 1500 at Fishbourne on the 6th, 1000 at Cuckoo Corner (Coombes) on the 8th and the same number at Steyning on the 24th. In February 1000 were at Goring Gap on the 16th, 800 were in the Brede Valley and 600 at Pett Level on the 2nd.

In the absence of any late winter or spring large roost counts only modest numbers were noted in the spring with peak March counts of 1000 flying to roost over Pett Level on the 24th, 800 on the Brede Levels on the 26th and 700 on the beach at Southwick on the 12th and 324 on Pett Level on 26 Apr being the highest count for that month. The easterly spring passage is not recorded systematically from most of the seawatching locations but movements of 208 E (2 hrs) at Rock-a-Nore (Hastings) on 6 Apr and 133 E (7¼ hrs) at Selsey Bill on 10 Apr were notable.

Two chicks were seen at Pett Level on 17 Jun, the fifth year running of breeding confirmed in the county, albeit not always successful. Autumn numbers were low with the highest count in each month being 50 at Rye Hbr on 23 Jul, 200, mainly adults, at Stoke Hill (West Stoke) on 9 Aug, 60 at Fishbourne on 21 Sep and 200 at Castle Hill (Falmer) on Oct 17. In November numbers improved with a count of 1000 at Brede Levels on the 7th and the high counts in December included 939 at East Chidham on the 7th and 600 and 720 at Pett Level on the 14th and 17th respectively. The nocturnal roost counts at Bewl Water were 181 on 28 Oct and 3000 on both 5 and 22 Dec. [TS, JAN]

Lesser Black-backed Gull

Larus fuscus

Fairly common passage migrant and winter visitor; scarce (mainly immature) in summer and scarce breeder. Amber listed species of medium conservation concern.

This species was recorded in 120 tetrads throughout the year. During the first three months the highest number recorded was 300 at Cuckmere Haven on 1 Jan, followed by 172 at the same place on 16 Feb and 158 were seen at Pett Level on 15 Mar.

A group of 20 was at Rye Hbr on 6 Apr, 37 at Pett Level on 8 Apr and 50 at the Ouse Estuary Project (Newhaven) on 23 Apr. In May 24 were at Arundel WWT on the 13th and 21 inland at Arlington Res on the 22nd. Small numbers, mainly single figures, were also recorded throughout the period.

Breeding was confirmed in four tetrads and was probable in a further three. Two pairs nested at the Brookside Business Park (Rustington), two nests with young were recorded in West Worthing and three pairs nested in Brighton raising six chicks in total, with the first fledged young observed on 11 Jun. In East Sussex breeding was recorded at Rye Hbr, and at Cliff End (Pett) two nests were recorded producing three young.

During the summer/autumn period, 25 were reported at Fishbourne on 18 Jul, 52 at Rye Hbr on 28 Jul, 32 at Southwater CP on 14 Sep and 98 at Rye Hbr on the same day. Also in September

25 were recorded at Selsey Bill on the 26th and, away from the coast, 30 at Blackdown on the 29th. One hundred were seen at Rye Hbr on 4 Oct; this number had grown to 150 by the 18th.

In the second winter period all except five records were single-figure counts. These were 120 at Pett Level on 15 Dec, 60 at Scotney GP also on 15 Dec, 30 at both Rye Hbr on 5 Nov and at Lewes Brooks on 15 Dec and, finally, 22 at Pett Level on 17 Dec. [TS]

Four birds showing the characteristics of *L.f. intermedius* were noted at the Adur Toll Bridge on 22 Jan. The *intermedius* race of this species is very variable with birds from Norway being much darker than those from further south and it is possibly under-recorded in Sussex. [DHH]

Herring Gull

Larus argentatus argenteus

Very common resident; status uncertain as passage migrant; and winter visitor. Red listed species of high conservation concern.

Herring Gulls were recorded in 365 tetrads during the year, slightly down on 2012. Four-figure counts for the first winter period were noted only three times: 1000 at Warnham LNR on 23 Jan, 1500 roosting at Bewl Water on 31 Jan and 1000 at Kingston Gorse on 23 Feb.

In the spring, counts in excess of 200 were recorded on 13 occasions; five of these were from Selsey Bill where the maximum of 539 gathered on the exposed rocks and sandbar at low tide on 31 Mar. Elsewhere the peak counts were 500 at Scotney GP on 10 Mar, 431 at Pett Level on 7 May, 400 at Warnham LNR on 13 Mar and 260 at Rye Hbr on 12 May.

Breeding was recorded as confirmed in just 12 tetrads and was probable in a further three. Breeding activity was recorded in Shoreham as early as 15 Mar but it was in May and June that nesting was observed with a pair apparently nesting at Chichester GP on 13 May and occupied nests being recorded on a chimney in Hove on the same day. At the Brookside Business Park (Rustington) a total of 13 nests was noted on 1 Jun, at least three with juveniles. Also in June nests were recorded on chimneys in Brighton and Hove and Goring where two nests with five chicks were recorded on the 11th. Seven nests were also recorded at Rye Hbr and one at Pagham Hbr. Nestlings were ringed in Horsham town centre which was the only inland breeding record.

During the post-breeding period and in autumn many of the larger counts came from farmland; 3000 were on a ploughed field at Balsdean on 27 Aug, at least 1000 were following the plough at Steep Down (Lancing) on 23 Sep and 700 were loafing on downland near Cissbury on Oct 17. Other large gatherings included 1500 at Crowhurst on 8 Sep and 1000 roosting at Glyne Gap (Bexhill) on 14 Oct.

The nocturnal roost at Glyne Gap had increased to 4200 on 9 Nov and other four-figure counts in the second winter period were 1500 at Rye Hb on 5 Nov and 1000 at Shoreham Hbr on 4 Nov. Inland there were 500 at Warnham LNR on 11 Dec and the roost at Bewl Water held 600 on 22 Dec. [TS]

There were just three records of birds of the nominate race *L.a. argentatus*. An adult bird was at the Ouse Estuary Project on 27 Jan (DC, BK). The two other records came from Seaford Head where there was a third or fourth winter bird on 24 Mar and an adult on 12 Sep (both MRE). [DHH]



Yellow-legged Gull, Fishbourne Creek, July 2013 (Andrew House)

Yellow-legged Gull

Larus michahellis

Scarce to fairly common but localised visitor; mainly in late summer and autumn. Amber listed species of medium conservation concern.

The estimated minimum numbers, based on the maximum recorded at any site during the month, were as follows:

	Jan	Feb	Mar	Apr	May		Jul	Aug	Sep	Oct	Nov	Dec
County total	1	1	3	-	1		44	31	23	8	4	9
Chichester Hbr	-	-	-	-	-		2	6	4	-	-	-
Pagham Hbr/Church Norton	1	1	-	-	1		42	22	19	8	-	-
Worthing/Goring	-	-	-	-	-		-	1	-	-	-	1
Shoreham	-	-	1	-	-		-	-	-	-	-	-
Warnham LNR	-	-	-	-	-		-	-	-	-	1	-
Cuckmere Haven	-	-	-	-	-		-	-	-	-	1	4
Beachy Head	-	-	1	-	-		-	2	-	-	-	-
Eastbourne	-	-	-	-	-		-	-	-	-	-	1
Glyne Gap (Bexhill)	-	-	-	-	-		-	-	-	-	1	-
Pett Level	-	-	1	-	-		-	-	-	-	-	1
Rye Hbr	-	-	-	-	-		-	-	-	-	1	-
Scotney GP	-	-	-	-	-		-	-	-	-	-	2

Following an unaged bird seen offshore at Church Norton on 30 Jan, a third-winter individual was seen at Pagham Hbr on 5 Feb which could possibly have been the same bird. In March one seen in breeding plumage at Beachy Head on the 3rd was the 18th recorded there by the observers and one was at Pett Level on the 15th. One was at Shoreham Beach on 6 Mar and the only other spring record was one at Pagham Hbr on 20 May.

In July there was an increase in numbers, presumably as a result of post-breeding dispersal. One in Chichester Hbr on 2 Jul was probably one of the two seen there on the 22nd. In Pagham Hbr, following three on 2 Jul numbers increased to four on the 8th, five on the 11th and 42 on the 23rd with 25 remaining on the 27th. In August, there were six in Chichester Hbr on the 1st (possibly from the 42 at nearby Pagham Hbr) and in Pagham Hbr 22 on the 2nd were probably part of the previous month's high numbers. Elsewhere one was recorded at Worthing on the 2nd and the first record from East Sussex was one at Beachy Head on the 8th.

In September, observers at Pagham Hbr recorded two on the 7th, three on the 10th and 14th but only single birds until 19 on the 24th. Meanwhile, four had been recorded in Chichester Hbr, possibly part of the original 42 of 23 Jul in Pagham Hbr. It seems that many then dispersed elsewhere as only four single birds were recorded, including three in East Sussex, for a change. Numbers in December were similarly low; apart from one at Goring on the 15th all other records were from East Sussex.

As a conservative estimate, a minimum of 57 individuals were involved, the majority in West Sussex. [JAH]

Caspian Gull

Larus cachinnans

Very rare winter visitor.

2012: A second-calendar-year bird at Newhaven on 5 and 6 Dec 2012 (JFC/RJF) has not previously been reported.

2013: Of the 18 species of gull on the Sussex list, Caspian Gull is probably the most challenging in terms of identification.

There were two records during the year, both from the Cuckmere valley near Exeat Bridge and both during December: a first winter bird on the 14th (DC/JFC/BK) and an adult on the 22nd (RJF). These records bring the county total to 25. [DHH]

Iceland Gull

Larus glaucoides

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

1995: The record of one at Weir Wood Res on 8 Jan has been withdrawn.

2013: There was only one accepted record: a bird of either first or second winter age at Piddinghoe Pond on 24 Nov (NMG). Monthly totals since 1948 have been as shown below. These figures illustrate that this species is essentially a late winter and spring visitor with 81% of arrivals occurring from January to May. [JAH]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
No. of birds	26	12	28	39	15	3	2	1	-	2	9	10	148



Caspian Gull, Exceat, December 2013 (Dave Cooper)

Glaucous Gull

Larus hyperboreus

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

The only record was of a first year bird at Pett Level on 15 Mar (IDH, SH, JW). The county total for this century, following a review, increases to a minimum of 30 distributed annually, as follows:

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. of birds	3	2	3	2	2	3	-	2	6	2	1	-	3	1

The monthly frequency with which these birds were first recorded was as given below. [JAH]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	14	3	5	5	1	-	-	-	-	-	1	1

Great Black-backed Gull

Larus marinus

Common winter visitor and passage migrant; scarce in summer; mostly non-breeder but very scarce breeder since 2000. Amber listed species of medium conservation concern.

During the year, this species was recorded in 93 tetrads, just one more than in 2012. During the first winter period three-figure counts were recorded at only three sites: 200 at Cuckmere Haven

on 27 Jan, 155 roosting at dusk at Rye Hbr on 3 Feb and 100 at Pagham Hbr on three dates in each of the months January to March.

Just three pairs were noted as breeding. A pair returned to the roof of a Brighton school for the third successive year and were nest building on 21 Mar. A pair nested on the Martello tower in Rye Hbr village and by June had fledged a single chick, and a pair nested on a factory roof in Lancing and produced two young, one of which subsequently died. During the spring and summer, counts were unremarkable, the highest being at Rye Hbr where 150 were seen on 21 Jul, at Pagham Hbr 100 were counted on 27 Apr and 104 were seen at Pilsey Sands on 7 Aug.

The autumn period saw figures rise with 255 at Hastings on 16 Sep (a record count there), 300 at Pagham Hbr on 28 Sep and on the same day 225 at Rye Hbr. In the second winter period five counts of 100 or more were recorded from four coastal sites; in descending magnitude these were 500 at Cuckmere Haven on 19 Nov, 350 at Glyne Gap (Bexhill) on 9 Nov, 177 at Rye Hbr on 5 Nov, 350 at Glyne Gap on 9 Nov, 160 adults at Pagham Hbr on 15 Dec and 140 there on 10 Nov.

There were very few records from inland waters; six were seen at Warnham LNR on 21 Jan and singles there on other days in January, August and October, three were seen at Bewl Water on 4 Oct and singles on other days that month, one was at Barcombe Res on 12 May and one at Arlington Res on 4 Oct and 15 Dec. [TS]

Little Tern

Sternula albifrons

Scarce breeding summer visitor and fairly common passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

The first birds of the year were 1 W at Selsey Bill on 9 Apr, one day later than the 10-year average, with one offshore there and 2 E at Splash Point (Seaford) three days later. There was very little other evidence of migration in April, with up to 15 lingering around Selsey Bill and adjacent areas and almost no reports from other seawatching sites, though 12 had returned to Rye Hbr by the 27th. The situation remained confused into May at Selsey Bill, with birds continually present, but with some eastward passage occurring too. The first day with some clear eastward movement was 5 May, when 53 were recorded passing Birling Gap and 17 passing Splash Point (Seaford). Passage continued in a modest fashion all month, with Selsey Bill grabbing the biggest counts of migrating birds as usual, and continuing to record a lot of lingering birds, including a peak count of 48 offshore on 12 May. Overall, numbers were down again this year, particularly at Splash Point, though they were stable at Selsey Bill. The monthly total of eastbound birds at five seawatching sites were:

	Apr	May	Total	Peak movement
Selsey Bill	64	353	417	22E on 7 May
Worthing	-	31	31	21 E on 5 May
Telscombe Cliffs	2	4	6	3E on 9 May
Splash Point	2	36	38	17 E on 5 May
Birling Gap	-	54	54	53 E on 5 May

As is sadly often the case with this species in the county, breeding success was very limited. At Rye Hbr considerable effort went into helping the birds, including decoys complete with sound systems and double quantities of electric fencing, but still possibly only one chick was fledged from the 11 pairs nesting.

In Chichester Hbr there was some display activity in early June, but the only nest failed, and in Pagham Hbr, despite a continuous presence of birds and considerable activity well into early July, no young were known to have fledged.

Numbers dropped away quickly from mid-July onwards, with almost all the records coming from Selsey Bill or Chichester Hbr. The last double-figure count, of 14, was on 24 Aug, at Pilsey Island and this was where the last bird of the year was seen on 22 Sep, five days earlier than the 10-year average. [AH]

Black Tern

Chlidonias niger

Scarce passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

Approximate monthly totals within the county were as follows:

Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1	1	25	1	-	13	11	54

The first record for the year was of a single adult bird at Climping Beach on 9 Mar (BA). It was seen feeding in the surf before flying off NW. It was over three weeks earlier than the previous earliest county record (2 Apr 2004) and five weeks earlier than the next seen past Splash Point (Seaford) on 14 Apr. The lack of favourable winds was doubtless the cause of what was a poor spring and the only counts of more than one bird were of 9 E at Birling Gap on 5 May, 4 E at Selsey Bill and 5 E at Splash Point the following day and 3 E at the latter site on 8 May. There were two at Rye Hbr on 24 May, and the last evidence of easterly movement was of two past Birling Gap on 27 May, and a single bird flew west past Splash Point on the very late date of 15 Jun.

Monthly totals from seawatching sites were as follows:

	Mar	Apr	May	Jun	Jul	Aug	Sep	Peak movement
Selsey Bill	-	-	5E	-	-	-	1W	4 on 6 May
Worthing Beach	-	-	1E & 1W	-	-	-	-	1 on 12 & 17 May
Splash Point	-	1E	11E	1W	-	2W	-	5 on 6 May
Birling Gap	-	-	11E	-	-	-	-	9 on 5 May

The first returning bird was a juvenile at Rye Hbr on 18 Aug, followed by four more juveniles in Chichester Hbr and 2 W past Splash Point on 24 Aug, and two at each of Bewl Water, Weir Wood Res and Rustington the following day. In September a single bird was noted in Fishbourne Channel on the 2nd, a group of seven was present in the mouth of Chichester Hbr for a number of days around the 4th, one flew west past Selsey Bill on the 7th, and the final record of the year was of a juvenile on Chichester GPs on the 23rd and 24th, 15 days earlier than the 10-year average. [AH]



Sandwich Tern, Selsey Bill, May 2013 (Andrew House)

Sandwich Tern

Sterna sandvicensis

Fairly common although localised breeding summer visitor and common passage migrant, very scarce winter visitor. Amber listed species of medium conservation concern.

Possibly as many as six birds overwintered in West Sussex with Chichester Hbr and Selsey Bill garnering most of the reports, though single birds were noted passing west at Worthing on 8 and 14 Jan. The first suggestion of migration was on 3 Mar, when 12 headed east past Selsey Bill, and by 10 Mar 21 birds were back at Rye Hbr. Passage remained slow throughout March; the only big count was 142 past Birling Gap on the 21st but at Rye Hbr numbers had risen to 250 by the 28th and 600 by 9 Apr. The biggest day of the spring for movement was 14 Apr, when 472 passed Selsey Bill and 1500 passed Splash Point (Seaford). Encouragingly, numbers heading east were well up on last year, with 440 in March, 3079 in April and 994 in May, giving a total of 4513, slightly more than the 25-year average. The monthly totals at five seawatching sites were as shown in the table below.

Despite the better passage numbers, breeding success was very limited in the county; at Rye Hbr around 120 pairs took up residence, but the poor early summer weather and predation meant the colony failed to produce a single fledged chick. At Pagham Hbr a lot of promising activity amounted to a handful of pairs nesting, all of which quickly failed and in Chichester Hbr 70 pairs were on Stakes Island but breeding success was not recorded.

Birds continued to be seen daily through August and September, principally from West Sussex with a peak of 103 heading west past Selsey Bill on 3 Aug, and in diminishing numbers into October.

		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Selsey Bill	E	273	1862	617	125	65	15	29	12
	W	14	138	51	23	64	207	180	7
Worthing	E	103	401	214	70	36	65	38	30
	W	18	145	138	75	28	61	46	11
Telscombe Cliffs	E	19	81	65	2	-	-	-	-
	W	-	9	28	-	-	-	-	-
Splash Point	E	51	2288	611	37	12	1	2	-
	W	8	8	33	-	2	3	-	5
Birling Gap	E	155	241	294	10	nc	nc	nc	nc
	W	4	13	25	-	nc	nc	nc	nc

The last record from Rye Hbr was of a single bird on 13 Nov, and there were two records of wintering birds from Chichester Hbr, of two together on 22 Nov, and of three on 19 Dec. [AH]



Common Tern, Shoreham, October 2013 (Dave Sadler)

Common Tern

Sterna hirundo

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

The first record of the year of two east past Selsey Bill on 24 Mar was bang on the 10-year average, but the next report was not received until the relatively late date of 7 Apr, when four flew east past the same site. Numbers remained extremely low in April, with no seawatching site

recording over 78 birds in a day and the first record away from coastal sites was one on the R Adur at Coombes on the 15th and eight at Chichester GP on the 16th. Although 350 passed east at Birling Gap on 3 May it was not until 5 May when all the pent-up drive to move north finally broke free of the weather and a massive and memorable movement of terns occurred along the county's coastline, mostly recorded as 'Commic' Terns, but undoubtedly the vast majority of birds were of this species. Numbers of Common Terns moving east on the 7th were 443 at Selsey Bill, 100 at Goring and 793 at Splash Point. The following day saw the movement continue with 448 E past Selsey Bill and 117 past Splash Point (Seaford). The biggest inland count of the spring was of 30 at Chichester GPs on 17 May. (There is a more complete breakdown of spring passage under the heading 'Common/Arctic Tern' below.)

After last year's complete nesting failure at Rye Hbr there was some moderately good news this year, with around 84 nesting pairs managing to fledge 23 young. Around 14 pairs nested in Pagham Hbr but only one chick was known to have fledged. Confirmed breeding was recorded from South Stakes Island (Chichester Hbr), Arundel WWT (where the chicks were predated), Warnham LNR (with six fledged young from two nests), Ardingly Res, Weir Wood Res and Pett Level but there are no reports of whether or not the young fledged from the last three sites.

Numbers began to decrease by the end of July, and there was some evidence of return migration in early August, when 185 birds were counted moving west past Selsey Bill between the 3rd and the 6th, with further counts of 59 W on the 10th and 58 W on the 17th. The last double-figure count was of 20 W at this site on 12 Sep, the last coastal record was of a juvenile at Shoreham Hbr on 22 Oct, and strangely the last record of the year was of a very late inland bird, at Bewl Water on 10 Nov, 14 days beyond the 10-year average. [AH]

Roseate Tern

Sterna dougallii

Very scarce passage migrant and non-breeding summer visitor. Red listed species of high conservation concern. Schedule 1 species.

2006: The record of one at Weir Wood Res on 2 Jun has been withdrawn.

2013: There were six accepted records of this rare visitor: a single bird was seen heading east past Splash Point (Seaford) on 5 May (SHL *et al.*) and this was very likely to have been one of the two seen shortly afterwards at Birling Gap (DC *et al.*). One was seen and photographed in Pagham Hbr LNR on the evening of 27 May (AH), and another (bearing a ring) was at Warnham LNR the following day (JJE). Two birds were seen regularly amongst the tern flocks at Rye Hbr from 27 Jun until 21 Jul, with one still being seen until 22nd Aug (BJY *et al.*). Since 2006 there have been a minimum of two and a maximum of five birds per year, so by recent standards 2013 was a better than average year. [AH, DHH]

Arctic Tern

Sterna paradisaea

Uncertain, but probably a fairly common spring and autumn passage migrant. Amber listed species of medium conservation concern.

This species is particularly difficult to identify on passage from seawatching sites, as distance, visibility and brief observation time all militate against confident separation from Common Tern, so its true status in the county is unclear. Most of the passage records are thus concealed within the 'Common/Arctic Tern' category below.

The first definite record of the year was of one east past Splash Point (Seaford) on 8 Apr, a day earlier than last year and three days ahead of the 10-year average. Sporadic records were received through April and into May, but the only notable counts were of 23 E past Splash Point on 1 May, and 50 past Birling Gap two days later. There were two inland spring records of singles at Chichester GPs on 22-23 Apr, and at Weir Wood Res on 24 May.

This bird proved to be the last recorded until one was noted passing west at Selsey Bill on 18 Aug. There were only reports of 11 birds from coastal sites during autumn, including a peak count of three at Shoreham Hbr on 22 and 23 Sep, and just two inland records, both from Chichester GPs on 8 and 17 Sep. There were just three October records, a single at Shoreham Hbr on the 10th and singles past Selsey Bill on the 3rd and the 27th, the last of the year and a day behind the 10-year average. [AH]

Common/Arctic Tern

Sterna hirundo/paradisaea

Due to the difficulties in separating Common and Arctic Terns passing seawatching sites, primarily brevity of view and distance, the majority of birds are recorded as 'Commic' Terns.

Below is a summary of the combined totals of Common, Arctic and 'Commic' Terns from the principal seawatching sites for the year:

		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Selsey Bill	E	2	288	7181	50	8	13	-	1
	W	-	8	136	44	51	407	77	4
Worthing	E	-	142	1478	16	10	32	8	-
	W	1	7	30	14	1	27	13	-
Telscombe Cliffs	E	-	36	194	-	-	-	-	-
	W	-	-	4	-	-	-	-	-
Splash Point	E	-	488	8933	-	-	-	2	-
	W	-	-	--	--	-	5	-	-
Birling Gap	E	-	31	5082	-	nc	nc	nc	nc
	W	-	2	-	-	nc	nc	nc	nc

It turned out to be another good spring passage, with a minimum total of 11,172 birds heading east up the Channel, beating last year's count by 1904 birds and being around a third higher than the 25-year average. Unsurprisingly, counts at Selsey Bill, up from 5676 to 6344 birds, and Splash Point (Seaford), up from 7162 to 8342 birds, reflect this increase. What was truly remarkable about the year was that three-quarters of all those went through over a four-day period, from 5 to 8 May, and one day, the 5th, produced around 55% of all the records at Selsey Bill (3423 birds), 65% at Splash Point (5400 birds) and 77% at Birling Gap (3924 birds).

There were very few reports of any note after the end of May, when most lingering birds were presumed to be Common Terns, and little return passage was recorded, a count of 33 W past Worthing on 25 Aug being the only double-figure count. The last report was of 2 W past Selsey Bill on 21 Sep, over a month ahead of the 10-year average. [AH]

Common Guillemot

Uria aalge

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

After worryingly low numbers of this species for much of the year, westerly movements off Selsey Bill in mid-December raised the minimum total for 2013 to 998. This exceeds both the 2012 total of 648 and the 10-year rolling average of 781. The minimum monthly totals for 2013 shown in the table below have been compiled using the same method as for Red-throated Diver.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly total	195	20	16	12	24	8	2	-	7	10	20	684
Peak no.	20	6	6	3	2	2	2	-	4	2	4	480
Peak day	12th	17th	22nd	7th	11th	15th	28th	-	28th	13th	11th	16th

In January numbers were very low until the end of the month when there were 70 in Rye Bay on the 25th and 40 E and 80 W off Selsey Bill the next day. Numbers remained low for the next ten months with no double-figure counts. The period June-August is always quiet but this year was unusual with no records between 27 Jun and 28 Jul and then a further gap in the records until 13 Sep.

Following continuing low numbers in October, those in November were boosted by a party of 20 some 7 km off Shoreham. The only noticeable movements of the year occurred off Selsey Bill in December with 42 W on the 15th, 480 W on the 16th and 40 W the next day. At this time there were also 80 on the sea off Lancing.

The totals at four seawatching sites are shown below. There will doubtless have been duplication between sites as birds moved along the coast and also where birds lingered offshore for more than one day so no attempt should be made to total the rows or columns.

	Jan-Feb			Mar-May			Jun-Jul			Aug-Oct			Nov-Dec		
	E	o/s	W	E	o/s	W	E	o/s	W	E	o/s	W	E	o/s	W
Selsey Bill	42	1	86	5	5	9	1	1	4	6	2	6	17	1	605
Worthing	-	-	-	-	2	-	-	-	-	1	-	1	-	9	9
Splash Point	48	6	4	21	3	-	2	-	-	6	-	-	4	-	-
Birling Gap	8	1	-	3	20	4	2	-	-	-	-	-	-	-	-

There were no records of birds away from the open sea or in tidal harbours during the year. [DHH]

Razorbill

Alca torda

Common winter visitor and fairly common passage migrant; formerly bred. Amber listed species of medium conservation concern.

In contrast to the last species, it was a good year for Razorbills with the minimum annual total of 3927, over three times that of 2012 (1075) and considerably above the 10-year rolling average of 2361. There was a noticeable difference in the pattern of occurrence between Common

Guillemots and Razorbills. While Guillemot numbers were very low until December, the converse was true in the case of Razorbills where the highest numbers were in the first three months of the year. The minimum monthly totals are shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly total	426	2721	334	98	125	27	1	1	6	36	61	91
Peak no.	32	1080	67	7	19	6	1	1	3	7	15	18
Peak date	25th	18th	21st	4th	11th	14th	30th	31st	27th	27th	29th	15th

During the first winter period there were movements involving over one hundred birds on eight dates. The only such occurrence in January involved 160 E and 320 W at Selsey Bill on the 26th. Six of the seven highest counts in February came from Splash Point (Seaford) including the maximum for the year of 1080 E on the 18th. The second highest count of the year was at Worthing with 4 E and 660 W on 24 Feb. Numbers declined dramatically in March with peak counts of 2 E and 66 W at Selsey Bill on the 10th and 67 E off Splash Point on the 21st. The only subsequent count of note was of 77 E at Splash Point on 8 Apr. In this period the largest offshore concentrations were of 150 in Rye Bay on 25 Jan and 40 off Church Norton (26 Jan) and also 40 off Lancing (12 Feb).

Small numbers continued to be seen on an almost daily basis at Selsey Bill during May after which numbers remained low until the end of the year with just a single double-figure count in November and only two such counts in December. No large offshore gatherings were recorded in the latter part of the year with 20 off Shoreham on 27 Nov and 33 off Worthing on 2 Dec being the peak counts.

	Jan-Feb			Mar-May			Jun-Jul			Aug-Oct			Nov-Dec		
	E	o/s	W	E	o/s	W	E	o/s	W	E	o/s	W	E	o/s	W
Selsey Bill	242	8	459	85	3	154	1	-	23	9	2	24	5	9	79
Worthing	58	-	697	19	1	26	5	-	1	2	-	2	5	87	14
Splash Point	1564	11	423	274	18	50	4	-	-	9	-	-	11	-	-
Birling Gap	264	-	-	46	1	22	1	-	-	-	-	-	-	-	-

The table above highlights the usual difference in flight direction between the east and west of the county. Overall at Selsey Bill 68% of all Razorbills recorded were moving west but at Splash Point the reverse was true with 80% of those recorded moving east.

There were no records of Razorbills away from the open sea or tidal harbours during the year. [DHH]

Little Auk

Alle alle

Very scarce autumn passage migrant and winter visitor.

1995: The record of one at Weir Wood Res on 4 Nov has been withdrawn.

There were no records of this scarce visitor in 2013, the last records being of singles passing Selsey Bill and Worthing on 22 Nov and 9 Dec 2012 respectively. [DHH]

Auk species

The annual total of 33,170 was a welcome increase on the 2012 figure of 20,393 and above the 10-year rolling average of 28,776. The table below shows the monthly totals which include those for Common Guillemots and Razorbills together with those for auks which were not identified to species. Due to the inevitable duplication of sightings the figures should not be taken as an accurate assessment.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly total	4620	15,485	6813	725	2082	102	5	3	28	160	1153	1994
Peak no.	1141E	5064W	3383W	395E	546E	16W	2E	1W	5W	29E	468W	630W
Peak day	13th	24th	10th	8th	4th	14th	28th	18th	13th	20th	24th	16th

The approximate totals recorded at four seawatching sites are shown in the table below.

	Jan-Feb			Mar-May			Jun-Jul			Aug-Oct			Nov-Dec		
	E	o/s	W	E	o/s	W	E	o/s	W	E	o/s	W	E	o/s	W
Selsey Bill	385	29	2347	1207	28	1482	16	1	61	-	-	2	614	12	1695
Worthing	362	-	4846	176	3	2185	9	-	4	12	-	11	155	96	480
Splash Point	5123	17	2272	1410	24	564	8	-	-	33	-	4	15	-	-
Birling Gap	2322	1	52	1720	22	517	-	-	-	-	-	-	-	-	-

Although there were 21 dates in the first winter period when more than one hundred auks were recorded, on only two of those dates did the totals reach four figures at any one seawatching site: on 24 Feb with 1824 W at Selsey Bill, 1000 W at Goring and 3240 W at Worthing and on 10 Mar when 1876 moved west past Worthing. The largest movement recorded in the east of the county at this time involved 400 E at Rock-A-Nore on 6 Feb. Three-figure totals continued to be recorded in March and April with the highest daily peaks at any site being 178 E at Splash Point (Seaford) on 8 Apr and 368 E at Birling Gap (Beachy Head) on 4 May. The tables above show that numbers typically dropped in the period June to October. It was late November before the next three-figure total occurred when there were 468 W at Selsey Bill. Observers at this site recorded a further six daily totals of more than one hundred birds before the end of the year including 630 W on 16 Dec.

Distant auks in flight can often prove impossible to identify to species. As a result of these difficulties, in 2013 only one in seven auks seen in flight was specifically identified. Where specific identification was possible, Razorbills outnumbered Common Guillemots by a ratio of 3.9:1. [DHH]

Feral Pigeon

Columba livia

Common resident.

In the first winter period, there were 36 double-figure counts, the highest of which were 250 at Brighton on 12 and 24 Jan and 230 on 1 Mar and 175 at Mile Oak Fm (Portslade) on 21 Mar. During the early SWBS, birds were encountered in only ten of the 100 1-km squares surveyed with a maximum of 85 on 16 Feb at Warnham.

Breeding was confirmed in only one tetrad and was probable in a further five. The first fledglings were noted at Whitehawk (Brighton) on 7 Mar. In the summer period there were five

three-figure counts, the highest being 175 at Brighton on 8 May, 210 there on the 20th and 150 at Woodingdean on 16 Aug, and 29 counts of 20 to 100.

In the autumn and second winter periods, the number of sizeable flocks was reduced with the largest being 160 at Brighton on 26 Sep, 100 at Lancing on 9 Dec and 100 at Newhaven Tide Mills on 26 Dec. There were 24 other records of flocks of 30 or more birds during the same period. [AHP]

Stock Dove

Columba oenas

Common resident and possible winter visitor. Amber listed species of medium conservation concern.

Records were received from 272 tetrads throughout the county, which is slightly more than last year.

In the first winter period, the highest count was a flock of 200 at Thorney Island on 24 Jan. Other notable concentrations were 111 at Pett Level on 22 Feb and 80 there on 20 Mar. During the early SWBS 69 birds were recorded from 19 1-km squares of 100 surveyed, with a maximum count of 15 near Westmeston on 18 Feb. The largest April concentration was of 70 birds at Pett Level on the 17th. Two sizeable concentrations were reported for early June: 73 at Pett Level on the 4th and 80 at Thorney Island on the 9th.

The first record of a calling male was on 1 Jan at Poundgate (Ashdown Forest), but all but two of the confirmed breeding records relate to the months of July and August. Records suggest that this species experienced a slightly more successful breeding season than in the previous year. Breeding was confirmed in 22 tetrads, compared with 12 in 2012, and was probable in a further 18 tetrads. Out of 30 nests for which detail was provided, 26 were in owl boxes and one was in a Kestrel box. Eleven nests contained two eggs or chicks, and two contained just one.

The first indication of the build-up of post-breeding numbers was flocks varying in size between 17 and 100 birds at Beachy Head on 29 Oct on which date there were also 255 at Seaford Head, 238 W at Ecclesbourne Glen (Hastings), 150 at Pett Level and 70 at Thorney Island. During migration watching at Hastings a total of 1033 was recorded on seven dates between 29 Oct and 15 Nov with the highest daily count of 646 W on 30 Oct, on which date 112 W were noted at Worthing, presumably part of the same movement. In November there were flocks of 120 at Thorney Island on the 4th, 250 at Beachy Head and 100 at Pevensey Levels on the 10th. The largest concentration in December was a flock of 400 at Easton Fm (Earnley) on the 14th, this being the largest flock recorded in Sussex since 2010. During the late SWBS, 78 birds were recorded in 18 1-km squares out of 114 surveyed, with a maximum count of 20 near Scaynes Hill on 1 Dec. [CJR]

Wood Pigeon

Columba palumbus

Abundant resident and winter visitor.

Wood Pigeons were recorded in 498 tetrads. In the first winter period, counts were unremarkable with flocks of 1000 seen at Brede on 3 Jan, Pagham Hbr on 21 Jan, Warnham LNR on 14 Feb and Sidlesham Ferry on 14 Mar and, in addition, there were some 44 counts of 100 or more. In early spring, 40 appeared to come in off the sea at Rottingdean on 12 Mar while 1500 were seen in bad weather at Sidlesham on 29 Mar. Demonstrating how widespread this species is, it was

encountered in 99 of the 100 1-km squares surveyed during the early SWBS with a maximum of 350 at Udimore on 27 Feb.

At Pagham Hbr 17 pairs or territories were identified while overall breeding was confirmed in 12 tetrads and probable in 36 others. Mating was first noted on 20 Jan at Worthing and nest building on 9 Mar at Boxgrove. The first fledglings were seen on 6 May at Broadbridge Heath and the last as late as 20 Oct at West Chiltington.

The main autumn movement commenced on 3 Nov with 2500 passing over Itchingfield in flocks of 20-200, followed by 2500 SW at Broadbridge Heath and 3659 at Poundgate (Ashdown Forest) on 9 Nov which flew out of a woodland roost at dawn and flew off south. Likewise on the 10th most were seen flying between south and west with 5200 at Beachy Head, 4000 at Seaford Head, 1390 at Brighton Wild Park and 3105 at Selsey Bill. Dwarfing all other counts were 20,000 flying south at dawn at Broadbridge Heath on the 13th, a day when 5850 were also seen at Brighton Wild Park. The final large count for the month was at Barcombe where 4000 were seen in five minutes heading south on the 15th and the last significant movement was of 900 W at Horsham on the 16th. In December, 3000 roosting at Warnham LNR and the 1050 that flew out of a roost at Scaynes Hill on 1 Dec and 1000 at Duddleswell (Ashdown Forest) on 2 Dec were the only records of note. During the late SWBS it was recorded in 111 of the 114 1-km squares surveyed with a maximum of 1050 on 1 Dec at Scaynes Hill. [AHP]

Collared Dove

Streptopelia decaocto

Very common resident.

Collared Doves were recorded in 296 tetrads. In the first winter period, there were 27 double-figure counts but only three exceeded 20 birds, with 23 at Boxgrove on the 17 Jan, 30 at Littlehampton on the 26th and 20 at West Wittering on 16 Feb. Flocks were generally under half a dozen birds. During the early SWBS, birds were encountered in 47 of the 100 1-km squares surveyed with a maximum of 20 on 16 Feb.

Breeding was confirmed in only three and was probable in a further 30 tetrads, presumably representing under-reporting of this species. Nest building was first noted at Littlehampton on 18 Mar and the first fledged young there on 5 Jun.

Numbers were again small in the late spring and summer months with 28 counts in double figures; the maximum count being 30 at Ringmer on 6 May, while in the autumn the highest counts of the nine double-figure counts were 30 at Battle on 18 Oct and 22 at Southwater on 14 Sep. Counts for the second winter period were similarly poor; of 18 double-figure counts the highest were 34 at Battle and 33 at Thorney Island on 24 Nov and 20 on 10 Dec at Oving. During the late SWBS birds were encountered in 44 of the 114 1-km squares surveyed with a maximum of 20 on 10 Dec. [AHP]

Turtle Dove

Streptopelia turtur

Scarce but declining summer visitor and passage migrant. Red listed species of high conservation concern.

Turtle Doves were recorded in 53 tetrads, a further reduction of c.30% on last year's 76, apparently continuing the decline of this species. The first arrival of the year was a bird at Pett Level on 14 Apr, 5 days later than the 10-year average date of 9 Apr. There were another nine

records for April following which there were sightings of ones and twos regularly during May. There were only two records of higher numbers with three at Pett Level on the 1st and three at Pagham Hbr on the 19th. Two birds were seen feeding on seed put out in a garden at Arlington on 27 May.

Breeding surveys included a minimum of two pairs at Rye Hbr, two or three purring males on the Knepp Estate, one pair at Pagham Hbr and one record of an adult with a recently fledged juvenile just able to fly at Pett Level on 23 Aug. Breeding was probable at five other sites (a reduction on the 15 of 2012), one at Arlington Res and four on Ashdown Forest. Birds were also heard purring in a further 17 1-km squares of presumably suitable habitat.

While there were ten for August, there were no sightings of more than two birds. There were only four records for September, all of single birds, with the last record of the year at Brighton Wild Park on 11 Sep, 15 days earlier than the date of the 10-year average. [AHP]

Rose-ringed Parakeet

Psittacula krameri

Very scarce introduced breeding resident.

This species was recorded at nine sites; all bar one at St Leonards-on-Sea on 26 Jan, from West Sussex. Almost all records were of single birds, the exceptions being two at Fernhurst on 25 Nov and 20 at Horsham on 6 Dec, interestingly, the closest sites to neighbouring Surrey where they breed extensively. [AHP]

Common Cuckoo

Cuculus canorus

Fairly common but declining summer visitor. Red listed species of high conservation concern.

Cuckoos were recorded in 182 tetrads, down on the 210 in 2012. The first arrival was heard by the railway in Lewes on 25 Mar, over a week earlier than the 10-year average date of 2 Apr, and probably the same bird at the same location on 2 Apr. This early bird was followed by others on 6, 10 and 11 Apr and birds were then reported arriving daily from the 13th. By the end of April records had been received from 83 sites throughout the county (although some duplication is likely). Twenty birds were recorded on Apr 21 and 16 on the 28th.

There were fewer records for April than in the previous year, probably due to the cold and wet spring, and birds were reported at fewer sites in that month, although they were still being recorded at new sites throughout May. The number of records for June and July was much greater than in the previous year, perhaps suggesting that birds stayed later or arrived later.

Breeding was confirmed at three sites. At Pagham Hbr five males were present during the breeding season. A recent fledgling was seen at Pulborough Brooks on 4 Aug, and two fledglings were seen near to Medmerry in the vicinity of Dunnocks and Reed Warblers. At Rye Hbr about six singing males were present throughout the spring and early summer and the maximum count at East Rother Levels was five. The maximum count at Stonehill (Ashdown Forest) for May was five on 14 May when three were trapped and ringed, and one of these, "Sussex", was fitted with a tracking device. This is the subject of an article on pages 244-250 of this report. Records were received of probable breeding at 16 sites; half of these sites were on Ashdown Forest but duplication is very likely. There were approximately 145 reports of singing males throughout the county, and half of these relate to Ashdown Forest.

Juveniles were seen at seven different locations, and at Pagham Hbr three noisy birds were reported on 29 Jul in the same field, with one of them being seen to be followed by Dunnocks. The last bird of the year, also a juvenile, was seen on 30 Sep at Blackdown (Fernhurst), which is later than the 10-year average date of 18 Sep and 41 days later than the penultimate observation on 20 Aug. [CJR]



Barn Owl, Waltham Brooks, March 2013 (Gareth Hughes)

Barn Owl

Tyto alba

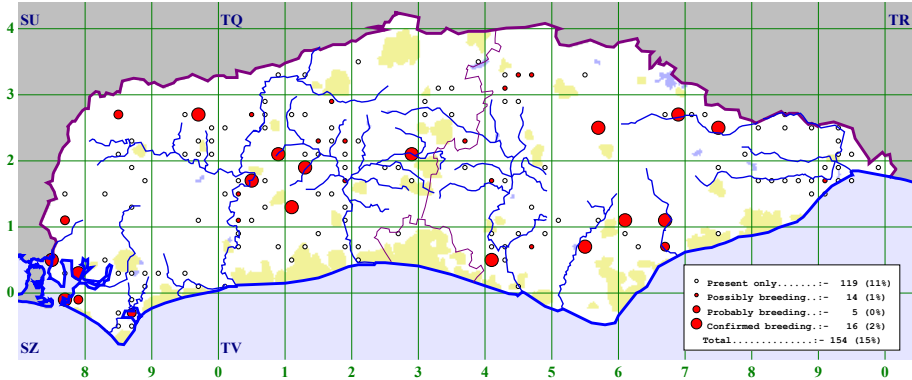
Fairly common resident. Amber listed species of medium conservation concern. Schedule 1 species.

Records of all sightings are shown in the map below. The monthly totals of casual sightings, excluding visits for ringing and at daily monitored reserves, were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
64	106	59	37	14	10	7	4	3	5	5	2

The high numbers seen hunting during daylight during January and February suggests that the birds were hungry.

This was a very poor year for Barn Owl breeding in Sussex and nationally. A wet and windy winter with extensive flooding of the river valleys was followed by the coldest March for 50 years. In West Sussex 230 nest boxes were checked and only eight broods of young found, one of those a single chick. Pairs and single adults were present at 32 other sites, roosting by day in the boxes but not having laid eggs.



In East Sussex ten breeding attempts were reported, but one area was not checked. As in West Sussex there were sites with single adults or a pair roosting in nest boxes but not breeding. There were no reports of Barn Owls using tree cavities or sites other than nest boxes. [ABW]

Little Owl

Athene noctua

Fairly common resident.

This introduced and sedentary resident was recorded from 52 tetrads during the year continuing a steep downward trend from 74 in 2012 and 104 in 2011. During the first winter period records came from a variety of locations throughout the county with the majority coming from favoured territories within downland, river valleys and on the coastal strip. All but one of the records were of single birds and at Burpham a bird was witnessed being mobbed by a pair of Mistle Thrushes.

Only two pairs were confirmed as breeding: at Sompting where two young fledged and at Petworth where a pair nested in a pile of logs. This total is significantly lower than the recent average of ten pairs. Breeding was probable at an additional three sites; Amberley Wild Brooks, Byworth and Barcombe. Apart from the two breeding pairs no sites held more than two birds at any time during the year.

With the low number of records, post-breeding dispersal is hard to detect in the data, but 12 sites had their first record for the year from September onwards, with the majority of these in the southern half of the county. Most reports during November and December were of single birds but at three sites two birds were seen together. At Woods Mill (Henfield) one was recorded roosting in scrubby *Salix* and was seen with sizeable bird prey. No birds were recorded during the year from a large area of north-central Sussex and for the third year running none were seen or heard at Beachy Head. [DG]

Tawny Owl

Strix aluco

Fairly common or common resident.

Tawny Owls were recorded from 137 tetrads spread throughout the county and birds appear to be present wherever suitable nesting habitat is available. In the first winter period the majority of records were of calling males and pairs with the maximum number of three birds being recorded

at both Frant and Etchingham. One observer remarked that there were quite a few pairs calling during the daytime on Ashdown Forest.

Breeding was confirmed in only one tetrad, compared to the average of 15 over the last five years, and was probable in a further fourteen. This species was also recorded from an additional 31 tetrads during the breeding season; cf. 22 in 2012. The confirmed breeding record was of at least two young calling in an Angmering garden on 16 Jul; at the same site nine days before one of the adults was mobbed by a Carrion Crow, two Magpies and four Herring Gulls before escaping to a denser tree. The highest numbers recorded during the breeding season were five birds at Powdermill Res and four at Stanmer Park (Brighton).

Around 21% of the records of birds heard calling occurred during the summer and autumn months; cf. 40% in 2012. Forty-three tetrads received their first record of this species for the year after the breeding season with many of these birds heard as they became more territorial from October onwards. During the autumn and second winter period the highest counts were of four at Pett Level and three at West Chiltington. The only reported road casualties were a brown phase bird found dead beside the road near Horseshoe Plantation (Beachy Head) on 3 May and one found dead beside Lunces Common (Wivelsfield) on 20 Dec. [DG]

Long-eared Owl

Asio otus

Scarce resident and very scarce passage migrant and winter visitor.

Birds were recorded from only five sites during the year and for the first time in a decade no records were received from an area of West Sussex downland scrub which had for many years been the most reliable site in the county to record this species. In the first winter period three birds were discovered at a previously unrecorded roost site in a wide hedgerow on downland in West Sussex (site F) and they were seen there from 8 Jan until 11 Feb. At Pagham Hbr an individual was recorded on 23 and 24 Mar and in East Sussex a bird was found dead beside the road in suitable downland habitat on 9 Feb.

In April a late spring migrant was seen at Shooters Bottom (Beachy Head) on the 25th and 26th and another possible migrant was found dead beside the road at Chichester GP on the 25th.

During the breeding season two birds were recorded at site F in potential breeding habitat on a single date. At Pagham Hbr an individual was seen on 21 and 22 Apr with the same or another bird present throughout July in suitable breeding habitat. On 8 Aug two birds were seen in the same area although there was no proof of breeding.

No autumn migrants or wintering birds were reported continuing the recent downward trend in the number of observations of this species. [DG]

Short-eared Owl

Asio flammeus

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

The approximate monthly totals, taking account of possible duplication, were as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Sep	Oct	Nov	Dec
22	5	13	9	6	3	1	6	5	14	6

During the first five months of the year an estimated minimum of 39 individuals were noted in the county compared to a 3-year average of 25 birds. At the beginning of the year at least 14 were present in the river valleys and along the coast including maximum counts of three at Rodmell Brooks and six at Pevensey Levels, but by the end of the month the majority of these birds had moved on. During February five individuals were recorded moving through the county, sometimes remaining at sites for short periods. In March and April ones and twos were present across Sussex with three seen at Thorney Island on 2 Mar increasing to four on 27 Mar, with one lingering in the area until 24 Apr. At least nine passage migrants were seen during April and May including at Pagham Hbr on 25 May and Beachy Head on the 31st.

In most years birds vacate their Sussex wintering grounds in March/April and occasional migrants move through the county until early May. In 2013 a single bird was recorded at Beachy Head on 3 Jun and another at Thorney Island on 14 Jun (where one summered in 2012). One was present at Rodmell Brooks throughout June remaining there until 5 Jul, with possibly the same bird being seen at Long Furlong (Findon) on the 7th. Short-eared Owls last bred in Sussex in 1922.

The first autumn migrant took up residence at Pulborough Brooks for ten days on 16 Sep with the next seen on the 30th when one was at Rye Hbr and three were seen flying separately over the sea at Worthing. Only five migrants were recorded during October including singles flying in off the sea at East Head (Chichester Hbr) and Selsey Bill on the 12th with migration continuing into the start of November.

The first wintering bird was back on territory on 4 Nov at Lidsey Rife (Barnham) where up to three were seen during November with two remaining to the end of the year. Elsewhere in the county single birds took up residence in the favoured river valleys and coastal locations and multiple sightings included two roosting on Pilsey Island on 16 Nov and two wide-ranging birds in the Adur valley throughout the month. The only wintering birds recorded on downland in the second winter period were two seen at The Burgh (Burpham) on 20 Dec. [DG]

Nightjar

Caprimulgus europaeus

Fairly common but localised summer visitor rarely seen on migration. Red listed species of high conservation concern.

This species was recorded in 53 tetrads, an increase on the 32 in 2012. The first reports for the year were of a bird at Darwell Woods on 2 May, one day later than the 10-year average arrival date. The next record was of one at Wrens Warren (Ashdown Forest) on 6 May followed by four at Darwell Res on the 7th. On the West Sussex heaths, two were noted at Iping Common on the 19th. Birds at Arundel WWT on 15 May and Charleston Reedbed on the 21st were most probably passage migrants.

There were no reports of confirmed breeding. During the *Thames Basin and Wealden Heaths Breeding Bird Survey*, 48 pairs or territories were recorded, including 19 at Ambersham and Heyshott Commons, ten at Chapel Common and six at Iping Common (see page 220). Probable breeding was recorded in a further eleven 1-km squares including Midhurst Common, Rewell Wood (Arundel), Romany Ridge (Chailey) and Ashdown Forest (where there were only nine locations of probable breeding). On Ashdown Forest, records were mostly of churring males and were from 29 locations. No attempt at calculating the numbers of territories on Ashdown Forest has been made this year.

Churring birds were also recorded at 12 other sites in suitable habitat, including Rewell Wood (Arundel), Wiggonholt Common, Memorial Common (Chailey), Romany Wood (Chailey)

Common), Broadwater Warren, Abbots Wood and Wilmington Woods (Hailsham), Darwell Hole, Darwell Res, Powdermill Res, Brede High Wood and Beckley.

The last inland record for West Sussex was of a bird at Lodsworth on 21 Aug. In East Sussex, the latest inland records were from Ashdown Forest of single birds in flight and calling on 31 Aug and 3 Sep. At the coast, single birds were reported at Pett Level on 22 and 24 Sep and, finally, on the 29th a bird was observed resting all day on a bird table in a garden in Hastings. [AR]

Common Swift

Apus apus

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

2011: The correct date of the last Swift of the year was 28 Oct, not 28 Sep as stated in the 2012 report.

2013: The first recorded Swift of the year, on 15 Apr at Arlington Res, was two days later than the 10-year average date and one day later than in 2012. Birds were subsequently recorded on a daily basis through to early August. The first double-figure count came from Chichester GP with 20 on 26 Apr followed by 20 at Pett Level on 28 Apr and 80 a day later at Rye Hbr. The first three-figure count also came from Chichester GP with 150 on 9 May; a further 13 such counts were received through the spring migration, the last being 300 from Rye Hbr on 31 May. The highest numbers recorded were 400 at Bewl Water on 29 May and between 300 and 500 arriving at Birling Gap on 31 May.

There was confirmed breeding in 34 1-km squares (34 tetrads) and probable breeding in a further 49 (33 tetrads). This was far higher than the eight confirmed breeding records for 2012, perhaps reflecting increased observer effort to record nesting Swifts. A minimum of 60 nests was recorded from 27 sites where breeding was confirmed and a further 41 nests from 20 sites where breeding was probable. In addition, one well watched and monitored breeding colony at Brighton General Hospital contained 12 active nest sites, making this one of the most significant Swift colonies in Sussex. Those involved have been working closely with developers, installing Swift nest boxes to help maintain the colony after re-development work has been carried out.

Swifts were recorded back at nest sites from 14 May at several locations in Brighton and the latest date on which birds were still visiting a nest site was 26 Jul in Horsham. Although a bird was observed entering a nest site on 8 Aug at Steyning this may have been a non-breeder prospecting for next year rather than visiting an active nest.

The largest gatherings were through June and into the beginning of July with 15 three-figure counts. By far the highest count, however, was 1320 W past Beachy Head on 29 Jun, the largest daily movement recorded there since 2004. An estimated 500 at the Ouse-Glynde confluence and 400 at Eartham, both on 24 Jun, were also notable counts.

After the majority of Swifts had left during July, there were just 11 double-figure counts in August, the highest of these being 75 at Seaford Head on the 6th and 50 from Beachy Head on the 2nd, whilst 32 at Pagham Hbr on the 22nd was the last double-figure count of the year.

There were five records during September, all involving single birds except two at Seaford Head on the 12th. The last observation was of one at Southwater CP on 13 Oct, exactly matching the 10-year average date but considerably later than for 2012 which had been on the early date of 19 Sep. [DB]



Common Swift, Arlington Reservoir, June 2013 (Jake Everitt)

Kingfisher

Alcedo atthis

Scarce to fairly common resident and possibly very scarce winter visitor. Amber listed species of medium conservation concern. Schedule 1 species.

Birds were recorded in 99 tetrads across the county, a slight increase compared with the previous year. Observations during the winter months, with the maximum number of birds recorded, were as follows:

	Jan	Feb		Nov	Dec
No. of birds	41	28		39	38
No. of inland sites	17	12		19	18
No. of coastal sites	14	7		20	13

The number of birds observed during January and February was comparable to the previous year and the number of sites in each category was also comparable. The highest count in this period was four at Warnham LNR on 16 Feb.



Kingfisher; Church Norton, December 2013 (Andrew House)

There was just one report of display behaviour, by a pair seen at Pett Level on 7 Apr. Breeding was confirmed at only two inland sites, one in East Sussex and one in West Sussex, where fledglings were seen. At the eastern site, in April observers noted evidence of an old nest tunnel being excavated and reported frequent sightings and whistling during April to June. There was concern that scratch marks on the river bank below the nest entrance might indicate disturbance or predation by mink but two juveniles were seen in September. Breeding was probable at a further

five sites and birds were observed in suitable habitat at a further six sites. Birds were seen at 26 sites throughout the county during the breeding season, compared with 19 in the previous year.

Between 22 Jul and 29 Sep four young birds were ringed at Ladywell (Coombes), but this does not necessarily mean that the birds fledged nearby. The highest counts in the autumn were four at both Weir Wood Res on 25 Aug and at Pulborough Brooks on 25 Sep.

The numbers of birds observed during November and December were similar to the 2012 totals, but numbers recorded at coastal sites were greater. The evidence suggests that this species is very much under-recorded in Sussex and observers are asked to record sightings, particularly those with breeding evidence. [CJR]

Bee-eater

Merops apiaster

Rare vagrant; bred once in 1955. Schedule 1 species.

Three birds was a typical number. The first one was seen in the churchyard at Church Norton on 18 May (AH) before drifting off high to the south; the second and third occurred at Beachy Head on 25 May and 6 Jun respectively (both MEC, RHC). Although the views of the first two birds were brief the last remained for at least two hours and was therefore seen by several observers.

The annual average number this century has been 3.4 and the annual totals have been as given in the table below. [JAH]

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4	3	6	1	1	3	-	-	4	3	6	6	7	3



Bee-eater, Beachy Head, June 2013 (Roger and Liz Charlwood)

Hoopoe*Upupa epos*

Very scarce spring and even scarcer autumn passage migrant; has bred. Schedule 1 species.

The first record was of one at Rustington on 15 Apr. The second was found at Charleston Bottom (Westdean, East Sussex) on 29 Apr by a family out for a walk who noticed an unusual bird feeding on the ground like a Green Woodpecker and eventually identified it as a Hoopoe from photographs. A month later another Hoopoe was found at Barcombe Mills on 29 May. The final bird of the year was at Chidham (Chichester) on 12 Oct where it was watched for an hour before it flew off towards Bosham. The four records in 2013 is just one below the average of five per year in recent years (*The Birds of Sussex*, Thomas 2014) but compares poorly with the nine in 2011. [SPB]

Wryneck*Jynx torquilla*

Very scarce passage migrant, most in autumn; last bred in 1944. Red listed species of high conservation concern.

Although there was no spring record it was actually a good year for the species with records from 25 tetrads in the autumn, noticeably higher than in recent years.

The first reports were singles from Seaford from 24-26 Aug and Charleston Reedbed on 28 Aug. There was a maximum of two birds at Beachy Head between 25 and 28 Aug, one in the Pagham area from the 25th to the 27th, one at Newhaven on the 26th and one at Crowlink (Eastdean) on the 27th. On 1 Sep records came from Thorney Island, Streat, Findon Park, Newhaven and Telscombe. The month continued with single birds at Ecclesbourne Glen (Hastings) on the 2nd, Cuckmere Haven from the 3rd to the 5th, Barcombe on the 4th and Findon from the 4th to the 5th. Although there were records from Pagham Hbr and The Severals (Church Norton) from 9 to 17 Sep which could be from a single bird, they are taken here as representing two birds. Reports from Blackdown from the 18th to the 19th, Newhaven Fort from the 18th to the 20th, Castle Hill (Falmer) on the 20th, Beachy Head and Thorney Island on the 21st and Cuckmere Haven on the 26th followed. October records were from Hope Gap (Seaford) on the 3rd and Cuckmere Haven again on the 4th. Two Wrynecks were ringed at Pett Level on 28 Sep and 29 Oct. This suggests a minimum of 28 birds, seven in August, 18 in September and three in October. This compares with 13, nine, 21 and 16 for the years 2009-12. [PJP]

Green Woodpecker*Picus viridis*

Fairly common or common resident. Amber listed species of medium conservation concern.

Although the species was recorded in 91% of tetrads in 2008-11 through atlas fieldwork, there has been a marked reduction in the number of records since then with 415 tetrads (40%) in 2012 and 356 (34%) in 2013. The reason for this is not fully understood, but under-recording is clearly a major factor (for example Garden BirdWatch figures are not included). However, the results of county surveys confirm the widespread distribution throughout the county, but suggest that the changing fortunes of the species in recent years have been more complex as indicated in the following tables.

	Year	No. of birds	1-km squares	Percentage
Early SWBS	2013	51	33 / 100	33%
Late SWBS	2013	53	42 / 114	37%
Early SWBS	2012	90	60 / 131	46%
Late SWBS	2012	56	46 / 107	43%

	Time period	Percentage change
BBS 2013	1994-2013	-35%
BBS 2013	2012-2013	-60%
BBS 2012	1994-2012	+59%
BBS 2012	2011-2012	+141%

After a very significant increase between 2011 and 2012 populations appear to have struggled in early 2012. The severe winter with much snow cover may have contributed to this.



Green Woodpecker, Hodcombe, August 2013 (Roger and Liz Charlwood)

During the first winter period the highest counts were six at Waterhall (Brighton) on 20 Mar, and a monthly maximum of six at Pulborough Brooks on 22 Mar.

Drumming on a telegraph pole was noted in Selsey on 4 Jan. On 11 Apr a pair was seen conducting a courtship display on the ground at Lancing. Breeding was confirmed in 12 tetrads and was probable in a further 38 (2012: 12 confirmed, 37 probable). The first record of an adult with a fledged juvenile was at Barnham on 2 Jun. A nest with young was noted at Ladywell (Coombes) from 5 to 27 Jun. During the *Thames Basin and Wealden Heaths Breeding Bird Survey* a total of 30 pairs or territories was identified. The highest count was of nine at Pett on 20 Aug

but there were 24 records of four or more birds during the late summer and autumn whilst in the second winter period most records involved just one or two birds. [PJP]

Great Spotted Woodpecker

Dendrocopos major

Common resident.

Recorded in 387 (37%) of the county's tetrads the species' wide distribution and apparently healthy county population is again shown from survey results; during the SWBS in the first winter period a total of 93 was found in 47 out of the 100 squares surveyed whilst in November and December the total was 64 birds in 44 out of 114 squares. During the BBS it was encountered in 111 (71%) of the 157 squares surveyed. The highest site counts were six at ten sites and a monthly maximum of nine at Canadia (Battle) on 11 Jan and at Pallingham (Pulborough) on 20 Apr, eight at Blackham on 7 Apr and seven were noted at a further four locations.

Drumming was heard first at Pulborough Brooks on 2 Jan. In the *Thames Basin and Wealden Heaths Breeding Bird Survey* 42 territories were reported. Breeding was confirmed in 26 tetrads and was probable in a further 38. The first reports of breeding were a nest with young at Southleigh Forest (Emsworth) on 25 May, a pair on a nest at Pinkham Fm (Pett) on 29 May, and the first fledged young noted were at Angmering on 10 Jun.

A total of 13 birds was seen on seven of the 79 days of the Hastings Migration Watch with a maximum count of five. [PJP]

Lesser Spotted Woodpecker

Dendrocopos minor

Scarce, possibly now very scarce and declining resident. Red listed species of high conservation concern.

The species was recorded in 30 tetrads (31 in 2012) with almost a third of the records coming from the Pulborough Brooks/Rackham Woods/Wiggonholt areas. There were records of birds feeding on peanut feeders in Glossops Green (Crawley) on 30 Jan and at The Mens LNR on 23 Feb and 18 Apr. Only one was recorded during the BBS at Glynde Levels on 27 Apr.

Breeding was confirmed at just one site and was probable in three, with birds noted in breeding habitat in a further seven tetrads. Drumming was heard at Pett Level on 2 Feb, at Rackham Woods on 19 Mar, and at Pulborough Brooks on 28 and 30 Mar. Birds were also heard calling and drumming at Chesworth Fm (Horsham) on 15 Apr, and two were at Westfield on 20 Apr. Begging calls of a juvenile being visited by an adult were noted on 10 Jun at Powdermill Res.

Birds were recorded on 16 dates between September and December including two together at Broadbridge Heath on 15 Dec and one on two dates at Warnham LNR.

As this species is of high conservation concern, all sightings should be reported with 4-figure or preferably 6-figure grid references, especially if territorial behaviour or other evidence of breeding is observed. [PJP]

Golden Oriole*Oriolus oriolus*

Very scarce passage migrant and rare summer visitor; may have bred in 1965. Red listed species of high conservation concern. Schedule 1 species.

Two birds were recorded, a typical number comparable with the annual average this century of 1.8. A male was photographed through a kitchen window at 6 m range at Highleigh (Sidlesham) on 17 Apr (CG, KJ). The second bird, a female or second calendar year male, was seen at Cradle Valley (Seaford) on 22 May (MRE, RE). The annual numbers this century, totalling 25, have been as given in the table below. [JAH]

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
5	2	-	2	-	-	2	1	1	1	1	3	5	2

Red-backed Shrike*Lanius collurio*

Very scarce passage migrant; formerly a breeding summer visitor. Red listed species of high conservation concern. Schedule 1 species.

Four birds, all juveniles, were recorded during the year. The first was a popular bird which remained at Rottingdean from 31 Aug until 8 Sep (mo). The next two were both at Thorney Island and both in September with one on the 21st-23rd and a second on the 22nd-23rd (both CBC, MAC). The final bird was another popular one remaining in the Pagham Hbr area from 1-9 Nov (SE *et al.*). These records bring the total for this century to 29 although occurrences have been erratic with a peak of six in 2006 but none in four other years. [DHH]



Red-backed Shrike, Rottingdean, September 2013 (Howard Statham)

Great Grey Shrike*Lanius excubitor**Very scarce winter visitor and passage migrant.*

None was recorded during the first part of the year. The first autumn bird was seen at Ambersham Common on 17 and 18 Oct and presumably the same individual was that seen at nearby Iping Common on the 19th. Another individual was seen at Church Norton on 30 Oct and another was recorded in Worthing on 4 and 7 Nov. One which reappeared for one day at Ambersham Common on 8 Nov may have been the individual there in October. It was not recorded there again but it, or possibly another individual, appeared at Waltham Brooks also on the 8th to be joined by a second bird from the 12th to the 14th, with one remaining into 2014. One of these possibly moved to The Burgh (Burpham) where one was recorded on several dates from 1 to 7 Dec. At Chanctonbury Ring another individual was present from 30 Nov to 3 Dec. Elsewhere, single birds were recorded at Broadwater Warren on 4 Nov, and in the Brede Valley on the 7th and the 9th. Finally, in December, one was recorded at Falmer on the 14th. A conservative estimate suggests that as many as nine individuals may have been involved. [JAH]

Magpie*Pica Pica**Very common resident.*

In the first winter period there were 11 sites where counts of more than 20 birds were recorded, the highest being 62 at Warnham LNR on 10 Jan (and 59 on 14 Feb) and 60 at Worsham Fm (Bexhill) on the 24th (and 33 on 19 Feb). Elsewhere, 30s were recorded at Hellingly on 13 Jan, and Steep Down (Lancing) on the 7th and 23rd. During the early SWBS Magpies were found in 87 of the 100 squares surveyed.

During the breeding season, breeding was confirmed in 11 tetrads and was probable in a further 28, surely under-recorded numbers for this common species. The earliest nest building was recorded at Hassocks on 1 Mar and at North Barnham on the 13th. On 18 Mar adults were seen visiting a nest at Mewsbrook Park (Littlehampton). Fledged young were first noted in Bognor Regis on 25 May. During the breeding season ten or more were seen on 51 occasions: the highest were 21 at Portslade-by-Sea on 15 Apr, 20 at Seaford Head on 20 Apr and 19 at Stone Cross (Pevensey) on 23 Jun.

In the summer period groups of ten or more were recorded on 12 occasions: 29 at Brighton Wild Park on 19 Jul, 25 at Pett Village on 20 Aug and 15 at Fairlight on 15 Aug. During the autumn period 15 or more were observed at 14 locations, the highest counts being 34 at Pett Village on 13 Sep, 34 at Cliff End (Pett) on 12 Oct, 24 at Selsey Bill on 9 Oct and 20 at Brighton Wild Park on 24 Oct.

In the second winter period significant numbers were recorded: the highest were 41 at Pett on 28 Dec, 36 at Woodingdean on 9 Dec, 24 at Haywards Heath on 10 Nov and 22 at Portslade on 17 Nov. During the late SWBS Magpies were in 99 of the 114 1-km squares surveyed. [SJB]

Jay*Garrulus gladius**Very common resident.*

Jays were recorded in 340 tetrads. The majority (83%) of records were of ones or twos, demonstrating the solitary nature of this species. During the first winter period, counts in excess

of four involved ten at Hellingly on 13 Jan, seven at Crowborough on the 3rd, six at Whitehawk (Brighton) on the 7th and five at Hastings on 7 Feb. During the early SWBS birds were recorded in 38 of the 100 1-km squares surveyed, with a maximum of seven, previously mentioned.

Breeding was confirmed in two tetrads and was probable in a further 12. Fledged birds were first recorded on 2 Jun at Broadbridge Heath and a family party was busy stripping a cherry tree of fruit in a garden at Angmering on 7 Jul. Probable breeding was observed at 13 sites.

Unusually large counts were observed at two coastal sites during the late spring. A flock of 17 flying west was noted at Selsey Bill on 17 May and 16 were recorded there on the 21st flying over gardens and at Beachy Head 13 (6 W and seven over Belle Tout) were counted on the 26th and at least that number on the 27th. We can only speculate about where these birds came from but it is a noteworthy occurrence. During the BBS 15 were recorded at Lewes on 16 May.

In the autumn, there were 13 records of six or more birds at some 12 sites, mostly in West Sussex, with a maximum of ten at Ladywell (Coombes) making a regular SW movement. Numbers in the second winter period were of a similar nature, the highest counts being 12 at Stonehill (Ashdown Forest) on 7 Dec and ten at West Dean Woods on the 1st. During the late SWBS birds were recorded in 53 of the 114 1-km squares surveyed with a maximum, like in the early survey, of seven at Crowborough on 12 Dec. [SJB]

Jackdaw

Corvus monedula

Very common resident.

Jackdaws were recorded from 426 tetrads. During the first winter period there were 23 counts of 100 or more. The highest count was 400 at Beeding Brooks on 16 Feb. Other high counts were 300 at Rye Hbr on 24 Jan and 300 at North Barnham on 31 Jan. During the early SWBS 1933 Jackdaws were recorded from 78 of the 100 squares surveyed.

A pair was observed visiting a probable nest site at Beauport Park (Hastings) as early as 8 Mar but it was not until 7 Apr that nest building was first recorded at Foxbridge Fm (Ifold). Breeding was confirmed in just 12 tetrads, although evidence of probable breeding was recorded from a further 33 tetrads. The first fledged young were recorded at Dial Post on 10 Jun. Thirteen used nests were reported in owl boxes on the Knepp Estate, with a further single owl box nest record at Gemsbrook Fm (Billingshurst).

During the BBS survey 116 were counted on the Parham Estate on 31 May. The highest counts of the summer period were 600 at Pett Level on 1 Aug, 500 at Barcombe Cross on 6 Jul, 400 at Westmeston on 6 Aug and 400 at Arlington Res on 10 Aug. There were two counts of 200, at Brighthams Fm (Partridge Green) on 12 Aug and at Pulborough Brooks on 31 Aug. There were five records of 150 birds at four sites, plus a further five records of 100 or more birds from four locations.

During the autumn and second winter period the largest gathering reported was 3070 corvids of which “the vast majority were jackdaws” flying in to roost at Hammonds Mill Fm (Burgess Hill) on 9 Dec, with counts of 3000 at the same site on two dates in November. Eleven hundred birds were at Beeding Brooks on 16 Nov, 574 were recorded at Warnham LNR on 26 Oct and 500 were counted at Lavington Common on 17 Nov. During the late SWBS Jackdaws were recorded in 83 of the 114 squares surveyed with a maximum count of 284 on 30 Nov at Kirdford. [GO]

Rook*Corvus frugilegus**Very common resident.*

Rooks were recorded from 306 tetrads compared with 326 tetrads the previous year. During the first winter period the highest counts were 600 seen coming into roost at North Barnham on 7 Feb, 500 leaving their roost at Littleworth (Partridge Green) on 5 Jan, 400 at Summersdale (Chichester) on 17 Feb and 350 at Cocking Causeway on 7 Feb. There were five counts of 200 or more and 14 records of 100 or more birds. During the early SWBS 1949 birds were found in 45 of the 100 squares surveyed.

There was only one record of nest building submitted, at Boxgrove, near Chichester on 9 Mar, where Rooks had been seen by the same observer holding territory on 17 Jan. Breeding was confirmed in 44 tetrads and was recorded as probable in a further seven tetrads. Twenty five rookeries were identified as holding 20 or more nests, with two of these comprising 100 or more nests. At Myrtlegrove Fm (Clapham) 100 nests were counted, but the largest single rookery was at Beddingham where 200 nests were counted. In the Arun valley, from Arundel to Littlehampton, a total of 542 occupied nests was reported. This figure compares with 582 in 2012 and 597 in 2011, perhaps indicating a downward trend. During the BBS there were ten counts of over 100 birds with a high of 250 at Birdham on 18 May.

During the summer period the highest counts were 2000 at Littleworth on 20 Jul, 550 at Arlington Res on 10 Aug, 470 at Marsh Fm (Sidlesham) on 20 Aug and 400 at Cissbury on 10 Aug. Two hundred were present at Brighthams Fm (Partridge Green) on 31 Jul and again on 12 Aug, whilst another count of 200 was recorded at Cadborough (Rye) on 3 Aug. There were five other records of 100 or more birds.

During the autumn and winter period there were eight records of 200 or more birds. The highest count by far was 1500, observed leaving their roost at Littleworth at 7.30 a.m. on 19 Dec. Four hundred birds were at Pett Level on 12 Dec, 300 were seen at Winchelsea on 18 Sep and 261 were reported from Pulborough Brooks on 30 Sep. There were two counts of 250 birds, at Pett Level on 9 Dec and at East Chidham (Chichester) on 11 Dec. During the late SWBS 1580 Rooks were found in 59 of the 114 squares surveyed. [GO]

Carrion Crow*Corvus corone**Very common resident.*

Carrion Crows were recorded from 489 tetrads. During the first winter period there were just two records of 100 or more birds; a total of 130 was counted at East Guldeford Level on 14 Mar and 100 were present at Goring Beach on the 1 Jan. There were 71 at Beeding Brooks on both 3 Jan and 3 Mar, and 65 were seen at Woodhouse (Woodmancote) on 2 Mar. During the early SWBS a total of 893 Carrion Crows was observed in 96 of the 100 squares surveyed.

Breeding was confirmed in 20 tetrads and recorded as probable in a further 28 tetrads. Nest building was first reported at Broadfield (Crawley) on 15 Feb, and the first occupied nest was seen at Sheepcote Valley (Brighton) on 20 Mar. The earliest report of fledged young was at Bolney MP on 18 May. Only three counts of 100 or more were recorded during the breeding season with 171 at Beeding Brooks on 12 May, 100 at Steep Down (Lancing) on the 22nd and during the BBS 126 were counted at Albourne on 15 Jun. During the summer period the highest count was 50 at Lancing on 28 Aug.



Carrion Crow, Newhaven Tidemills, March 2013 (Peter Wilson)

During the autumn and second winter period there were nine records of 100 or more birds. Three of these were at Pulborough Brooks, where the highest count of 129 was recorded on 30 Sep. On 25 Nov 120 birds were seen at Camber Sands. There were seven further counts of 100 birds. During the late SWBS 1043 Carrion Crows were in 109 of the 114 squares surveyed. [GO]

Raven

Corvus corax

Scarce and increasing breeding resident; first bred in the modern era in 2001.

In 2013 Ravens were recorded in 271 tetrads which, compared with the 55 tetrads of 2006 and regular annual increases since then, indicates that they are continuing to spread. Records were mostly from coastal localities and heavily wooded areas in the hinterland and were fairly well distributed across the county.

The estimated monthly totals and the number of 1-km sites recorded, based on the assumption that the highest number at any site during the month was the minimum there, were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	50	61	66	64	48	36	23	77	77	65	56	56
No. of sites	35	43	42	45	26	17	10	43	54	44	30	32

Records suggest that during the breeding season there were probably five successful breeding pairs; two nests were closely monitored with each rearing three young. Two of these sites were coastal, one (a traditional site) was within 9 km of the coast and the other two were well inland

(one of which involved nesting in a huge cedar tree). There were a further nine probable breeding pairs. Ravens nest early and pair activity should be sought in February. Even allowing for many unmated birds there is clearly an enormous discrepancy between the 61 birds recorded in February and the 14 confirmed or probable nesting pairs. An analysis of the data suggests that there were approximately five coastal pairs and possibly at least 30 pairs inland. Highly visible and very vocal at times Ravens can be remarkably quiet and unobtrusive once the breeding season commences. Inevitably, many nesting pairs will be overlooked.

Multiple sightings are becoming more common. Counts of seven were recorded at Beachy Head on 29 Jun and Coldwaltham on 19 Nov. Fives were noted at Rye Hbr on 31 May, Angmering Park on 29 Aug and Pulborough Brooks on 21 Nov. Counts of four occurred at seven other sites from Ashdown Forest on 16 Feb, through Newhaven on 12 May, Bepton on 15 Jul, Wisborough Green on 28 Aug, Burpham on 23 Sep and Waltham Brooks on 15 Nov. There were 228 counts of threes. [MEK]

Goldcrest

Regulus regulus

Very common breeding resident, common passage migrant and winter visitor.

Goldcrests were recorded in 268 tetrads, fewer than the 357 in 2012. A total of 41 was recorded in 18 of 100 1-km squares surveyed for the SWBS, with a maximum count of eight at Chuck Hatch (Ashdown Forest) on 13 Jan, much lower than the figure in 2012 when 115 were counted in 46 of 131 squares surveyed. No large parties were reported; in January eight at Canadia (Battle) on the 7th, ten at Coldwaltham SF on the 8th, eight at Five Hundred Acre Wood (Ashdown Forest) on the 13th and six at Cliff End (Pett) on the 28th were the only groups to number more than five birds. Individuals seen in gardens were taking advantage of suet balls and blocks as well as feeding in conifers, and on 3 Mar one was seen bathing in a stream in a garden in Roffey (Horsham).

Breeding season records were not only widely scattered, but revealed a lower density for the species, with only approximately 25 reported on Ashdown Forest, compared with 80 last year. Apart from Ashdown Forest, other sites where birds were recorded in May and June were Lavington Common, Pulborough Brooks where nest building was observed on 7 May, Woods Mill, Chesworth Fm (Horsham), Pond Lye (Goddards Green), Tilgate Park (Crawley), Crowborough GC, Troutbeck (Eridge) and Pett Level.

At Beachy Head just six were ringed and the team reported that the species was very scarce in the autumn. Steyning RG ringed six new birds at The Mumbles (Steyning) and 12 at Cissbury between late September and December; at the latter site 74 new birds were ringed in 2011 in the same period and 76 in 2012. Monthly maxima at Pett Level in the autumn were three in September, four in October and six in November. In December 13 were ringed there between the 1st and the 20th.

Total encounters during the second winter SWBS period were an improvement on the first with 60 in 33 of 114 1-km squares surveyed, with a maximum count of ten near Bolney on 4 Dec. Other reports of more than five at a particular site were seven at Ambersham Common on 14 Nov, eight at Cliff End (Pett) on the 25th, and six at Nymans (Handcross) on the 26th, and in December seven were at Chesworth Fm (Horsham) on the 8th, eight at Church Norton on the 11th and ten at Drayton (Chichester) on the 12th. [VPB]

Firecrest*Regulus ignicapilla*

Scarce or possibly fairly common breeding resident, passage migrant and winter visitor. Amber listed species of medium conservation concern. Schedule 1 species.

Firecrests were typically much fewer in number than Goldcrests. They were recorded in 97 tetrads, fewer than the 110 in 2012. Just a single bird was recorded in one of 100 1-km squares surveyed for the early SWBS. In January most reports were from near the coast with Pagham and Rye Harbours, Arundel WWT, Bognor Regis, Hove, Bexhill and Cliff End (Pett) all providing sightings of one to three individuals of this very attractive species. A male was seen feeding in a Bognor Regis garden on 14 Jan, and another bird was in a different Bognor garden on 8 Feb. The maximum number seen at one site in the first winter period was five at West Dean Woods on 11 Jan.



Firecrest, Arundel, January 2013 (Leigh Prevost)

Nine seen in the Seaford Head area on 9 Apr and six at Birling Gap on the 13th were indicative of spring migration. Four seen at West Dean Woods on 4 Jun included two males disputing territory, but surprisingly there were records from only two other sites in June. Breeding was possible in five locations but there was only one record of probable breeding at Mardens Hill (Crowborough).

Between 24 Jun and 24 Aug there were no records at all, and it was not until the end of September that sightings increased. Three were at Beachy Head on the 24th, on the 28th a bird was seen on a door handle of some French windows in Crawley and in October one was in a Lewes garden on the 8th, three in Mallydams Wood on the 24th, and six at Seaford Head and five at Cuckmere Haven on the 29th. The species was noted as being more common than Goldcrests in

the autumn at Beachy Head. Eight were ringed at Pett Level, six at Beachy Head, five at Cissbury and four at Ladywell (Coombes), all but three of these during the autumn.

In the second winter period SWBS two birds were found in the 114 1-km squares visited. In November three were at Whitbread Hollow (Beachy Head) on the 8-10th, four at Cuckmere Haven on the 13th, three at Climping Gap on the 19th and four were seen together near the hide at Church Norton on the 22nd. In December three were at Church Norton on the 2nd, two at Apuldram Church on the 10th, two at Swanbourne Lake (Arundel) on the 14th and two at Rye Hbr between the 19th and 29th. [VPB]

Penduline Tit

Remiz pendulinus

Rare vagrant.

A first year bird was ringed at Pett Level on 30 Oct (RBRG). The record has been accepted by the BBRC and increases the county total (after a review) to 33. [DHH]

Blue Tit

Cyanistes caeruleus

Abundant resident.

Blue Tits were recorded in 483 tetrads in 2013, a slight reduction from 2012. During the first winter period there were 33 records of over 30 birds, with six records of over 50. The highest counts were of 99 at Warnham LNR on 16 Feb and 66 at Broadbridge Heath on 8 Jan. During the early SWBS a total of 1468 Blue Tits were recorded in 93 of the 100 squares surveyed, the previously mentioned count of 99 being the maximum recorded.

Breeding was confirmed in 36 tetrads, a little lower than in 2012, and was probable in a further 37, slightly up on the previous year. The first record of nesting birds came from Partridge Green on 14 Mar and the first nest with young was reported on 5 Apr from Midhurst. The first record of fledglings came from Bognor Regis, with one being fed by an adult on 6 May. Similar records continued through the summer. High counts during the breeding season included 50 at Pulborough Brooks on 21 Apr and 48 were counted at Broadbridge Heath on 21 Apr whilst during the BBS 48 were counted at Hickstead on 6 May.

During the autumn there were five counts of 30 or more birds, with the highest being 43 at Pett Village on 13 Sep, 32 at Southwater on the 21st and 30 at Ifield MP on 3 Oct.

In the second winter period there were 11 counts in excess of 30 with 50 at Warnham LNR on 17 Nov, 49 at Pett on 12 Dec and 40, during an SWBS, at Kirdford on 30 Nov. During the late SWBS 1000 birds were encountered in 111 of the 114 1-km squares surveyed. [PD]

Great Tit

Parus major

Abundant resident.

Great Tits were reported from 462 tetrads in 2013, slightly down on last year. In the first winter period there were some 30 records of 20 or more, the highest of which were 41 during an SWBS at Warnham LNR on 16 Feb and 40 at Pallingham (Pulborough) on 21 Feb, but 54% of records were of ones or twos. During the early SWBS 803 birds were encountered in 90 of the 100 1-km squares surveyed.

Breeding was confirmed in 25 tetrads and was probable in a further 35. The first evidence of breeding came from Hastings where a nest with eggs was found on 27 Apr. The earliest records of fledged young came from Bognor Regis on 27 May, only to be predated the next day. Further records of fledged young came from Duddleswell (Ashdown Forest) on 2 Jun and Pett Level where 13 were counted on 3 Jun. Numbers during the spring and summer periods to the end of August included some 110 counts of ten or more with the highest being 50 at Pulborough Brooks on 21 Apr.

During the autumn and second winter period, numbers were much as above with the highest count being 36 at Pett Level on 19 Dec, 32 at Pallingham on the 11th and 30 at Warnham LNR on 17 Nov. During the late SWBS 478 birds were encountered in 97 of the 114 1-km squares surveyed with a maximum of 32.

There was one record of a bird with aberrant plumage: one seen at Whitbread Hollow (Beachy Head) on 26 Jul was in totally grey plumage except for one green mantle feather. [PD]



Coal Tit, Upper Breeding, January 2013 (Wendy Ball)

Coal Tit

Periparus ater

Very common resident.

Coal Tits were reported in 226 tetrads in 2013, very similar to 2012. During the first winter period over 80% of records were of one or two birds and there were only four records of ten or more with the highest counts being 20 at Southwater CP on 31 Jan, 20 at Pulborough Brooks on 4 Mar, 13 at Powdermill Res on 5 Mar and 10, during an SWBS, at Beckley on 27 Feb. During the early SWBS, 79 birds were encountered in 31 of the 100 1-km squares surveyed.

Confirmed breeding was recorded in three tetrads and was probable in a further 16. The first record of confirmed breeding was of fledged young at Ashdown Res on 16 Jun and the only other record of fledged birds was at Horsham on 5 Jul. During the breeding and summer seasons there were only six records of ten or more involving 27 at Southwater CP on 4 May, 19 at Kingley Vale on 22 Aug, 12 at Pulborough Brooks on the 19th and ten at Five Hundred Acre Wood (Ashdown Forest) on the 17th.

During the latter third of the year, numbers were again low: over 85% of records were of ones or twos and the two highest counts were of 36 at Pett on 12 Dec and ten at Stansted Forest on the 28th. During the late SWBS 30 birds were encountered in 17 of the 114 1-km squares surveyed with a maximum of six at Tilgate Forest on 30 Nov. [PD]

Marsh Tit

Poecile palustris

Scarce resident. Red listed species of high conservation concern.

Marsh Tits were recorded in 135 tetrads mostly in ones and twos, from across the county where suitable habitat occurs. The only coastal or near coastal records were from the Pett Level area, including Cliff End. The only high counts during the first winter period were of eight on three dates in January from Canadia (Battle).

During the breeding season, records were received from only 67 locations, compared to 161 in 2012. Probable or confirmed breeding was recorded in 14 tetrads but as Marsh Tit is a sedentary species, most records are probably of potential breeders. The earliest report of confirmed breeding was on 16 May at Mannings Heath where young were reported in a bat box. Fledged young were first seen at Broxmead (Bolney) on 10 Jun. The highest count during the breeding season was of four at Pulborough Brooks on 30 Jun.

During the autumn five were seen at Warnham LNR on 29 Sep and four at Pulborough Brooks on 19 Sep. During the second winter period records were from 56 locations, down on the 147 locations in 2012. High counts during this period were of only four each at Warnham LNR on 7 Nov and at Selhurst Park (Halnaker) the next day.

As there is continued evidence of a decline in this species, observers are encouraged to submit all records, especially if breeding evidence is noted. [MJC]

Bearded Tit

Panurus biarmicus

Scarce breeding resident and very scarce passage migrant and winter visitor. Amber listed species of medium conservation concern. Schedule 1 species.

Most records came from the two core coastal areas at opposite ends of the county, Chichester and Pagham Hbrs in the west and Pett Level and Rye Hbr in the east. During the first winter period there were only three records outside these two core areas: two at the Ouse Estuary Project (Newhaven) on 3 Jan, two at Shinewater (Eastbourne) on 15 Jan and one at Filsham LNR on 21 Mar.

Counts outside the breeding season from the eight locations where the species was recorded are shown in the table below.

Breeding was confirmed by at least two broods at Pett Level. Males were seen carrying food at Thorney Deepes on 20 Apr, 2 May and 19 Jun and at least six pairs were present at Rye Hbr where

breeding undoubtedly occurred. Birds were present at Arundel WWT and Filsham LNR during the breeding season where breeding was possible. Distinctive ‘high flying’ was seen by two birds at Beachy Head on 6 Oct and by four at Thorney Deeps on 7 Nov.

	Jan	Feb	Mar		Aug	Sep	Oct	Nov	Dec
County total	28	19	16		7	29	48	40	9
Thorney Deeps	5	-	1		-	14	6	12	-
Pagham Hbr	9	9	9		-	-	2	3	-
Arundel WWT	-	-	-		-	-	3	1	-
Newhaven	2	-	-		-	-	-	-	-
Eastbourne*	2	-	-		-	-	2	-	1?
Filsham LNR	-	-	1		-	-	-	-	-
Pett Level	-	2	1		4	14	20	16	6
Rye Hbr	10	8	4		3	1	15	8	2

*includes two at Beachy Head in October

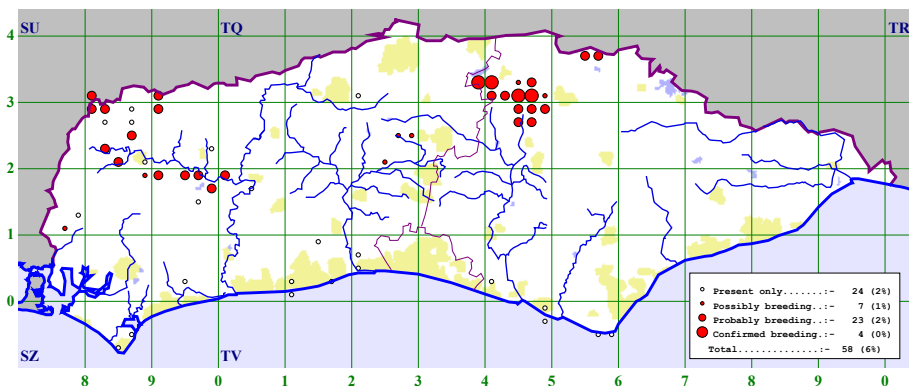
During the second winter period one was at Arundel WWT on 8 Nov, two at the North Wall (Pagham Hbr) on 13 Nov, one at the Ferry Pool (Sidlesham) on 27 Nov and an unspecified number at West Langney Lake (Eastbourne) on 17 Dec. [MJC]

Woodlark

Lullula arborea

Scarce resident and possibly very scarce passage migrant. Amber listed species of medium conservation concern. Schedule 1 species.

This species was recorded in 58 tetrads. The first record for the year was of one at Churlwood (Ashdown Forest) on 8 Jan. Nine birds were recorded in a stubble field at Sutton on the 13th, eight at Barnham on the 22nd and single birds at Lavington Plantation and Ashdown Ridge on the 28th. In coastal or near-coastal locations, four were recorded at Selsey during a cold spell on the 20th, three at Shoreham airport on the 21st and 22nd, up to six at Goring Beach from the 22nd to the 24th, and eight at Telscombe on the 30th. In February, there were reports of individuals or small numbers of birds, including some in song, at Lavington Plantation, where there were eight on the 8th, Twineham Grange, various sites on Ashdown Forest and Broadwater Warren.



Breeding was confirmed within five 1-km squares (four tetrads) on Ashdown Forest where birds were noted carrying food at Lavender Platt on 13 May and at Birch Wood on the 18th. Birds were recorded as probably breeding in a further 15 1-km squares there. Elsewhere, during the *Thames Basin and Wealden Heaths Breeding Bird Survey* (see page 220), 32 pairs or territories were identified compared with 35 in 2012 and 28 in 2011. Probable breeding was also recorded at Heath End (Duncton) and Broadwater Warren, and possible breeding at the Knepp Estate. At least one juvenile was present at Old Lodge NR on 26 Jun; it was accompanied by an adult and one other bird.



Woodlark, Shoreham Airport, January 2013 (Dorian Mason)

After the breeding season, the relatively few records received were of mainly ones and twos. However, a flock of 30 birds was recorded at Broadwater Warren on 19 Oct, 14 at Broad Halfpenny (Coates) on 10 Sep, seven there on Aug 9 and 16 Dec with another seven birds recorded near Bolney on 24 Oct. Otherwise mostly single birds were reported at heathland sites in West and East Sussex during September and October and at Cissbury Ring on 6 Oct. There were also sightings of single birds in coastal locations in October, including at Belle Tout on the 5th, Beachy Head from the 6th to the 26th, Seaford on the 6th, and of two at East Head on the 12th. Final reports of the year were of single birds at Hilliers Wood (Petworth) on 13 Nov and at Sutton End on 16 Nov. [AR]

Skylark*Alauda arvensis*

Very common but declining resident; probably common passage migrant and winter visitor. Red listed species of high conservation concern.

This species was recorded in 282 tetrads. Large three-figure flocks were reported at several locations in January, particularly from the 19th to the 25th, coinciding with a hard weather spell. There were 120 at Thorney Island on the 21st, 250 at Dell Quay (Chichester Hbr) the same day, 120 at Climping Gap on the 19th increasing to 500 on the 24th, 230 at the Sussex Pad (Shoreham) on the 21st, 235 at Rye Hbr also on the 19th and 200 plus birds at Beachy Head on the 13th, 150 there on the 22nd and 120 on the 25th. Fewer flocks of this size were recorded in February; the three largest were of 140 birds at Fernhurst on the 20th, 75 at Rye Hbr on the 6th and 70 at Beachy Head on the 8th.

The first reports of song for the year were from Ashdown Forest on 28 and 31 Jan, slightly later than in 2012 (11 Jan) and 2011 (18 Jan). Courtship display was first noted on 2 Feb at Thorney Island. Breeding was confirmed at just three locations, with sightings of distraction behaviour on Ashdown Forest on 25 Apr, of adults carrying food or faecal sacs at Rye Hbr on 19 Jun and at Woodingdean on 1 Jul. Breeding was probable in 30 further tetrads. However, a minimum of 360 probable breeding pairs or territories were recorded, including 15 at Medmerry, 12 at Pagham Hbr, 230 on the Norfolk Estate, 45 or more on Ashdown Forest, 16 at Marsh Foot Fm (Wartling) and 34 at Rye Hbr. The Norfolk Estate figure represented a decline of 38% from the 372 pairs reported in 2012 (and further declines from 2010 and 2011).

With the onset of autumn there was an increase in the numbers recorded as birds began to move. There were 20 records of counts of 20 or more with peaks of 170 at Cadborough (Rye) on 20 Oct and 123 at Pett Level on the 24th. At Selsey Bill, seawatchers recorded 69 E, 21 S and 36 W during the month with a maximum of 44 E on the 24th. At Hastings, a total of 103 was recorded on 15 dates of 79 days of observation between 24 Sep and 14 Nov. Movements at Beachy Head included 30 W on 30 Oct. In the second winter period, the highest counts were 125 feeding in stubble on Steep Down (Lancing) on 9 Dec and 110 at East Guldeford Level on 25 Nov and there were also six records of 50 or more including a flock of 50 S at Bepton on 7 Nov. In December, other flocks were reported in the east and west, including 50 at Golden Cross on the 2nd, 40 at Winchelsea and 39 on winter cereals at Chidham on the 11th. [AR]

Shore Lark*Eremophila alpestris*

Rare vagrant. Amber listed species of medium conservation concern. Schedule 1 species.

The only record for the year was of one at Belle Tout (Beachy Head) on 27 Oct (MRE, AG). The county total this century moves on to nine and since 1948 to 104. [JAH]

Sand Martin*Riparia riparia*

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

The first returning spring migrants of the year were recorded at two different locations on 10 Mar and represented a total of six birds, three each at Arlington Res and Pett Level, six days earlier than the first record of 2012 but equalling the 10-year average date.

Apart from a single bird at Pagham Hbr on 11 Mar, the next records were 12 days later on 23 Mar at Pulborough Brooks (1) and Pagham Hbr (2). At Chichester GP during the following week, there were 30 on 27 Mar increasing to 35 the following day and a further 20 on 2 Apr. Numbers, however, remained low with only 14 double-figure counts through April, reaching a maximum of 40 at Waltham Brooks on the 19th and the same number at Chichester GP on the 27th. The only three-figure count of the spring came from Pulborough Brooks with 100 on 9 May. This appears to have been another poor spring passage for Sand Martins, compounded by there being only a single confirmed breeding and two probable breeding records. Birds were seen checking the nesting bank at Arundel WWT on 16 Apr and confirmation of breeding was recorded at Sidlesham on 30 Jun where newly fledged young were observed.

Return migration began typically early, with 500 at Pagham Hbr and 308 SE at Beachy Head on 6 Jul being the precursors of a steady but generally unremarkable autumn migration, followed at Pagham Hbr by a further 300 on 9 Jul, 100 on the 11th and another 300 on the 25th.

All the four-figure counts of the autumn came from Pett Level where large numbers roosted in the reedbeds. The first significant record there was of 900 on 2 Aug but between then and 24 Sep the sum of 16 evening roost counts was 46,900 birds involving ten counts of 1000 to 5000 and a peak of 20,000 on 23 Sep. Aside from that location, no site recorded more than 300 birds on a single day, and no more than 30 after mid-September.

There were only seven records for October, the last sizeable group being 25 at Pett Level on the 5th. The last bird of the year was sighted at Pett Level on 14 Oct, almost a whole month earlier than in 2012 (11 Nov) and a few days earlier than the 10-year average date of 20 Oct. [DB]

Barn Swallow

Hirundo rustica

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

An indication of the late spring was that the first returning Swallow was not recorded until 20 Mar at Goring, nearly three weeks later than the first bird for 2012 (1 Mar) and 11 days later than the 10-year average date of 9 Mar. Three days later two birds were observed at Midhurst, whilst on the 28th one was recorded flying north at Selsey Bill. Migrants continued to arrive in small numbers through the first half of April, with the first double-figure count of 11 on the 11th coming from Pagham Hbr. Although spring migration increased during April and into May, there were only eight three-figure counts throughout the entire spring, most between mid-April and mid-May. The highest count came from Selsey Bill where 248 N were recorded on 5 May. These figures represent far fewer migrants than Sussex normally experiences in the spring.

Breeding was confirmed from 11 1-km squares (17 tetrads) between June and September, and was probable in a further 11 (14 tetrads). Birds collecting mud for nest building were observed on Ashdown Forest on 21 Apr; on 20 May a nest was being built inside the reedbed hide at Arundel WWT and by 4 Jun it contained five eggs. Successful fledging occurred by 10 Jul but was also recorded on the comparatively late date of 6 Sep. Fledging was first noted, however, from Findon Park on 14 Jun, although other locations also recorded late fledging from subsequent broods.

Autumn migration peaked through the latter part of September and into the first week of October. Counts at two of the main seawatching sites during these months were as shown in the table below. Between 19 Sep and 7 Oct there were 30 counts over 1000 and a further 77 three-figure counts totalling a truly impressive 161,267 birds. Of this total almost one third were recorded from a single location on one day with 50,000 birds at Pett Level on 23 Sep; it is

uncertain how many of these birds went to roost in the reedbeds. The total for this same day from all locations was just under 72,000.

		Sep	Oct	Peak counts
Selsey Bill	E	9988	197	3000 E on 25 & 27 Sep
	W	1089	17	350 W on 13 Sep
	S	8349	124	7000 S on 23 Sep
Worthing	E	3882	768	1550 E on 30 Sep

Other notable counts, all in September, included 12,000 at Fairlight on the 23rd; 10,000 roosting at Pett Level on the 30th; 7000 S past Selsey Bill on the 23rd; 5200 S at Pett Level on the 21st; and 5000 at both Pagham Hbr on the 22nd and Cuckmere Haven on the 24th. The reedbeds at Pett Level continued to provide a roost site with 5000 there on 2 Oct, 1000 on the 8th and 500 on the 12th. The last flurry of migrants occurred on 8 Nov with 25 at Beachy Head and 27 S past Selsey Bill. After this the maximum recorded was three on four subsequent dates.

The last recorded birds of the year were very much in line with recent trends; three were observed at Camber Sands and a single bird was noted from East Head (Chichester Hbr) heading north, all on 19 Nov, one day later than in 2012 and just five days earlier than the 10-year average. [DB]

House Martin

Delichon urbicum

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

A flock of c.50 birds over Chiddingly on 29 Mar was the first record for the year, some 12 days later than in 2012 and over two weeks later than the 10-year average arrival date. The number of birds involved at Chiddingly was quite remarkable as the only other March record was one at Bewl Water on the 30th and in a spring migration which was very slow, later than usual and involved only small numbers compared with previous years. There were few three-figure counts: 200 at Pulborough Brooks on 8 May with a further 100 on the 9th and 10th and 150 at Sidlesham Ferry on the 28th. The only other three-figure counts came later with 200 at Sidlesham SF on 10 Jun and 200 from Arlington Res on the 28th. Entirely dwarfing these counts, however, were the estimated 1000 at Bewl Water on 29 May but these larger figures distort the true picture of spring migration this year where the next highest count after those cited above was 50 at Arlington Res on 29 Apr.

Confirmed breeding involved only six records from six 1-km squares (five tetrads), with probable breeding in a further seven (eight tetrads), surely grossly under-recorded. The first indication of an occupied nest came from the Parham Estate on 31 May, whilst the first nest with young was observed at Chichester on 18 Jun. Occupied nests were still being encountered towards the end of August (at Henfield on the 29th). It is hoped that the decline in confirmed breeding records in recent years may in part reflect fewer observers submitting such records but comparisons between the 1988-92 and recent atlas results show a reduced distribution and anecdotal evidence suggests a genuine decline in the Sussex breeding population continues.

Two interesting records from September concerned, firstly, on the 15th a flock of 60 birds that took shelter from a storm on the sides of adjacent houses in Ringmer. On the 24th a wholly white leucistic bird was observed amongst a large flock at Coombes.

The first high count of the autumn came from Barcombe Res where 250 were noted on 25 Aug. Autumn migration, most noticeable between 4 Sep and 7 Oct, involved some 79 records of 100 or more totalling over 49,350. It was concentrated between 14 and 30 Sep with 15 records of 1000 or more and the highest day count was 6500 E in 2½ hours at Selsey Bill on the 25th. After the end of the first week of October migration dropped away completely, with only six counts greater than ten birds, the highest being 60 at Beachy Head on 15 Oct.

There were only ten records from November; following 20 at Arlington Res on the 1st they were all of single birds, except for two seen together on the 4th and 22nd. The final bird was noted at Arundel WWT on 24 Nov, 11 days later than in 2012 and 13 days later than the 10-year average date. [DB]

Red-rumped Swallow

Cecropis daurica

Rare vagrant.

2011: The record of one at Weir Wood Res on 17 Jul has been withdrawn.

2013: There was only one record, the first since 2011: a spring adult at Waltham Brooks on 18 Mar [SG]. This raises the county total since the first record in 1967 to 38 and for this century to 20. [JAH]

Cetti's Warbler

Cettia cetti

Scarce but increasing resident, passage migrant and winter visitor.

During January and February there were reports from 14 different sites, a decrease of seven from 2012, but similar to 2011, and numbers recorded were also lower, presumably due to poor weather during the previous breeding season. The main concentrations remain at Thorney Deeps (Chichester Hbr) where two singing birds were heard on 9 Jan and another two were giving alarm calls, at Rye and Pagham Harbours which both reported three birds on the 13th and Pett Level which held four on the 14th. Other sites included North Bersted, the former Lec Airfield (Bognor Regis), Rose Green, Arundel WWT, Beeding Brooks, Shinewater (Eastbourne) and Filsham LNR though only this last site held more than a single bird, with three on 9 Jan. The maximum number at Filsham during March was five, and at Chichester GP six were recorded on the 20th. Records also came from Coldwaltham, Shoreham Airport and Southease.

There were eight males singing throughout April and May at Thorney Deeps, 18 were at Pagham Hbr, up to eight at Arundel WWT, seven or eight at Filsham LNR, four at Pett Level, and seven at Rye Hbr. Breeding was confirmed at one site, Thorney Deeps, on 9 Jun when four young were seen with two adults plus a second brood in August and another pair and four young were noted at a different part of the site on 25 Jun. Breeding was probable in seven tetrads.

During November and December the species was recorded at 20 sites and numbers were generally higher than earlier in the year; ten singing birds were at Thorney Deeps in November, three at both Arundel WWT and Shinewater, and six at Pett Level. [VPB]

Long-tailed Tit*Aegithalos caudatus.**Very common resident.*

Long-tailed Tits were reported from 331 tetrads in 2013, a reduction from the 372 in 2012 and significantly down from the 542 tetrads in 2011. During the first winter period there were some 39 records of over ten birds with the highest being 30 at Chichester on 25 Feb and 21 at Pallingham (Pulborough) on the 21st and 20 at Crawley on 13th. Almost 60% of records were of fewer than five. During the early SWBS 219 birds were encountered in 42 of the 100 1-km squares surveyed with a maximum of 21 on 21 Feb.

Breeding was confirmed in 16 tetrads, slightly up from last year and was probable in a further 24. The first records of nest building activity were on 19 Mar at Arundel WWT and the 27th when adults were seen collecting spiders webs in Littlehampton. There were few reports of breeding success, with only 16 records of fledged juveniles between 27 May at Stonehill (Ashdown Forest) and 7 Jul at Angmering.

Numbers during the late spring and summer months included 26 of ten or more birds and high counts of 30 at Boxgrove (Chichester) on 6 Jul, 25 in a garden at Ferring on 25 Aug and 20s at Pett Level on 12 and 21 Aug and Ashcombe Bottom (Lewes) on 13 Jul but again some 75% of records involved no more than four birds.

During the autumn and second winter periods numbers were expectedly higher although some 80% of records were of fewer than ten birds. The highest counts were 35 at Pett Level on 14 Nov, 30 at Warnham LNR on 29 Dec and 25 at Upper Wellingham (Ringmer) on 10 Nov. During the late SWBS 237 birds were encountered in 37 of the 114 1-km squares surveyed with a maximum of 25 on 10 Nov. [PD]

Pallas's Leaf Warbler*Phylloscopus proregulus**Very scarce visitor; mostly late autumn.*

Three birds were recorded this year, comparable with the annual average of 2.4 for this century. The first was at Horseshoe Plantation (Beachy Head) on 25-26 Oct (MAG, NTWT *et al.*). A second individual was found at Climping on 28 Oct (OM, RNP) and a third at Birling Gap on 2 Nov (RJF, JWK). Following a review, these three raise the county total for this century to 34 and for 1968-2013 to 95. The first record occurred in 1968. Historically, the earliest arrival was 1 Oct (1998) with the next on the 11th giving a median October date of the 21st. [JAH]

Yellow-browed Warbler*Phylloscopus inornata**Very scarce visitor; mostly in later autumn.*

It was an excellent year for this species with the highest annual total ever. After allowing for duplication and individuals being present at a site for more than one day, it appears that at least 20 birds passed through the county during the period 5 Oct-15 Nov, exceeding the 15 recorded in 2005. The first record was of one ringed at Cissbury Ring on 5 Oct (SRG). Also on 5 Oct the first of three birds appeared at Seaford Head with the others being on the 7th and the 9th (MRE, RCS). One at Newick on 6 Oct (JSG) was followed by one at Climping on the 7th (RP, OM *et al.*) which, unusually, remained until the 11th. Two were at Belle Tout (Beachy Head) on 9 Oct (DC, JFC,

BK) when there was also one at Goring with it or another present there on the 11th (DIS). There was then a gap until 14 Oct when one was present in Burgess Hill (DC, DRC, JFC) followed two days later by two at Pett Level (RBRG, SH). On 17 Oct, two were seen at Climping (BFF *et al.*) with one at Birling Gap the next day (DRC, JFC). The final October records were of another at Climping on the 26th (OM *et al.*) and one trapped at Charleston Reedbed on the 30th (GD). The two November records involved singles at Beachy Head on the 2nd (MEC, RHC) and Pett Level on the 15th (RBRG). These records bring the county total this century to approximately 90. [DHH]

Radde's Warbler

Phylloscopus schwarzi

Very rare vagrant.

There was only one record, the first since 2005. One, seen for one day at Sheepcote Valley (Brighton) on 12 Oct (ADW *et al.*) raises the county total to 13 since the first in 1974. The earliest arrival was 30 Sep 1992 and the latest 2 Nov 1995; the median arrival date is 16 Oct. Most birds are one-day wonders, the longest stayer being from 15-20 Oct 1995. [JAH]

Western Bonelli's Warbler

Phylloscopus bonelli

Very rare vagrant.

One found at Church Norton on 22 Apr (EMR, PR *et al.*) remained for the next two days. The record has been accepted by the BBRC and is the fifth for the county but only the second this century. The four previous records of Western Bonelli's Warbler were all in the Beachy Head area, though there have also been four county records of indeterminate Eastern/Western Bonelli's Warblers. The five records of Western Bonelli's Warbler have been in April (2) and September (3). [DHH]

Wood Warbler

Phylloscopus sibilatrix

Very scarce and declining summer resident and passage migrant. Red listed species of high conservation concern.

The steady decrease in records of this species continues; it was only recorded from 13 tetrads which was just over half the total of 2012. Wood Warbler is the subject of a separate article on pages 277-281 of this report.

The earliest record was from Pulborough Brooks on 16 Apr, one day earlier than the 10-year county average date and 11 days earlier than in 2012. This was closely followed by one at Church Norton on the 17th; the only other record for April was a single at Midhurst Common on the 30th. Others were recorded at Pagham Hbr and Pulborough Brooks on 1 May. Singing birds were recorded at four inland sites but there was no sign that any breeding took place.

In the autumn birds were trapped and ringed at Pett Level on 25 Jul, and 8, 12 and 14 Aug; two were recorded at Weir Wood Res on 25 Aug and one was at Sompting on the 28th and lastly one, possibly two, were at Pagham Hbr on 22 Sep, seven days later than the 10-year county average. [TWP]

Chiffchaff*Phylloscopus collybita*

Very common summer visitor and passage migrant; small numbers winter.

This species was recorded in 430 tetrads in 2013, down on the 452 in 2012. In January it was recorded from the 1st and in all 32 records were submitted. Most of these were single birds but there were three at Sefton Fm (Rose Green) on the 6th, three at Pett Level on the 7th, three at Coldwaltham SF on the 10th, four at Waltham Brooks on the 11th, five at Lidsey SF on the 13th and six at Heron Tye (East Grinstead) on the 17th. February produced only 18 records, again mainly singles but six were now at Coldwaltham SF. March was slow but four at Beachy Head on the 9th showed birds were arriving; numbers at Coldwaltham were up to 20 on the 23rd and ten were at Thorney Island on the 25th.

Records surged in April with 514 reports received although no major falls were recorded at coastal sites. There was a notable increase in numbers from the middle of the month with 14 at Weir Wood Res on the 24th, 15 at Arlington Res on the 21st, 15 at Pulborough Brooks on the 22nd and 23 at Pett Level, also on this date.

Breeding was only confirmed in seven tetrads with probable breeding in a further 24; surely this can be improved upon. In August there were signs of movement, whether real returning migration or just movement is difficult to say but there were 20 at Cissbury Ring on the 19th and 50 at Barcombe Res on the 25th. In September things really started with 60 at Beachy Head and 21 at Seaford Head on the 12th, 100 at Beachy Head and 147 at Fairlight on the 15th. Church Norton (Pagham Hbr) held 70 on the 17th. There were obvious falls on the 19th with 124 at Fairlight, 312 at Pett Level and 120 at Climping. On the 21st 750 were counted at Beachy Head but then numbers dropped significantly; on the 24th 60 were there, 50 at Seaford Head and 37 at Lullington Heath. At the end of the month 50 were at Beachy Head on the 30th. October kicked off with 30 at Cissbury Ring on the 1st, 40 at Seaford Head on the 2nd and 174 were ringed at Pett Level on the 5th. Also on this date 139 were counted at Seaford Head and 20 at Whitbread Hollow (Beachy Head) with 550 in total at Beachy Head on the 6th, 125 there on the 7th and a further 150 on the 9th. Numbers then fell away as expected but there were still numbers in the low 50s on the 14th and 15th at Beachy Head and 30-plus there on the 18th. The highest count for the months of November and December were 15 at Warnham LNR on 16 Nov and 13 at Henfield on 9 Dec. The species was last recorded on 29 Dec at three sites including five at Lavant SF. [TWP]

There were two records of birds showing characteristics of one of the eastern forms, *P.c. abietinus* or *P.c. tristis*. One was at Beachy Head on 2 Nov (RHC, MEC) for most of the day. Although no call was heard its characteristics were thought to be of *tristis*. DNA analysis of a bird caught at Pett Level on 28 Nov (RBRG) confirmed that it was of the race *tristis*. [JAH]

Willow Warbler*Phylloscopus trochilus*

Common but declining summer visitor and passage migrant. Amber listed species of medium conservation concern.

This species was recorded from 222 tetrads, slightly up on the 209 in 2012. It was first recorded at Pulborough Brooks on 21 Mar (the same date as in 2012) and three days later than the 10-year average arrival date. There was just one record in March, a single at Warnham LNR on the 28th. The species was not then recorded again until 6 Apr with one at Newick. There was a small arrival on the 11th with 15 at Selsey Bill and 30 at New Salts Fm (Lancing). Although a

total of 279 records was received for this month there followed the merest trickle of birds until 17 at Seaford Head and 15 at Brooklands (Worthing) on the 23rd and then another ten at Seaford Head on the 26th.

Breeding was confirmed in only seven tetrads, much better than the miserable three in 2012 but still poor, and was probable in a further 17. As is usual Ashdown Forest is the major stronghold for this species with a very good history of thorough recording of presence.

A bird at Pett Level on 19 and 27 May was heard to utter an unusual song, mainly Willow Warbler but with Chiffchaff interspersed midway.

Return passage was noted from 22 Jul with a single at Beachy Head followed by 35 there on the 27th. August saw 40 at this site on the 4th, followed by 100 there and 40 at Cissbury Ring on the 6th. The 8th produced 81 at Beachy Head, 41 at Seaford Head and another 40 at Cissbury Ring and 115 at Beachy Head on the 10th. This site continued with the best figures with 60 on the 12th, 100 on the 13th, 180 on the 14th and 90 on the 17th. One hundred and fifty were recorded at Cissbury Ring on the 19th and a minimum of 100 on the 20th. The monthly maximum at Pett Level was 127 trapped on the 21st and there was another good count at Cissbury Ring of 100 on the 23rd. Totals of 60 were recorded at Beachy Head on the 27th and 28th to end the month. September started with 90 at Beachy Head on the 1st and the 31 trapped at Pett Level was the largest of the nine double-figure counts there during the month. The only other significant numbers were 30 at Fairlight on the 18th as numbers generally reduced to the expected trickle for this month. There were 13 records in October, the largest number being seven at Pulborough Brooks on the 1st. The final record was at Chichester GP with two on the 15th. [TWP]

The only records of birds showing characteristics of the continental form *P.t. acredula* were two trapped and ringed at Beachy Head on 14 Aug (BHRG). One seen later that day at Seaford Head (RCS) may have been one of the Beachy Head birds. [JAH]

Blackcap

Sylvia atricapilla

Very common summer visitor and passage migrant; scarce winter visitor.

During January and February there were reports from 28 different sites, representing a minimum of 40 individuals, similar to this period in 2012. As in 2012 only one bird was located in SWBS counts. Most sightings were of single birds, often seen regularly in the same gardens, but a male and female were in a Ratton (Eastbourne) garden on 7 Jan, two were seen on a snowy day in Bognor Regis on the 19th and were joined by another on the 20th and a pair was at Bramber on the 22nd. Food sources used were sunflower heart feeders, fat balls, hanging suet, peanut feeders and crumbs taken from a bird table. A male feeding on the ground at Sedlescombe on 25 Mar had to be rescued from a cat, but was seen feeding in the same way the following day.

The first male in song was heard at Hove Recreation Ground on 14 Mar, but it was not until the start of April that records started to increase across the county. Breeding was confirmed in eight tetrads and was probable in a further 39. During the breeding season there were 28 pairs on the Norfolk Estate, only just over half the 2012 figure, 17 were at Pagham Hbr and singing males were holding territory in suitable habitat throughout Sussex. A female with a brood patch was trapped at Cissbury on 25 May and the first juveniles found were two ringed at The Mumbles (Steyning) on 29 Jun. Five birds retrapped at Cissbury were first caught in 2009, and one retrapped at Beachy Head on 28 Jul was a bird ringed in 2007.

Return passage at Beachy Head was at its height in mid-September when 350, 600, 750, 500 and 300 were recorded passing through on the 12th, 15th, 21st, 24th and 25th respectively, and the

Beachy Head ringing group trapped a total of 866, reporting a reasonable but not exceptional number. At Pett Level the monthly maxima ringed, out of an annual total of 4850, were 48 on 28 Aug, 344 on 15 Sep and 214 on 10 Oct. Steyning RG handled 527 different birds, 20% more than the low numbers in 2012, and the number of first-year birds relative to the total increased to 88% from 73% indicating a more successful breeding season.

During November and December reports which were unlikely to be of lingering migrants came from 14 sites, of which just one, a West Tarring (Worthing) garden where a pair was seen on 24 Nov, held more than a single bird. [VPB]

Garden Warbler

Sylvia borin

Common summer visitor and passage migrant.

The first birds of the year were at Blackdown (Fernhurst) and Broadfield (Crawley) on 19 Apr, 21 days later than the first 2012 record and 16 days later than the 10-year average date. Another was at Greenwood Gate (Ashdown Forest) on the 20th, and four were recorded in Leechpool Woods (Horsham) on the 23rd. The first arrivals at Pulborough Brooks were two on the 25th. In May six were at Shipley on the 1st, five at Pulborough Brooks on the 3rd, four at Copsale the same day, five at Knepp on the 7th, four at Ardingly Res on the 13th and five at Shortland Copse (Plaistow) on the 16th.

Garden Warblers were recorded in 124 tetrads and breeding was confirmed in one, a bird with a faecal sac on Ashdown Forest on 16 May, and was probable in a further 11. During the BBS a total of five was recorded at Wardley (Milland) on 7 Jun. At Eridge song was first heard on 29 Apr, by 11 May two territories were occupied, and one was still singing on 2 Jun.

The total ringed by the Steyning RG at Cissbury and at The Mumbles (Steyning) was 30, one more than in 2012. At Beachy Head only 41, the lowest autumn total ever, were ringed with a maximum of 11 on 3 Sep. A total of 299 were ringed at Pett Level where four birds were trapped in June and monthly maxima during autumn passage were three on 27 Jul, 22 on 21 Aug and 13 on 1 Sep.

There were very few records after the middle of September, and during October single birds were seen at Pulborough Brooks on the 2nd and 7th, at Beachy Head on the 9th, and four individuals were ringed at Pett Level on four different dates, the final one on the 15th, three days later than the 10-year average date. [VPB]

Lesser Whitethroat

Sylvia curruca

Fairly common summer visitor and passage migrant.

Lesser Whitethroats were recorded in 127 tetrads. The first two birds of the year were seen at Pulborough Brooks and at Pett Level on 14 Apr, eight days later than the first arrival of 2012, and four days later than the 10-year average date. Birds were trapped at Pett Level on nine days in April with a maximum of four on the 23rd.

During the breeding season there were seven pairs at Pagham Hbr, the same number as the previous year; however, at Rye Hbr there were 16 pairs which was an increase of four. None nested on the Norfolk Estate, and though two were seen at Brighton Wild Park on 24 Apr there was no evidence of breeding there. Observers at several other sites recorded more than single birds; these

included Crowlink with two on 3 May, Beeding Brooks with three on the 4th, Ashcombe Bottom where there were nine the same day and three were at Combe Haven on the 6th, at Pulborough Brooks on 1 Jun and three at Upper Beeding on 20 Jun. At Wilbees Fm (Arlington) an adult was seen with four juveniles on 18 Jun. Steyning RG reported similar numbers to 2012, with five first-year individuals trapped at The Mumbles (Steyning) between 10 Aug and 7 Sep, while at Cissbury two adults were ringed, and four very young juveniles found on 14 Jul testified to at least one successful brood there.

None was noted at Beachy Head between 27 May and 17 Jul when three were seen. Five were at the site on 30 Aug and 11 on 4 Sep of which one was ringed, but the ringing group reported their lowest ever total of just 21 birds during autumn passage. Monthly maxima trapped at Pett Level, from an annual total of 127, for August and September were ten on 29 Aug and six on 5 Sep. Two individuals were ringed there in October, with the one on the 15th being the final record for the year, four days later than the 10-year average date. [VPB]



Common Whitethroat, Pagham Little Lagoon, June 2013 (Trevor Guy)

Common Whitethroat

Sylvia communis

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

Common Whitethroats were recorded in 315 tetrads, slightly up on the 302 in 2012. The first birds of 2013 were recorded at six widespread locations on 14 Apr, two weeks later than the 10-year average arrival date. Less than a week later the species was widely reported and in reasonable numbers. Thirty were recorded at Rye Hbr on the 17th, 12 at Seaford Head and 17 at Crowhurst on the 20th, 20 at Beachy Head the following day, and 19 in the Devil's Dyke area and

16 at Pulborough Brooks on the 21st. Ashdown Forest held a healthy population, with seven at Greenwood Gate on 1 May, five at the Forest Centre on the 5th, nine at Stonehill on the 6th, 11 at Kings Standing on the 11th, five at Pippingford Park on the 23rd, ten at Stonehill on the 27th and ten at Hindleap Warren on the 30th. Also in May 12 were noted at Cuckmere Haven on the 3rd, eight singing males were at Barcombe Res on the 12th and 38 were recorded at Beachy Head on the 22nd. Worthing High Street was an unusual location for a singing male on 2 Jun, presumably a late migrant.

Breeding was confirmed in 19 tetrads and probable in a further 46 including 58 pairs at Pagham Hbr, 11 pairs at Pulborough Brooks, 96 pairs on the Norfolk Estate and 34 territories mapped at Rye Hbr. These figures remain significantly lower than in 2011 when the Norfolk Estate alone reported 173 pairs. Adults carrying food were seen at Ashburnham Place (Battle) on 2 Jun and at Earnley two days later. On 16 Jun the first young were seen with an adult at Iping Common and among 14 reported at Sidlesham Ferry on the 16th were two families of freshly fledged young.

Steyning RG handled more birds than in 2012 with 49 different birds at Cissbury and 34 at The Mumbles (Steyning), though as was the case for breeding records, numbers were nowhere near those of 2011. However the proportion of first year birds ringed at these sites in relation to the total increased from 67% to 80% suggesting better breeding success this year.

On 22 Aug at least 50 were reported from Sidlesham. Autumn passage at Beachy Head was described as “about average”, with 100 counted on both 27 and 28 Aug, and the September maximum was 80 on the 5th; 204 different individuals were ringed there. At Pett Level a total of 857 was ringed and the peak number ringed in each of the main autumn months was 77 on 21 Aug and 41 on 9 Sep. The last bird at Brighton Wild Park was reported on 24 Sep, at Pett Level the final date was 6 Oct, but the last sightings were at Beachy Head and Thorney Island on the 14th, three days later than in 2012 and 13 days earlier than the 10-year average date. [VPB]

Dartford Warbler

Sylvia undata

Scarce to fairly common but localised resident. Amber listed species of medium conservation concern. Schedule 1 species.

This species was recorded in just 19 tetrads. The estimated minimum numbers of birds and 1-km squares were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	7	1	3	14	4	6	6	2	3	11	11	3
No. of sites	5	1	2	9	4	6	4	2	3	7	6	3

In January, two birds were present at Lavington Common on the 2nd and 5th. Singles were reported at Hastings CP on the 5th and 16th, at Iping Common on the 19th, and at Thorney Deepes (Chichester Hbr) on the 5th and 8th, with two there on the 19th.

In West Sussex, a single male was seen at Lavington Common on 21 Feb and then a pair there on 4 Mar and two (unsexed) on 6 Apr. A single bird was seen at Lavington Plantation on 27 Mar and, on 14 Apr, three were at West Lavington (Midhurst), a male and female were at Heyshott Common and one was at Ambersham Common. Singles were sighted at Iping Common from 20 Apr. In East Sussex on Ashdown Forest, a pair was reported on 4 Mar and singles were present at various Ashdown Forest sites from April onwards. Away from the Sussex heaths, a single bird was reported at Hastings CP on 7 Apr.

During the *Thames Basin and Wealden Heaths Breeding Bird Survey* (see page 220) only four pairs or territories were recorded, at Ambersham and Heyshott Commons, Iping Common, and Weavers Down (Liss). In East Sussex, confirmed breeding was reported at only one site, on Ashdown Forest, where recently fledged young were recorded on 8 Jun. Evidence of probable breeding was recorded at seven locations on Ashdown Forest, and possible breeding at another three.

There were several sightings on West and East Sussex heathlands during the autumn, including three at Ambersham Common on 24 and 29 Oct and three on Ashdown Forest on 14 Oct. Elsewhere, singles were observed at the North Wall (Pagham Hbr) and Hastings CP on 6 Oct and on 24 Oct, a juvenile was sighted at Belle Tout (Beachy Head).

During November, birds were observed on Lavington and Ambersham Commons with three at the former site on the 14th and two pairs at the latter on the 16th. There were sightings of singles at various locations on Ashdown Forest in November and December, with the last of the year reported on 29 Dec. Single birds were also reported at Sidlesham on 1 Nov, Printhead (Chichester Hbr) on 23 Nov, and Rye Hbr on 19 Dec. [AR]

Grasshopper Warbler

Locustella naevia

Very scarce and declining summer visitor and fairly common passage migrant. Red listed species of high conservation concern.

The first arrival was a single bird heard reeling at Waltham Brooks on 19 Apr, 11 days later than the 10-year average date. At the same location on the 21st one was seen singing from the top of a low bramble and two singing males were there on the 25th. The other April records were of individuals at Pagham Hbr on the 23rd, the Lower Adur valley on the 25th, Pett Level on the 25th and 30th, Pulborough Brooks on the 25th and Beachy Head on the 27th.

During May and June there were only two records. A single bird was heard singing in the central drove at Amberley Wild Brooks on 13 May, and another was at Pett Level on 26 Jun. In July one bird was noted north of the A27 at Mill Hill (Shoreham) from the 12th to the 15th and another at North Wall (Pagham Hbr) on the 15th. No confirmation of breeding was received for any of these sites.

Beachy Head RS trapped the first on autumn passage on 22 Jul and ringed a total of 11 between then and 6 Oct, an average number for recent years. Six were seen in the same area on 27 Jul. Three first-year birds were ringed at Ladywell (Coombes) in August, with the individual trapped on the 27th being the final record from West Sussex. A remarkable total of 436 were ringed at Pett Level, 36 in July, 238 in August, 151 in September and 11 in October and the final record for the year was one trapped there on 13 Oct, three days earlier than the 10-year average date. [VPB]

Savi's Warbler

Locustella luscinioides

Rare visitor; has bred. Red listed species of high conservation concern. Schedule 1 species.

The only record was of a bird in song at Pett Level on 18 Jun but it was not heard subsequently (IDH). The record has been accepted by the BBRC and is the first in the county since 2011. [DHH]

Booted Warbler*Iduna caligata*

Very rare vagrant. Small numbers breed in southern Finland but the main breeding range extends from central Russia to China. The species winters on the Indian subcontinent and in Southeast Asia.

The two records of this very rare vagrant were the first sightings in the county for 17 years but unfortunately neither stayed for more than one day. One was at Climping on 27 Aug (RG, CRJ, OM *et al.*) and the second at Seaford Head on 30 Sep (KG, RCS *et al.*). Both records have been accepted by the BBRC and bring the county total up to six. The six records have been of one in April, one in August and four in September. [DHH]



Booted Warbler, Climping, August 2013 (Dave Sadler)

Melodious Warbler*Hippolais polyglotta*

Very scarce visitor.

As in 2012, there was just a single record this year. On 27 Jul an adult male was trapped and ringed at Pett Level (RBRG). This raises the number seen this century to 16, of which 11 have been at Beachy Head, and to 66 records in total. [VPB]

Aquatic Warbler*Acrocephalus paludicola*

Very scarce autumn visitor. Red listed species of high conservation concern. Considered vulnerable by the IUCN.

2011: One trapped at Hardham on 26 Jul (ML) has not previously been reported. This brings the county total to 186 although only 29 have been recorded this century with none in either of the last two years. [DHH]

Sedge Warbler*Acrocephalus schoenobaenus*

Fairly common summer visitor and common passage migrant.

The species was recorded in 66 tetrads, two up from 2012. The first noted returning bird was at the Ouse Estuary Project (Newhaven) on 13 Apr, 15 days later than the 10-year average arrival date. This was followed by two at Pett Level on the 14th, four there on the following day and singles at Thorney Deepes, Sidlesham Ferry (Pagham Hbr) and Pulborough Brooks on the 15th. The monthly maximum at Pett Level was 12 on the 17th and there were also 12 at Sidlesham Ferry on the 20th. Ten were recorded at Arundel WWT on the 26th and at the Ouse Estuary Project there were 27 on the 28th rising to 30 on 12 May.

During the breeding season breeding was confirmed in only three tetrads, even worse than the miserly four in 2012 and only probable in a further three. At Rye Hbr 43 territories were mapped and there were also five pairs at Medmerry, six pairs at Filsham and 31 pairs at Pagham Hbr.

A juvenile at Beachy Head on 16 July was the first noted returning migrant. Thereafter a trickle of migrants was noted, the monthly maximum at Pett Level being 73 on the 31st. There was a surge in early August with 264 (the monthly maximum) trapped at this site on the 4th. Also noteworthy were ten at Seaford Head on the 7th and 11 at Beachy Head on the 8th. There were few records after this except at Pett Level where there were double-figure counts on 26 days during September with a maximum of 249 ringed on the 15th. There were records from three sites in October, the latest being at Pett Level on the 9th. [TWP]

Marsh Warbler*Acrocephalus palustris*

Rare summer visitor and very scarce passage migrant. Red listed species of high conservation concern. Schedule 1 species.

2011: The record of one at Weir Wood Res on 15 Jun has been withdrawn.

2013: Three birds were recorded from two separate sites in East Sussex. At one site a male returned for its seventh year and was present from 27 to 30 May. At the second site one was present on 15 and 22 Jul and another on 5 Aug. The county total for this century moves on to a minimum of 70. [JAH]

Reed Warbler*Acrocephalus scirpaceus*

Common summer visitor and very common passage migrant.

This species was recorded in 107 tetrads, about the same as in 2012. The first record was of one at Pett Level on 14 Apr, seven days later than in 2012 and nine days later than the 10-year average arrival date. This was quickly followed by ones and twos at many sites; the best figures being nine at the Ouse Estuary Project (Newhaven) on the 23rd and ten at Pagham Hbr on the 28th. Elsewhere there were 13 at Seftor Fm (Rose Green) on the 5th, and 16 at Pagham Hbr and 25 at Combe Haven on the 6th. The Ouse Estuary Project boasted 29 on the 19th, 15 were at Ladywell (Coombes) on the 21st and 22 were counted singing at Arundel WWT the same day. The month's maximum counts at Rother Levels (East) and Beeding Brooks were 24 on the 27th and 22 on the 29th respectively.

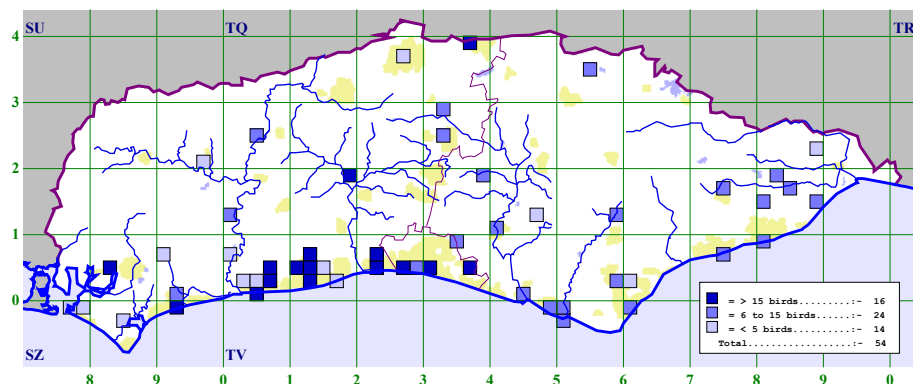
During the breeding season confirmed breeding was reported at only five sites with probable breeding in a further eleven. At Rye Hbr 150 plus territories were mapped though the total was thought to be in excess of 200 pairs. At Pagham Hbr the breeding survey identified 76 pairs and a minimum of 30 territories were recorded at Filsham LNR.

Return migration began with a single at Seaford Head on 22 July and four there on the 26th. The first for Beachy Head was on the 27th when three were present. August started with 62 ringed at Pett Level with the monthly maximum ringed there being 168 on the 21st. Twelve were recorded at Beachy Head on both the 27th and 28th. In September 149 were ringed at Pett Level on the 1st where there were also significant numbers from the 2nd to the 12th and at Beachy Head 21 were recorded on the 5th. There were a number of records, mainly of single figures from a wide selection of sites thereafter. The species was present at eight sites in October and the last record was of one ringed at Pett Level on the 30th. [TWP]

Waxwing*Bombycilla garrulous*

Rare winter visitor.

The winter of 2012-13 was a major irruption winter for Waxwings in the UK. The birds which arrived during the late autumn of 2012 stayed until the end of April. Records came from 54 tetrads across the county as shown in the following abundance per tetrad map:



The majority of records were for January (22 days) and February (21 days) but records, and numbers, declined noticeably after 19 Feb and by 7 Mar the majority had departed; they were recorded on only two further days in March (12th and 28th) and three in April (22nd, 26th and finally the 29th).

The mobility of this species, as it seeks its preferred foods, makes it difficult to estimate the numbers involved. A conservative estimate of monthly numbers, which allows for counts from nearby 1-km squares as birds moved between sites but which could still involve an element of double-counting, were as follows:

	Jan	Feb	Mar	Apr
No. of birds	311	146	38	18

There were numerous double-figure counts, as shown below:

Locality	Jan	Feb	Mar	Apr
Fishbourne		33		
Bognor Regis		19		
Rustington	33			
Angmering	33	18	10	
East Preston	15			
Durrington		32		
High Salvington (Worthing)		26		
West Tarring (Worthing)		24		
Offington (Worthing)		26		
Partridge Green	18			
Shoreham	37			
Portslade	20	11		
Hove				10
Brighton	20			
Woodingdean	18			
Furnace Wood (Felbridge)	19			
Chailey	12			
Lewes	12			
Eridge Park	15			
Hellingly	15			
Bexhill	14			
Westfield			14	
Pett Level	12			
Brede Valley	10			

That Waxwings are mobile while seeking foods is evident from the above data where flocks were recorded in adjacent or nearby localities. This mobility may appear greater as observers refer to the same location with different names.

In January, double-figure counts were recorded at 16 different localities, with the highest counts all in West Sussex. The highest count was 37 at Shoreham on the 9th and other notable

counts included 18 at Partridge Green on the 3rd, 33 at Rustington and Angmering on the 10th (presumably the same flock), 20 at Portslade on the 22nd and 19 near Felbridge on the 26th. In East Sussex the highest counts were of 15 at Hellingly on the 6th, another 15 at Eridge Park on the 22nd and 18 at Woodingdean on the 26th. A more marked trend was evident in February. There were double-figure counts in West Sussex from eight localities, including 32 at Fishbourne on the 2nd and 32 at Durrington on the 9th but there were no such numbers in the east of the county, where birds were only recorded at Eastbourne with a maximum of nine on the 25th.

Numbers tailed off significantly in March; the only records were of up to seven at Battle on the 5th, ten at Angering on the 12th and 14 at Westfield on the 28th following which there were no more recorded until 22 Apr as birds returned to their breeding grounds. The April stragglers, possibly latecomers from further afield, involved ten at Hove on the 22nd, seven at Seaford on the 26th and, finally, a single bird at Angmering on the 29th.

There were no Waxwings recorded during the latter half of the year but the irruption of 2012-2013 was one of the best noted in Sussex in recent decades. [JC, JAH]

Nuthatch

Sitta europaea

Common resident.

Most records were from The Weald with few from the coast. During the first winter period there were no double-figure counts; the highest count was of eight in TQ1533 (Warnham) on 16 Feb and there were ten other counts exceeding four.

During the breeding season, the first apparently occupied nest was noted on 20 Mar at Broadbridge Heath. The first nest with young was noted on 5 May at Ladywell (Coombes) and the first fledglings were at Broadbridge Heath on 2 Jun. Breeding was confirmed in nine tetrads, a significant reduction on the 25 in 2012, and was probable in 17. Fledged birds were first noted on 4 Jun at Roffey (Horsham). This season also produced the highest counts of the year with 14 at Petworth Park on 23 Apr and ten at Slinfold on 30 Jun.

During the summer and autumn the species was recorded from 130 sites. The highest counts during this period were of nine at Plashett Lakes (Little Horsted) on 21 Aug, eight at Pulborough Brooks on 5 Aug and at Pickham Fm (Pett) on 3 Sep and ten other counts of five or more. The only ringing return was of six new birds (five juveniles, one adult) ringed at Ladywell (Coombes) during 38 sessions.

The highest count during the second winter period was of nine in SU9622 (Petworth Park) on 14 Dec with five other counts exceeding four birds. Overall, during the year, the vast majority of records (83-86%) were of ones or twos. [JAH]

Treecreeper

Certhia familiaris

Common resident.

During the first winter period the highest count was six at Burwash Weald on 8 Feb. During this period there were only six records exceeding two birds. There was one record of birds feeding on sunflower hearts on a very cold day in an Angmering garden on 10 Mar.

During the breeding season, the first nest was noted at Hesworth Common on 28 Apr but the first fledged young were recorded at Cliff End (Pett) on 3 Jun. Breeding was confirmed in seven

tetrads and was probable in a further 13, comparable with 2012. During this period the highest counts were of 13 at Kirdford on 15 Apr, seven there on 21 May, six at Pulborough Brooks on 22 Mar, five at Uckfield on 26 Apr and fours at four other sites

During the autumn, the highest counts were a notable nine at Pickham Fm (Pett) on 3 Sep and six at Pett Level on 26 Aug. Otherwise, there were eight counts of four or five. The only records from coastal sites were from the Pett Level area and at Atherington (Climping) in the late summer and autumn from 13 Jul to 26 Oct, suggestive of coastal dispersal.

At The Mumbles (Steyning), eight young birds and two adults were trapped of which two had been ringed the previous year, while at Ladywell (Coombes) four young birds and four adults were trapped of which one had been ringed the previous year.

During the second winter period the highest counts were of four each at Kirdford on 30 Nov and Pickham Fm (Pett) on 12 Dec. Overall the vast majority of records (93-95%) were of ones or twos. Trees species on which Treecreeper was reported were oak, beech, alder and silver birch. [JAH]

Wren

Troglodytes troglodytes

Abundant resident.

Although Wrens are abundant and near ubiquitous in the county, populations can be significantly affected by severe winter weather. This appears to have been such a year.

Monthly records from selected sites where surveys were regular through the year were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sefter Fm (Rose Green)	2	1	4	8	6	8	8	7	4	2	3	?
Broadbridge Heath	5	?	8	25	16	16	13	1	1	1	?	?
Warnham LNR	10	8	7	11	16	6	4	3	4	6	8	14
Poynings	?	2	5	16	14	12	15	10	12	12	5	?
Lewes Race Course	4	4	2	8	4	9	5	4	5	?	6	2
Lewes Railwayland	2	3	1	5	7	18	2	9	12	5	3	3
Pett Village	2	3	12	21	1	21	22	15	15	15	9	7
Cliff End (Pett)	20	6	16	41	26	40	27	26	17	24	18	11

Wrens were reported from 451 tetrads, a further reduction from the 471 of 2012 and 651 in 2011. During the early SWBS, 197 birds were found in 62 of the 100 squares surveyed with the maximum count of 12 at Kirdford. This represented a reduction in numbers of around 15% and of distribution of around 10% from 2012. BBS records in 2013 showed that the maximum counts from two surveys totaled 1256 birds from 146 squares (*cf.* 1435 birds in 142 squares surveyed in 2012 and 1232 from 140 in 2011). The maximum count was 29 in Wisborough Green, and 28 was the maximum at Nutley (*cf.* 38 there in 2012). In 2012 there were 15 counts of 20 or more and in 2013 there were 11. Similar reduction was found in the counts from regularly visited sites but these must be treated with caution since there is significant variation between visits. For example regular counts at Cliff End (Pett) show how variably birds make their presence known: the four counts in March were 12, 15, 8, 16; in April, 17, 29, 41, 32. Seven were in gorse above snow-covered heather around Braberry Lakes (Ashdown Forest) on 21 Jan.

Breeding was confirmed in 16 tetrads and was probable in a further 22, although birds were in breeding territory in another 83. A bird was gathering nest material at Lavender Platt (Ashdown Forest) on 12 Apr. There were 25 pairs on the Norfolk Estate (an improvement on the 18 of 2012 but down on the 31 of 2011) and 44 pairs around Pagham Hbr (a very substantial drop from the 67 of 2012 and the 87 of 2011). The first young were reported from Warnham LNR on 2 Jun.

It appears to have been a good breeding year with numbers recovering in the second half. Wrens were more prominent in the late than the early BBS counts. Ten in Whitbread Hollow (Beachy Head) on 14 Jul represented an unusually high number for so early in the autumn; eight was the maximum in August (and there were no later counts). Very young birds were still being found in mid-August (e.g. at Waterhall, Brighton).

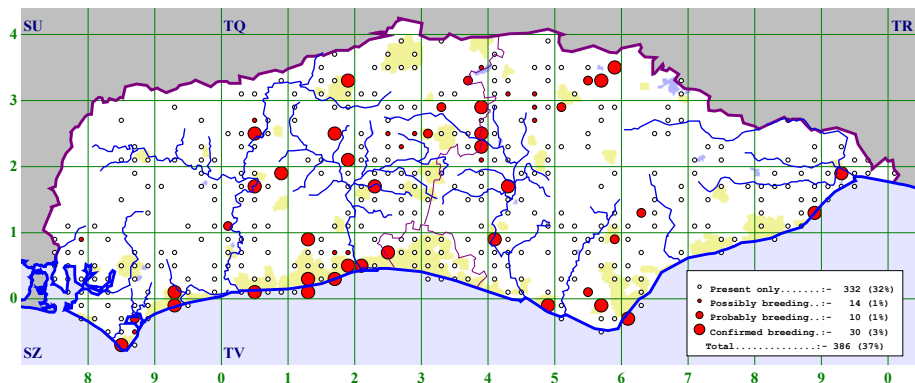
In the late year SWBS, 265 birds were found in 85 of the 114 squares surveyed; the 2012 figures were 284 in 78 of 107 squares. The maximum count was nine at Ridgewood (Uckfield). [CB]

Common Starling

Sturnus vulgaris

Common but declining resident and very common to abundant winter visitor. Red listed species of high conservation concern.

Although Starlings were recorded widely there were no records from many parts of the Weald and the north of the county. During the first winter period the largest flock was a dusk roost of 23,000 at the Palace Pier (Brighton) on 25 Jan. Four-figure counts were recorded from ten sites with several large flocks of 300-4000 at Pett Level during March. At Partridge Green 1000 were feeding on a field sprayed with slurry in the company of Fieldfares on 6 Jan with 2000 at the nearby sewage farm two days later. Most other large flocks were in the river valleys and on the coastal plain but 1000 roosted in Bexhill town centre on 4 Jan and 1000 were at Warnham LNR on 21 Mar. In the first winter SWBS 3126 were counted in 58 of the 100 1-km squares surveyed with a maximum of 500 at Twineham Grange (Hickstead) on 4 Feb.



In the spring, a wheeling flock of c.400 with c.100 Fieldfares at Troutbeck (Eridge) on 22 Mar was thought to be preparing to depart with the last sighting there of 20 flying high north on 7 Apr. The previous day 150 flew east at Pett Level and 28 N at Selsey. Elsewhere smaller numbers were on the move throughout the county in early April.

The first evidence of breeding activity was one investigating a potential nest site at Troutbeck on 1 Mar and one was collecting nesting material at Pett Level on 25 Mar. The first successful fledging was noted at Worthing on 16 May. Breeding was confirmed in 35 tetrads and was probable in a further ten. One pair successfully raised young in a Swift nest box at Bognor Regis.

Flock sizes increased throughout August and from the 17th 2000 were often roosting in reedbeds at Pett Level with 2500 there on 3 Sep. Other four-figure flocks were 1000 at Lewes Brooks on 25 Aug, the same number in the lower Cuckmere valley on 15 Sep and 3000 at Sidlesham on 22 Sep. The only significant post-breeding movements recorded were 1000 W at Pett Level and 350 SW at Eastbourne on 23 Aug. In the late SWBS 2580 were counted in 70 of 114 1-km squares surveyed with a highest count of 270 at Twineham on 2 Dec.

In the second winter period, on 15 Nov 190 were seen to come in from the sea at Hastings and 200 flew N at Selsey the following day. The roost at the Palace Pier held 17,400 on 19 Nov and 40,400 on 26 Dec, the highest count there since February 2010. Other four-figure flocks included 1500 at Pett Level on 10 Nov and 3000 at Udimore which flew west on leaving a roost at dawn on 17 Nov. Five thousand were disturbed the same day by a Peregrine while feeding on undersown stubble at Steep Down (Lancing), 1500 were wheeling over Chichester railway station at dusk on 4 Dec and 2000 were at Henfield on 26 Dec and 1000 W at dusk on the 11th at Ladywell (Coombes) presumably going to roost. At Nymans (Handcross) seven Starlings were seen to feed on magnolia seeds. [ACG]

Rose-coloured Starling

Pastor roseus

Rare vagrant.

The only records received relate to a juvenile found and photographed in a seaside garden at Selsey East Beach on 1 Oct (SR *et al.*). It was relocated in the same area on 7 Oct and last seen the following day. This gives a county total of 14 this century and 39 overall. [ACG]

Ring Ouzel

Turdus torquatus

Passage migrant, very scarce in spring, scarce in autumn. Red listed species of high conservation concern.

Ring Ouzels were recorded mostly at or near coastal sites or downland prominences. An average spring count was followed by an astonishing autumn passage which exceeded the combined totals for the previous ten years. The estimated minimum monthly totals, after allowing for possible duplication, were as follows:

Mar	Apr	May		Sep	Oct	Nov
1	18	-		12	1100	9

The first bird of the year was a male at Nutbourne (Chichester) on 31 Mar, two days later than the 10-year average date, followed by two at Balsdean (Rottingdean) on 1 Apr but a full week then elapsed before another single was seen at Stoughton. Four birds were at Beachy Head on the 11th followed by singles at Goring Gap, Lavington Common and Netherfield. Two were seen at Pagham Hbr and one at Seaford Head, 11 days earlier than the 10-year average date.

The first returning autumn migrant was noted at Cissbury Ring on 22 Sep, a whole week later than the 10-year average date. There were two birds at Blackdown (Fernhurst) and one at Sheepcote Valley (Brighton) on the 27th with another at Truleigh Hill (Edburton) on the 29th and a few at Beachy Head the day after.

October was remarkable for its unprecedented passage, most of it on Saturday the 12th and predominantly in East Sussex between Seaford and Hastings. An estimated 400 passed through Beachy Head, being noted as the largest day count ever, the previous best having been 200 on 9 Oct 1966. Elsewhere, 238 passed through Hastings CP, 162 through Crowlink (East Dean) and 150 through Seaford Head. Numbers further west at this time were relatively minor but included 16 at Blackdown and 15 at Sheepcote Valley. Earlier in the month counts of up to 20 were recorded at Blackdown, Sheepcote Valley, Seaford Head and Beachy Head. The latter part of the month was subdued.

During November the only records were of five at Blackdown on the 2nd and a few single birds at Beachy Head including the last bird of the year on the 13th, the 10-year average date. The total autumn passage was over ten times the 10-year average and the largest for at least 50 years. [JHW]

Blackbird

Turdus merula

Abundant breeding resident; very common or abundant winter visitor; status uncertain as passage migrant.

Blackbirds were recorded from 508 tetrads, a small drop of 18 on 2012. During the early SWBS, 992 Blackbirds were seen in 97 of the 100 1-km squares surveyed, half the density from 1287 in 57 squares last year, with a maximum count of 28 at Peacehaven on 6 Jan.

In the first winter period, most of the 15 counts of 25 or more birds occurred in January and mainly in East Sussex, though ironically the peak of 56 was in February at Pett Level on the 23rd and the January peak of 40 was at Holmbush (Hellingly) on the 13th. During spring, 17 sites held 25 or more birds with peaks of 63 at Pett village in March and 40 at nearby Cliff End in April, the reverse of last year. There were no reports from the Norfolk Estate for these periods.

During the breeding season, there were 38 records of confirmed breeding and a further 54 of probable breeding and during the BBS a high count of 40 was made at Nutley on 11 Jun. Nest building was first noted at Steyning on 3 Mar. On 11 Apr food was being gathered in Partridge Green and a fledgling was seen there on the 17th while at the end of June a nest was still active in Findon and food carrying was observed on Ashdown Forest well into July. At Pagham Hbr 33 pairs were recorded and 30 at Rye Hbr while on the Norfolk Estate the number of pairs dropped back to the 2011 count of 108 after last year's splendid 148.

Numbers in autumn and the second winter period also reverted to 2011 levels with a maximum of 44 birds at Rickney (Pevensey Level) on 28 Dec and 41 at Pett Level the same day as part of a total of 31 reports of 20 or more. During the late SWBS a total of 984 was recorded from all 114 1-km squares surveyed with a maximum count of 28 at Peacehaven on 27 Nov. [JHW]



Fieldfare, Goring-by-Sea, January 2013 (Nick Bond)

Fieldfare

Turdus pilaris

Common, occasionally very common, passage migrant and winter visitor. Red listed species of high conservation concern. Schedule 1 species.

Fieldfares were recorded from 307 tetrads, 78 more than the previous year. Harsh weather on the continent gave rise to an influx of record numbers in the first winter period and the second period was also above average. Approximate monthly totals in the east and west sides of the county were as follows:

	Jan	Feb	Mar	April		Sept	Oct	Nov	Dec
County total	29508	10527	5271	1108		11	1531	4703	2356
West of TQ30	21495	6954	3129	589		10	333	2677	1237
East of TQ30	8013	3573	2142	519		1	1198	2026	1119

In the first two weeks of January two flocks of 300 birds were recorded (in the Arun valley on the 7th and at West Dean on the 11th), but from the 19th thousands of birds were driven westwards along the coast, which itself was suffering from snow storms, during severe continental weather. Following 500 at Pett Level on the 19th, observers at Climping counted flocks totalling 1500 W on the 20th, 1300 W on the 21st and 2000 W on the 22nd. The count of 1840 at Pagham Hbr on the 21st probably included at least some of the above and there were many counts of several hundreds mostly at sites in West Sussex. A second smaller passage during the following weekend involved 1250 at Medmerry on the 26th, 2100 on Lewes Brooks the following day and 1000s at Greatham

Bridge and Partridge Green on the 30th. February was quieter with 700 on Ambersham polo fields on the 8th and 1000 on Barnham Brooks on the 24th. Numbers in March continued the decline with 350 at Adversane on the 15th and 400 at Troutbeck (Eridge) on the 25th and 200 still there on 11 Apr. The last bird left Liphook on 22 Apr, four days earlier than the 10-year average date.

Ten returning birds were seen at Iping Common on 24 Sep, five days earlier than the 10-year average date. Only small numbers were then seen until 110 passed through Fairlight (Hastings) on 12 Oct and several counts of 100 or more were recorded on Ashdown Forest in October and November including 270 on the golf course on 6 Nov. Further south, 150 were noted at Icklesham on 7 Nov, 1000 passed through Coates Common on the 17th and 150 were at Coldwaltham on the 19th. There were 173 at Pulborough on the 25th and 200 at Partridge Green the same day and finally 400 at West Dean on 17 Dec. [JHW]

Song Thrush

Turdus philomelos

Very common but decreasing resident and partial migrant; common passage migrant and winter visitor. Red listed species of high conservation concern.

Severe continental weather invoked migration in the third week of the year, illustrated by 30 at Climping on 20 Jan, 35 at Beachy Head on the 22nd and 41 on the 25th, 40 at Newhaven on the 23rd and 20 at Bexhill on the 24th. The latter birds remained but all others dispersed though sightings of a dozen or more were mainly confined to coastal areas. During the early SWBS 196 birds were seen (*cf.* 260 in 2012) in 71 of the 131 1-km squares surveyed with a maximum of 11 in Scaynes Hill on 17 Feb.

Breeding was confirmed in 12 1-km squares and was probable in a further 26. Breeding appeared to be late: the first record of food-carrying was at Angmering on 10 Apr; a nest with eggs was noted at Troutbeck (Eridge) on the 19th and a fledgling at South Stoke on 15 May. Eight territories were recorded at Pagham Hbr and 29 on the Norfolk Estate, a fall from 41 in 2012.

Migration was apparent from the last day of September when ten birds were reported from Upper Beeding and another 11 the next day at Seaford Head. In mid-October, 24 were at Sheepcote Valley (Brighton), 51 at Pett Level on the 12th and 20 at Pagham Hbr on the 13th. At Hastings, a total of 167 was recorded on 21 dates between 19 Sep and 14 Nov during the Hastings Migration Watch with a maximum of 42 on 12 Oct. Although 40 were still recorded at Pett Level on the 29th, they and all others were dispersing and no sightings elsewhere exceeded 10 for the rest of the year apart from 15 at Warnham LNR on 17 Dec.

During the late SWBS a total of 98 was recorded from 50 of the 114 1-km squares surveyed with a maximum count of six at Crowborough on 12 Dec. [JHW]

Redwing

Turdus iliacus

Common, occasionally very common, passage migrant and winter visitor. Red listed species of high conservation concern. Schedule 1 species.

Redwings were recorded from 275 tetrads with a slight bias to West Sussex. The first winter period was prolonged and the second period average. The approximate minimum monthly totals in the west and east sides of the county were as follows:

	Jan	Feb	Mar	Apr		Sep	Oct	Nov	Dec
County total	3354	1674	3627	1817		3	2793	1320	1701
West of TQ30	1780	923	2242	1233		3	560	797	887
East of TQ30	1574	751	1385	584		-	2233	523	814

Significant records in the first winter period occurred mainly in January which included nine counts of 100 or more avoiding severe continental weather, including 240 at Plumpton Green on the 6th, 170 at Portobello (Telscombe Cliffs) on the 20th (a day when a major influx of Fieldfares occurred), 250 at Newhaven on the 23rd and 200 at Kings Standing (Ashdown Forest) on the 30th. Two counts of 100 were made in February but March was outstanding with another nine counts of 100s including 500 in off the sea in small flocks at Beacon Hill (Rottingdean) on the 12th and flocks of 200 on pastures at Strood Green on the 22nd, Barns Green on the 23rd and Pulborough Brooks on the 25th. April was also busy with 335 near Shipley on the 3rd, 200 still at Strood Green and 150 at Woolbeding a day or two later and 142 at Ashdown Ridge on the 9th. Fifty noisy birds were at Twyford Fm (Ashdown Forest) on the 11th and the four final birds at Crowhurst on the 13th were three days earlier than the 10-year average date. The period total of almost 10,500 birds was only exceeded in the last two decades by the 13,250 in 2010.

A single bird at Barns Green on 23 Sep, two days later than the 10-year average date, and other September singles at Blackdown (Fernhurst) and Broadbridge Heath and Hastings preceded busy activity in mid-October. This involved 100 birds at Climping on the 10th which were overshadowed by hundreds flying north at Sheepcote Valley (Brighton) on the 11th, recorded as 1255 but possibly as many as 3000. On the same day 270 flew west at Fairlight (Hastings) and maybe the same birds returned east the next day but apart from 230 birds at Blackdown on the 23rd the rest of the month was subdued. There were 100 or more at Gills Lap (Ashdown Forest) on 3 Nov, at Pulborough Brooks on the 11th and Pevensey on 28 Dec with 150 at Five Oaks the next day and counts of at least 50 from 13 other sites in the last two months. The total autumn count was about average. [JHW]

Mistle Thrush

Turdus viscivorus

Common resident and partial migrant. Amber listed species of medium conservation concern.

Mistle Thrushes were recorded from 258 tetrads spread across the county and there was a slight increase in sightings. The approximate monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	104	111	88	131	124	125	50	133	177	140	122	135

The first three months were disappointing and slightly worse than last year's poor count. The highlights were five to seven birds at Climping, Goring, Warnham LNR, Pett Level, Brede valley and Fairlight (Hastings).

During the breeding season, there were only nine records of confirmed breeding. Birds were seen entering an apparently occupied nest site at Arlington Res on 16 Mar, carrying food or faecal sacs at Cliff End (Pett) on 15 Apr and the first fledged juvenile was seen at Cuckfield on 23 Mar. Three pairs were recorded on the Norfolk Estate but pairs were apparently absent at Pagham

Harbour and there were “probably a few pairs” just outside Rye Hbr. As last year, there were some family parties in June and bigger flocks in August, including 52 at Stansted Pk on the 8th, 15 at Arundel on the 15th and 16 at Pett Level on the 20th. In September, significant counts included 32 at Broad Halfpenny (Coates) on the 10th, 16 at Kirdford on the 1st, 15 at Sedlescombe on the 6th and 25 at Old Lodge (Ashdown Forest) on the 22nd. Similar numbers were noted at four sites in October while the only double-figure counts in the second winter period were ten at Broad Halfpenny on 15 Dec and 15 at Kingley Vale on 16 Dec. [JHW]

Spotted Flycatcher

Muscicapa striata

Fairly common but declining summer visitor; scarce passage migrant in spring and fairly common in autumn. Red listed species of high conservation concern.

The first spring arrival was seen at Cuckfield on the very early date of 11 Apr. The next birds were not noted until the 28th when one was at Pagham Hbr and another at West Dean. By the end of May a minimum of 101 had been recorded on 25 days of observation, including falls of 11 at Beachy Head on 22 May and ten there on the 26th when another ten were also noted at Seaford Head. On 1 Jun, a fall of 27 was recorded at Beachy Head by which date no less than 56 had been recorded there. One unfortunate migrant ditched in the sea off Selsey Bill on 22 May, close to the shoreline, and was quickly rescued by observers, but sadly it died shortly thereafter.



Spotted Flycatcher, Cissbury Ring, September 2013 (Howard Statham)

The first indication of nesting was of a pair occupying a nest box at Etchingham on 29 May. The first fledged young were two or three noted at Billingshurst on 2 Jul from a nest in clematis. Breeding was confirmed in eight tetrads and was probable in a further eight.

During August the highest counts were of eight at Easebourne on the 16th, involving three adults and five young, and 20 at Cissbury Ring on the 27th; elsewhere there were three counts of seven and six of six. There were eight double-figure counts in September including 30 at Chanctonbury Ring and also at Cissbury Ring on the 5th, 15 at Pulborough Brooks on the 15th and 14 at Mount Harry (Plumpton) and 12 at Church Norton, both on the 4th. The final record was of one at Pett Level on 30 Sep, considerably earlier than the 10-year average date of 14 Oct. [JAH]

Robin

Erithacus rubecula

Abundant resident; probably common passage migrant, mainly in autumn; status uncertain as winter visitor.

Robins were recorded in 481 tetrads (cf. 503 in 2012, 673 in 2011). In the early SWBS, a total of 933 birds was found in 92 of the 100 squares surveyed, with a maximum of 38 in Warnham, followed by 32 in Burgess Hill. The overall total and the site maxima were considerably down on those for 2012 when there were some 40 counts in excess of 20; in 2013 there were only nine. The pattern of numbers through the months is exemplified by the monthly maxima at Warnham LNR and Pett Level, as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Warnham LNR	20	17	17	20	11	10	13	5	8	5	12	11
Pett Level	51	35	34	36	34	28	8	60	74	88	48	39

The dip in numbers at Warnham LNR in late summer and autumn and at Pett Level in July should be treated with some caution; they might be due to reduced observer effort and the detectability of the species. However, the clear maxima at the coastal site of Pett Level in September and October, also evident in 2012, possibly denotes the presence of immigrant birds, demonstrated by the arrival overnight of 30 birds on 14 Oct. That birds were ‘on the move’ during the autumn was demonstrated at Hastings where, during an extended migration watch 775 birds were recorded on 36 dates from 8 Sep to 14 Nov with a maximum daily count of 54 on 29 Sep. Records from elsewhere indicating autumnal movements included 34 at Seaford Head on 19 Sep, 32 at Poynings on the 21st and 39 at Brighton on the 25th. In October, the high counts included 32 at Beachy Head on the 6th, 56 at Brighton on the 9th and 37 at Poynings on the 24th. Distinct October maxima were also a feature at Ladywell (Coombes), where there was an influx on 29 Oct. Arrival of 15 obvious migrants was noted at Whitbread Hollow (Beachy Head) on 2 Nov. Inland sites tended to show more stable numbers through the year.

Breeding was confirmed in 37 tetrads and probable in a further 31. One bird sang throughout a “vicious territorial fight” at Stoughton on 8 Apr. Young were being fed at Rustington on 18 Apr and there was an occupied nest at Findon on 25 Apr. Five young were raised from a nest on a window ledge at Salvington Lodge Hospital. Late broods were evident at five sites in August, the last recorded at Littleworth on the 24th.

BBS records in 2013 showed that the maximum counts from two surveys totalled 1395 birds from 152 squares (cf. 1343 birds in 146 in 2012 and 1093 in 144 in 2011). The maximum was 35 south of Loxwood (where 18 were counted in 2012).

Snatches of song were heard at Withdean, Brighton, on 28 Jul and full winter song at Doomsday Green (Horsham) from 3 Sep.

In the late SWBS, a total of 741 birds was located in 107 of the 114 squares surveyed, with a maximum of 29 in Nutley, followed by 20 at Maplehurst Wood (Westfield). These figures were in line with those of 2012; the number of squares holding ten or more birds rose from 21 in 2012 to 29. [CB]



Nightingale, Pulborough Brooks, July 2013 (Sandra Palme)

Common Nightingale

Luscinia megarhynchos

Fairly common summer visitor and infrequently seen passage migrant. Amber listed species of medium conservation concern.

There were records from 114 tetrads, with confirmed breeding in one tetrad and probable breeding in 14. The BTO Nightingale Survey of 2012-13 is the subject of a scientific article on pages 265-276 of this report.

The first reported arrival was of one bird at Seaford on 10 Apr, slightly later than the 10-year average arrival date. Between 12 Apr and 31 May, records were received for every day bar three. Nightingales seem to have a near unerring ability to find suitable breeding areas on first arrival, even if they eventually move. Thus one was singing from “damp, thick, bramble” near Patching Pond from 12-15 May but was not reported thereafter. The Nightingale has been characterized as an ‘opportunist’ and such records might be an example of that. Other ‘opportunist’ birds that may not have established themselves included singles in scrub by the Burgess Hill ring road on 2 May and at Steyning MP and near Lurgashall on the 5th. One was at Rye Hbr on 27 Apr and two on 11 May, but again there were no further records there. In favoured areas, arrival was concentrated: there were five in the Etchingham area on the 14 Apr and seven at Pulborough Brooks the next day, with eight at Abbots Wood (Hailsham) on the 19th and seven around Darwell Res on the 28th

(and eight there on 5 May). The maximum count was 13 in the Plaistow area on 16 May and 12 were there on 7 Jun.

Of interest, given the sense that the decline of coppicing and the impact of deer on woodlands, together with the attraction of overgrown damp areas, may be provoking a repositioning of breeding Nightingales, were records of three singing on Waltham Brooks on Apr 21. On 24 Apr, three were singing at Woods Mill (Henfield) with a further two west of the A2037. Two singing near Shipbourne Fm (Wisborough Green) were in the same location as in 2012. An interesting record came from Foxbridge Fm (Ifold), where two singing birds relocated a short distance after logging work disturbed their territories.

BBS records in 2013 showed that the maximum counts from two surveys totalled 36 birds in 18 of the 156 1-km squares surveyed (cf. 23 birds in 16 in 2012). The high counts were seven at Bearhurst Fm (Stonegate) (where one had been recorded in 2012), and six south of Wisborough Green (two in 2012).

An excellent autumn brought 12 July records, 33 in August and three in September. The most remarkable records came from Seaford Head, with birds on 15 days between 22 Jul and 29 Aug (with a maximum of five on 10 Aug), and a late bird on 5 Sep. By contrast, only two were found at Whitbread Hollow (Beachy Head). One was on the beach at Church Norton on 29 Aug and the last was a very late bird at Fairlight on 23 Sep. Perhaps the oddest record came from Kingley Vale where three accompanied a juvenile Whinchat on 19 Aug. [CB]



Red-breasted Flycatcher, Pevensey Bay, November 2013 (Jake Everitt)

Red-breasted Flycatcher*Ficedula parva*

Rare vagrant.

There were two records for the year for this perky little ‘flicker’. A first-winter bird was recorded at Beachy Head on 6 Oct (ASC *et al.*). The second, also first-winter, was photographed in the finder’s garden at Pevensy Bay on 5 Nov (MRE, AR) and was seen on several dates to the 14th. The county total for this century increases to eight and that since 1948 to 32. [JAH]

Pied Flycatcher*Ficedula hypoleuca*

Scarce passage migrant; more numerous in autumn than spring. Has bred. Amber listed species of medium conservation concern.

The first spring migrant was noted in Brighton on 17-18 Apr and during the following week others were seen at Beachy Head, Seaford Head and Cissbury Ring. One was at Selsey on 28 May and one described as “a very tatty female” was seen at Seaford Head on 1 Jun, an exceptional date for this species. In all, there were only eight spring records involving nine birds.

The approximate monthly totals were as follows:

Apr	May	Jun	Jul	Aug	Sep	Total
7	1	1	2	74	16	101

The year’s total was a significant increase on recent years and the best since 124 in 2003, but the 10-year average is still only 49, range 30-101.

One was at Old Lodge LNR (Ashdown Forest) on 2 Jul but return migration effectively started on 28 Jul when a single bird was trapped at Whitbread Hollow (Beachy Head). But it was not until another ten days before the main migration began with single birds recorded at seven mostly coastal sites (Pagham Hbr, Kingley Vale, Mill Hill (Shoreham), Cissbury Ring, Seaford Head, Beachy Head and Pett Level) to 11 Aug. There was then a hiatus before the first multiple count of five at Seaford Head on 20 Aug. Thereafter, there were 41 records of which 61% were of single birds with a highest count of at least five at West Dean on 28 Aug. Other counts of more than one during August were four at Seaford Head on the 24th, three each at Pagham Hbr on the 27th-28th and Seaford Head on the 28th-29th. On 1 Sep there were three at Beachy Head, two at Pagham and Selsey the next day and two at Seaford Head on the 4th. As usual autumn numbers greatly exceeded those of spring and showed an improvement on 2011 and 2012 when there were only 15 and 23 August birds, respectively. The last record was of one at Church Norton on 22 Sep, nine days earlier than the 10-year average date and just one day later than the earliest recorded last date. [JAH, MJC]

Black Redstart*Phoenicurus ochruros*

Rare resident; scarce passage migrant and very scarce winter visitor. Amber listed species of medium conservation concern.

This species was recorded in 62 tetrads. On 1 Jan, one was recorded at Madehurst, the only inland sighting for the month. Other records were spread over eight coastal locations from

Lancing to Seaford involving approximately 14 birds, mostly as singles but including twos at Shoreham on 1 Jan, at Telscombe Cliffs on the 14th and Sovereign Hbr (Eastbourne) on the 18th. In February, only six were recorded at four coastal sites.

Migration commenced in March with records for 21 days, particularly from the 20th onwards; a minimum of 56 birds were recorded. Sightings, from about 24 coastal locations, were primarily of singles, but four were observed at Sovereign Hbr on 9 Mar, three at Rye Hbr on 27 Mar and three at Worthing on 7 Apr. At Telscombe Cliffs, male and female birds were present on 15 days between 12 and 31 Mar, plus two on 4 and 6 Apr and one on 15 Apr. At the North Wall (Pagham Hbr), an adult female was present from the 23 to 28 Mar, with males reported from 24 Mar to 1 Apr. Single birds were noted at Southwick between 5 and 9 Apr, around Beachy Head between 7 and 13 Apr, and on six of seven days between 7 and 14 Apr at Selsey. Inland, a male was reported at Coldwaltham on the 21 Mar and a male at High Cross Fm (Uckfield) from 4 to 6 Apr. Spring passage was largely over by mid-April, although two remained at Seaford Head from 26 Apr to 1 May and a singing male was at Southwick Canal on 1-2 May. The last bird of spring was at Pagham Hbr on 17 May.

The first post-breeding birds were singles seen at Beachy Head on 27 Jul and 4 Aug, at Lancing on the 6th, and at Cuckmere Haven on the 13th and 14th. An immature male was noted at Seaford Head on 14 Aug and, although another bird was reported in an assumed breeding area at Hastings CP on the 28 Aug, there were no reports that confirmed breeding.

Autumn migration, which commenced on 5 Oct with one at Brighton Marina, lasted from mid-October into November, with coastal sightings at about 28 different locations. Most were of singles, but twos were seen at Hastings on 29 Oct, at Birling Gap on 2 Nov, at Shoreham Hbr on 8 Nov, at Belle Tout (Beachy Head) on 15 and 16 Nov, and at Sovereign Hbr on 29 Nov. Inland, a female was seen at High Cross Fm (Uckfield) on 20 and 21 Oct, with others at Broad Oak (Brede) on 25 Oct, Battle on 26 Oct, Robertsbridge on 5 Nov and at Fernhurst on 9 Nov.

In December, reports were mostly of one or two birds, although three were at Eastbourne on the 14th. One remained at Shoreham from the 4th to the 27th and another at Brighton from the 11th to the 28th. Inland, singles were reported at Burpham on the 20th and 22nd. [AR]

Common Redstart

Phoenicurus phoenicurus

Scarce and declining summer visitor and fairly common passage migrant. Amber listed species of medium conservation concern.

This species was recorded in 97 tetrads, an increase on the 82 in 2012. The first migrants recorded were at Pagham Hbr and Beachy Head on 11 Apr, somewhat later than the 10-year average of 26 Mar and two were seen at Pagham Hbr on the 13th. Birds continued to be recorded at coastal sites (Selsey Bill, Chichester, Bognor Regis, Brighton, Seaford Head and Beachy Head) during April and early May, with the final coastal record for the spring at Pagham Hbr on 26 May. The first inland records were of singles on Ashdown Forest on 13 Apr, Waltham Brooks on the 14th and at Kingley Vale on the 15th with three at Pulborough Brooks, also on 15 Apr. By late April birds were being recorded inland at their traditional breeding sites; on Ashdown Forest, nine were noted on 1 May and there were also sightings on the West Sussex commons during late April and May and at Henfield on 16 May.

During the *Thames Basin and Wealden Heaths Breeding Bird Survey*, ten pairs or territories in West Sussex were recorded, including two each at Blackdown (Fernhurst), Chapel Common (Liphook), and Linchmere and Stanley Commons (see page 220). A further eight pairs or

territories were recorded on Ashdown Forest. Breeding was confirmed at three sites: at Stedham Common adult birds were seen carrying food or faecal sacs on 18 Jun, on Ashdown Forest nine adults were seen with some carrying food or faecal sacs at Old Lodge NR on 25 May and fledged young were noted there between 7 Jun (four birds) and 28 Jul (three birds). Two fledged young were also recorded at Hindleap Warren (Ashdown Forest) on 14 Jul.



Common Redstart, Old Lodge, June 2013 (Sandra Palme)

Birds were recorded again at coastal sites from 8 Aug when singles were noted at Seaford Head and Beachy Head on the 8th. Migration was particularly noticeable from 17 Aug through to 22 Sep, during which period birds were recorded on virtually every day with most records being of one, two or three, mainly at coastal sites. However, six were seen at Hastings CP on 30 Aug and at Beachy Head on 1 Sep; seven were noted at Cissbury Ring and 14 at Kingley Vale on 4 Sep, and a peak of 26 were at Cissbury Ring on 5 Sep with 11 there on the 10th.

The last inland sightings of the autumn were at Pulborough Brooks on 7 Oct and on Ashdown Forest on 8 Oct. The final sighting for the year was one at Climping on 18 Oct, a little earlier than the 10-year average of 29 Oct. [AR]

Whinchat

Saxicola rubetra

Fairly common passage migrant. Rare summer visitor, last bred in 1999. Amber listed species of medium conservation concern.

Whinchats were recorded in 76 tetrads, once again with a bias towards the coast but slightly up on last year. The monthly minimum number of birds compared with the 5-year average 2009-2013 and the number of days on which they were recorded is shown below.

	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov
No. of birds	-	20	12	-	-	366	408	42	1
5-year average	2	8	18	1	4	181	297	25	1
No. of days	0	8	7	0	0	20	29	11	1

All except two of the records for April and May were of single birds with the first on 18 Apr at Telscombe Cliffs (13 days later than the 10-year average arrival date), followed by one at Pulborough Brooks three days later. The total number of birds seen in April and May was near the 5-year average but fewer than last year’s sightings.



Whinchat, Arlington Reservoir, August 2013 (Jake Everitt)

The earliest returning bird was one at Seaford Head on 8 Aug, 17 days later than last year but thereafter very large numbers were seen throughout the autumn. The August total was nearly 50% above the 5-year average. The highest daily totals for August were 30 and 25 at Beachy Head on the 25th and 27th, 18 at Seaford Head on the 24th and 13 at Sheepcote Valley (Brighton), also on the 27th. On the 29th during a walk between Cissbury Ring and No Man’s Land (Findon) 14 were counted. The total number of sightings for September was 25% above the 5-year average. However the individual totals were lower than for August with 12 at Cissbury Ring on the 1st and 17 at Balsdean on the 5th being the highest numbers recorded.

The highest count for October was four at Pett Level on the 6th. The only November record was one on the water meadows at Arundel on the 17th, 19 days later than the 10-year average date. [GDE]

Eurasian Stonechat*Saxicola rubicola*

Fairly common resident and partial migrant.

The minimum monthly totals and the number of days on which they were recorded were:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	81	31	71	145	136	163	128	158	230	255	201	107
No. of days	20	15	21	30	22	23	24	24	26	27	19	19

Birds were recorded in 133 tetrads, 18 more than last year. However the numbers recorded in each month were all lower than the 5-year average (2006-10), some by a considerable amount except for December which was comparable to the average.

The highest counts in the first three-month period were six at Rodmell Brooks on 13 Jan and at Beachy Head on 6 Mar. Two further counts of five were recorded at Beachy Head on 24 and 29 Mar and there were also two counts of four there on 19 and 31 Mar and at Pagham Hbr on 21 Jan and 4 Feb. The species was reported from just one square out of 100 surveyed in the early SWBS.

Breeding was confirmed in 15 tetrads and was probable in 12 with breeding records coming principally from Ashdown Forest and the West Sussex heathlands. In the *Thames Basin and Wealden Heaths Breeding Bird Survey* there were records of 15 birds holding territory in 10 1-km squares. The first confirmed breeding was on 7 May at Ellisons Pond (Ashdown Forest), later than in 2012. Fledged birds were first noted on 27 May at Stonehill (Ashdown Forest) and continued to be recorded throughout Ashdown Forest until 14 Sep. Elsewhere the only confirmed breeding records were at No Man's Land (Findon), Newhaven and Cuckmere Haven. The highest numbers recorded during this period were nine at Ellisons Pond on 4 Jun, 11 at Beachy Head on the 11th, 12 at Stonehill on the 30th, nine at The Hollies (Ashdown Forest) on 1 Jul and 10 at Wren's Warren (Ashdown Forest) on 9 Jul.

During August 11 were recorded at Beachy Head on the 10th and ten each at Stonehill on the 13th and Roman Road (Ashdown Forest) on the 20th and Stonehill again on the 27th. September saw high counts of 15 at Beachy Head on the 12th and 12 on the 24th. There were 14 at Stonehill on the 5th and 12 at Wren's Warren on the 3rd. The highest daily count in October was nine at Cissbury Ring on the 7th. During the Hastings Migration Watch Stonechats were recorded on 10 of the 79 days watched with a total of 13 birds. During the second winter period, the highest daily counts were eight at Thorney Island on 4 Nov, six at Cuckmere Haven on 19 Nov and five at Pevensey on 10 Nov. Birds were present in five out of 114 squares surveyed in the SWBS with a maximum of four. [GDE, MJC]

A bird of the continental race *S.r. rubicola* was identified at Birling Gap on 9 Mar (DC, JFC, BK) and three were present at Beachy Head from 29 Jun to 6 Aug (DC, JFC, BK).[DHH]

Northern Wheatear*Oenanthe oenanthe*

Very scarce breeding summer visitor and common passage migrant; very rare in mid-winter. Amber listed species of medium conservation concern.

Northern Wheatears were recorded from 138 tetrads, predominantly coastal or near coastal, with an additional grouping of records on Ashdown Forest. The minimum monthly totals, which may include some duplication, were as follows:

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
No. of birds	165	351	77	23	6	727	749	278	21
No. of days	16	28	18	10	4	28	30	29	11

The first spring record of a single bird was typically coastal, at Ferring Beach on 9 Mar. Others were seen at Telscombe Cliffs on 12 Mar, at Seaford Head on the 14th and followed by seven more coastal records of lone birds from the 17th to the 22nd. On the 23rd there were two records of two birds, at The Severals (Church Norton) and Telscombe Cliffs plus a single at Pulborough Brooks. Larger numbers were recorded on the following day with five seen at Beachy Head and 11 at Selsey Bill. The highest single day tally for March was 20 on the Church Norton foreshore on the 25th and the only other double-figure count of the month was 11 at Thorney Island on the same date. Thorney Island was also the most favoured location at the beginning of April where eight were recorded on the 1st. Most of the records in the first half of the month were of fewer birds or singles, although there were ten at Goring Beach on the 11th. Notable counts during mid- to late April were 13 at Church Norton on the 16th, 14 at Beachy Head on the 26th, ten at Ferring on the same date and 11 at Beachy Head on the 28th. Passage was much reduced throughout May. There were two early June records away from the Rye Hbr breeding sites, both of single birds, at Beachy Head on the 2nd and at The Midrips on the 10th. An interesting record of a single bright male at Medmerry on 30 Jun presumably involved an exceptionally late spring migrant or dispersal by a failed breeder.

Breeding was confirmed from just two tetrads, both at Rye Hbr, and there was no record of probable breeding anywhere else. Young being fed were noted on 5 Jun and two groups with fledged young were observed there on the 19th.

The first sign of autumn passage was at Beachy Head where a juvenile bird was seen on 21 Jul. Birds were recorded on 28 days in August and during September records were received for every day of the month with the peak day totals being at the end of August with 97 on the 27th, 96 on the 28th and 87 on the 29th. There were nineteen double-figure counts, but only two of 20 or more with 22 seen at Fairlight on 15 Sep and 20 at Pagham Hbr on the 24th.

During October the highest numbers were at the Worthing and Selsey Bill seawatching sites where counts of ten and nine birds were recorded respectively on the same date of 6 Oct. There were two records of eight at Thorney Island on the 2nd and at Church Norton also on the 6th. There were twenty-one records on eleven dates in November, all of single birds. An adult at Pilsey Sands (Chichester Hbr) between 10 and 19 Nov was the last, eight days later than the 10-year average last recorded date.

There were four spring records of the Greenland Wheatear subspecies *O.o. leucorhoa*. The first of these was a male at Pulborough Brooks on 25 April. This was followed by another single bird reported from the beach at Ferring on 4 May followed by one on 15 May at Church Norton spit and one the next day at Selsey Bill. There was one autumn record on 25 Oct of one at Newhaven Tide Mills. There have been 56 spring records for this subspecies since 1949 (31 this century) but only 23 autumn records (ten this century). [GO]

Dunnock

Prunella modularis

Very common resident. Amber listed species of medium conservation concern.

Dunnocks were recorded in 401 tetrads, a further reduction, cf. 416 in 2012, 600 in 2011 and 520 in 2010.

Monthly records for selected sites where recording was regular through the year were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sefter Fm (Rose Green)	1	1	4	4	3	1	2	?	1	4	3	?
West Tarring (Worthing)	1	2	3	2	2	3	2	2	1	1	1	1
Warnham LNR	15	6	14	12	8	7	6	8	7	3	9	6
Round Hill (Hangleton)	nc	1	1	14	6	5	5	5	12	18	nc	nc
Lewes Racecourse and Downs	2	9	7	11	4	3	3	?	2	?	4	3
Battle Canadia	4	2	3	4	3	2	3	4	2	4	2	3
Pett Village	18	24	27	18	?	14	11	3	15	22	6	4
Cliff End (Pett)	15	25	27	21	14	11	10	9	14	22	20	11

In the early year SWBS counts, 222 birds were found in 66 of the 100 squares surveyed (66% and 3.4 birds/occupied square); the maximum was 11 at Telscombe. The 2012 figures were 357 birds from 96 of the 131 surveyed squares (73% and 3.7 birds/occupied square). In the late year SWBS counts, 157 birds were found in 64 of the 114 squares surveyed (56% and 2.5 birds/square). The 2012 figures were 174 from 64 of 107 (60% and 2.7 birds/square). The BBS results show a statistically significant decline of 48% from 1994 to 2013, and a 19% decline from 2012 to 2013 (although this figure is not statistically significant).

The highest counts for both January and February were five locations around Brighton and near Pett; double-figure counts also came from West Hoathly and Worsham Fm (Bexhill).

Breeding was confirmed in 17 tetrads and probable in 32, an increase on the totals of 15 and 19 in 2012. The first fledged young were at Roffey (Horsham) on 3 May; the last at Mountfield on 16 Aug.

Breeding season surveys of pairs/territories from specific locations over the past few years are shown below:

	2013	2012	2011	2010
Pagham Hbr	18	24	37	37
Norfolk Estate	33	59	38	36
Rye Hbr	32	35	34	37

A “small influx” was noted at Beachy Head on 24 Sep (when 40 birds were present); ten in gardens at Selsey Bill the next day may also have included some arriving birds. Ten at Whitbread Hollow (Beachy Head) on 24 Oct denoted “an obvious increase”. Song was noted at Pett Level on 4 Nov and in Hove and Whatlington in December. [CB]

House Sparrow

Passer domesticus

Very common but possibly declining resident. Red listed species of high conservation concern.

During the first winter period, 856 House Sparrows were counted in the early SWBS in 71 of the 100 1-km squares surveyed with a highest count of 70 at Westbourne on 1 Jan. Other high

counts during the period were 50 at Portslade on 5 Jan, 52 at Burgess Hill on 9 Feb and just under 80 at Pett on 23 Feb and 18 Mar.

The first hint of nesting activity was at Stoughton on 17 Feb when a pair was seen investigating eaves and picking up a feather but the first occupied nest was recorded at Copsale on 11 May and the first fledged young were noted at Broxmead (Bolney) on the 15th. Breeding was confirmed in 19 tetrads and was probable in a further 29. High counts during the breeding season include 90 at Mile Oak (Portslade) on 18 May and over 100 at Pett on 13 Jul.

The first sizeable post-breeding flock of over 50 was 60 at Henfield on 12 Aug followed next day by 127 at Pagham Hbr and 100 at Pett, 80 at Widewater (Lancing) on the 21st, 70 at Streat on the 25th and 80 at Rye Hbr on the 29th but the largest count was 250 at Thorney Island on the 30th.

In the autumn and second winter periods there were no higher counts than in August but in the late SWBS 814 were counted in 69 of the 114 1-km squares surveyed with a highest count of 53 at Kirdford (Petworth) on 30 Nov. At Wivelsfield a House Sparrow caught a Humming-bird Hawk-moth on 5 Nov. [ACG]

Tree Sparrow

Passer montanus

Much declined and now very scarce resident; scarce passage migrant and winter visitor.

The stronghold of this species remains in East Sussex. Breeding was confirmed at only one site: at East Guldeford Level, where concerted efforts are being undertaken to help the species, it was recorded throughout the year with a highest count of 12 on 18 Oct. On Pevensey Levels, where breeding was probable, small numbers were present throughout the year with 12 on 17 Apr being the highest count. Elsewhere in the east, three flew over Seaford Head on 14 Mar, two were seen at Cadborough (Rye) on 20 Oct and there was one at the Camber on 1 Dec. At Hastings, only two were recorded on 29 Oct during 79 days of an extended migration watch from 5 Aug to 15 Nov.

In West Sussex, three were recorded at Hunston (Chichester) on 5 Dec. [ACG]

Yellow Wagtail

Motacilla flava flavissima

Scarce and localised summer visitor; scarce passage migrant in spring and fairly common in autumn. Red listed species of conservation concern.

Yellow Wagtails were found in 90 tetrads in 2013, a distinct improvement on the 67 of 2012 and back to the levels of 2010 and 2011. The overwhelming majority were at or near the coast.

The first record was of one at Pulborough Brooks on 4 Apr, nine days later than the 10-year average arrival date. The next record was of two around Ferry Pool (Sidlesham) six days later. These are late dates: the average for 2002-11 was 26 Mar. Thirteen were at Pett Level on 28 Apr and ten were at Rye Hbr the next day. Slightly further inland, seven were on Hankham Level on 14 Apr and six at Arlington Res on the 26th. The spring maximum of 25 was at Scotney GP on 6 May, declining to eight the next day. Between 15 Apr and 12 May at least 18 were recorded arriving in off the sea with five at Selsey Bill on 5 May being the largest number recorded.

Four pairs were estimated to have bred on East Guldeford Level and one at Rye Hbr and there was a pair each at Amberley Wild Brooks and Pulborough Brooks. At Stakers Fm (Yapton) there was an agitated pair in a "weedy field of bolting lettuces and oil-seed rape" on 5 Jul. A remarkable

record came from Rudgwick in the upper Arun valley of an adult female and a newly fledged bird found on 2 Jun. Discovery of breeding in such a location is heartening.

The first signs of autumn movement came with one flying east at Pett Level on 16 Jul, one at Church Norton on the 21st and two at Seaford Head on the 27th. There were 25 records of at least 50 birds in August and September: largest counts, moving from west to east, were 150 at Medmerry on 1 Sep, 150 at the North Wall (Pagham Hbr) on 10 Sep, 200 on the beach between Pett and Winchelsea on 20 Aug, around 450 at Rye Hbr on the 24th (150 at Harbour Fm and 300 on the Beach Reserve) and 400 at Scotney GP on 31 Aug (with 200 there on 4 Sep). The maximum count at Seaford Head was 45 on 18 Sep and at Beachy Head 48 on 5 Sep. The most productive inland area appeared to be on downland between Steyning and Cissbury; at Steep Down (Lancing) on 23 Sep a group chose to feed around sheep rather than cows in the same field. Twenty were on Amberley Wild Brooks on 12 Sep, two were near Partridge Green on the 15th and one was at Glottenham Fm (Mountfield) on the 22nd. There were two records of two and three birds flying over Ashdown Forest.

In October numbers declined; the high counts were 40 at Pagham Hbr on the 3rd and 4th, 35 at Crowlink (Beachy Head) on the 2nd and 20 at Pulborough Brooks on the 1st. The only November record and the last bird of the year was on the beach at Selsey Bill on the 17th. The average last date for 2002-11 was 24 Oct and the last recorded date is 23 Nov. There is very little information as to the precise origin of the birds which pass through Sussex in the autumn. [CB]

A bird showing characteristics of the Scandinavian form *M.f. thunbergi* was seen and photographed on 12 Jun (MRE, mo) at Cuckmere Haven as a second calendar year. [JAH]

A male of the race *M.f. flava* (Blue-headed Wagtail) was photographed at Black Ditch (Angmering) on 25 Apr (BA). [DHH]



Blue-headed Wagtail, Black Ditch (Angmering), April 2013 (Bola Akinola)

Grey Wagtail*Motacilla cinerea*

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

Birds were recorded in 163 tetrads (cf. 144 in 2012), with something of a preponderance of records coming this year from West Sussex. Birds were noted in all months of the year at Troutbeck (Eridge) and in eleven months at Warnham LNR. Numbers in the early months at best were unexceptional (none was recorded in the early year SWBS) and any spring passage went unnoticed. (There were no records from Selsey Bill, Seaford Head or Rye Hbr and just one report of a single at Pagham Hbr on 16 Feb.)

Breeding was confirmed in four tetrads and probable in ten. The first clear indication of breeding came with birds collecting food at Wakehurst Place on 10 May and at Troutbeck (Eridge) on the 18th. Three newly fledged young were at The Mumbles (Steyping) on 26 May, and the busy parents had a second brood by 1 Jul. Four very young birds were in a nest at Maresfield on 19 Jun. There were reports from five squares in the BBS; Hempstead (Uckfield) was the only site to feature in both 2012 and 2013.

The Hastings autumn migration watch recorded 72 birds between 13 Aug and 19 Oct, with a maximum of nine on 25 Sep. This was a considerable increase on the 2012 total of 39. It was not matched elsewhere: six flew E at Selsey Bill on 5 Sep and 6 flew W on the 19th but only three flew over in 85 hr of seawatch observation there during October. There was no concerted movement across or over coastal Sussex, merely a dribble of sightings from mid-July (one was over Seaford Head on the 13th and one was at Beachy Head on the 20th) through to November.

In the late year SWBS, single birds were found in 11 of the 114 squares surveyed (cf. four birds in three of 107 squares in 2012). As in the past few years, there were only a handful of urban records for the winter months (and no birds seemed to stay for long): one was in Crawley in January and February; two were on roofs in Bexhill on 7 Oct ('as usual' commented the observer) and two were on the station roof at Southwick on the 8th; singles were at West Worthing on 2 Nov and in central Shoreham on the 18th; three were on rooftops in Hastings at dusk on 10 Jan; seven were in Alexandra Park (Hastings) on 9 Nov (but only a couple of single birds were recorded in December in Hastings). [CB]

Pied Wagtail*Motacilla alba yarrellii*

Common resident, passage migrant and winter visitor.

Pied Wagtails were recorded in 332 tetrads. Confirmed breeding came from 11 tetrads, with probable breeding in a further six. In the early SWBS 79 birds were found in 28 of the 100 squares surveyed, with a maximum of ten in Cowfold. In the late surveys, 166 birds were found in 57 squares of 114 surveyed, with a maximum of 12 at Pett Level.

In the first winter period large roosts included over 300 at Hickstead on 26 Jan, 140 at Gills Lap (Ashdown Forest) on 29 Mar and 70 at the Princess Royal Hospital (Haywards Heath) on 2 Feb. There were six further records of over 50 birds.

The peak spring passage at Selsey Bill was in March during which 36 moved north. The first reports of breeding came from High Cross Fm (Uckfield) where an adult with food was seen and Bolney MP where fledged young were seen, both on 18 May. Maximum counts from two surveys in the BBS totalled 86 birds from 54 squares (cf. 94 birds in 55 in 2012 and 87 in 55 in 2011).

Autumn movement was followed at Hastings where 611 were logged on 31 of the 69 days of observation between 15 Sep and 15 Nov, with a maximum of 89 E on 30 Sep. The first overhead migrants at Pett Level were detected on 26 Sep. At Seaford, 15 flew east over the sea on 20 Oct. Monthly totals from Selsey Bill in the last four months were:

	Sep	Oct	Nov	Dec	Total
Eastbound	109	80	1	-	190
Westbound	10	207	39	-	256
Southbound	-	54	-	-	54
Present	21	38	18	10	87

Cricket pitches were favoured at Findon and Henfield; there were fewer reports from sewage works this year. About 30 were “feeding in a field stripped of brassicas by grazing sheep” at Steep Down (Lancing) on 9 Dec. There were four substantial roost counts at the end of the year: around 100 at Arundel WWT on 5 and 14 Nov (where early year records had been in single figures), over 200 at the North Terminal (Gatwick Airport) on 24 Dec, and 585 “going to roost in a medium sized garden tree” in the Old Steine (Brighton) on the 29th. There was no early year count from these two latter sites.

There were 34 records of some 40 birds of White Wagtail *M.a. alba*. The first record was of two birds at Pulborough Brooks on 4 Mar, followed by singles at Sidlesham SF on the 14th, one seen coming in over the sea at Worthing on the 31st and one at Telscombe Cliffs also on the 31st. Eight, all at or close to the coast, were found in the first half of April. Three males were at Arlington Res on 26 Apr (with two still there on 4 May). A pair, first noted on 3 May, bred at Sidlesham Ferry, raising two young: the family was last noted at this location on 19 Jun although four were recorded nearby in Pagham Hbr on the 26th. Breeding by White Wagtail pairs in the county is most unusual; the last pure pair bred in the Cuckmere valley in 1974 (*The Birds of Sussex*, Thomas 2014); nor are Pied x White pairs recorded every year.

There were no records in July or August. Autumn passage involved perhaps 10 birds recorded from seven sites with four at Hastings on 19 Sep being the largest count. A late bird was at Cissbury Ring on 2 Nov. [CB]

Tawny Pipit

Anthus campestris

Very scarce visitor, mostly in autumn.

Following one in 2012 the only record this year was of one seen briefly and heard on several occasions at Cuckmere Haven on 25 Sep (MRE). This is the 12th record this century and raises the county total since 1948 to 228. Only 5% of records since 1948 have been in spring but 69% occur in September. The earliest autumn date was 6 Aug 1973 and the latest 24 Oct 1948. [JAH]

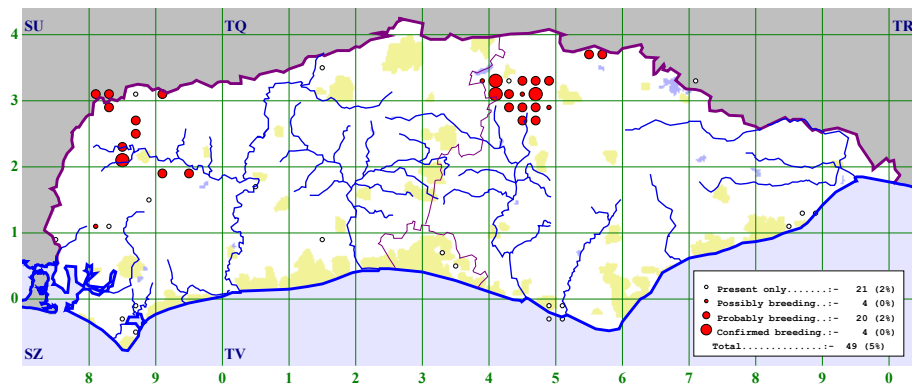
Tree Pipit

Anthus trivialis

Fairly common but local summer visitor and passage migrant. Red listed species of high conservation concern.

Tree Pipits were recorded in 49 tetrads, slightly down from the 2012 total of 51. The first of the year were four recorded on 12 Apr at Lavender Platt (Ashdown Forest) with four at Hindleap

Warren (Ashdown Forest) and two at Barnsden (Ashdown Forest) the next day. This arrival date is more than two weeks later than the recent 10-year average and the last later arrival date was 13 Apr 1979. Thereafter, birds were recorded on an almost daily basis on Ashdown Forest with a minimum of 26 distributed across some 16 1-km squares on the forest. Spring passage was reported from Pett village, Hastings CP and Seaford Head. By the end of April a minimum of a further 22 birds had been recorded at a further 11 sites across the county but biased towards the west. In May, birds were recorded on 21 days during the month entirely at the established breeding areas on Ashdown Forest and the West Sussex heathlands.



In the breeding season, breeding was confirmed in four 1-km squares, three of which were on Ashdown Forest, and was probable in a further 19 1-km squares. Of these, 17 were on Ashdown Forest and two at Broadwater Warren. In addition, 23 pairs or territories were identified during the *Thames Basin and Wealden Heaths Breeding Bird Survey* (see page 220). Adults carrying food were first observed at Old Lodge LNR (Ashdown Forest) on 7 Jun and the first fledged young at Lavender Platt on 2 Jul.

The earliest evidence of return migration was of two birds flying over Seaford Head on 8 Aug followed by two more at Pett Level on the 10th. Thereafter, birds were recorded at coastal sites on an almost daily basis until 12 Sep. The highest counts were of 12 at Beachy Head on 27 Aug and eight at Brighton Wild Park on the 28th. A total of 23 was recorded over 14 dates between 15 Aug and 17 Oct during migration watches near Hastings with a peak count of just three. Although 12 remained on Ashdown Forest at Duddleswell on 24 Sep, the final records for the year were of single birds at Seaford Head and Beachy Head on 6 Oct, nine days earlier than the 10-year average date. [SJB]

Meadow Pipit

Anthus pratensis

Common but declining resident; very common passage migrant and winter visitor. Amber listed species of medium conservation concern.

Meadow Pipits were recorded in 235 tetrads, an improvement on the 2012 figure of 198. In the first winter period, sightings of significant numbers included 210 at Milland on 25 Feb, 60 at Cowfold on 16 Jan and 50 at Birdham on 25 Feb.



Meadow Pipit, Widewater, November 2013 (Howard Statham)

Spring migration commenced on 9 Mar with counts of 22 N at Selsey Bill and 68 N at Beachy Head and lasted through until the end of April. During this period at least 3088 birds were recorded flying north at the main seawatching locations, as follows:

		Mar	Apr	Peak counts
Selsey Bill	N	2316	507	845 on 28 Mar and 239 on 1 Apr
Worthing	N	228	11	100 on 28 Mar
Splash Point	N	127	19	109 on 29 Mar
Birling Gap	N	4	12	

Breeding was confirmed in three tetrads and was probable in a further 14. Displaying was first observed at Old Lodge LNR (Ashdown Forest) on 5 Mar, nest visiting was observed on 2 Apr at Ellisons Pond (Ashdown Forest) and food carrying was noted at Pevensey Levels on 25 May. There were 12 pairs or territories at Medmerry, four at Pagham Hbr and about nine at Rye Hbr. Three territories were noted during the *Thames Basin and Wealden Heaths Breeding Bird Survey* (see page 220). No attempt at calculating the number of territories on Ashdown Forest was made this year but one was noted as “seeing off a Cuckoo” at a probable nest site at Ellisons Pond on 7 May.

Autumn migration, as recorded at two of the principal seawatching sites, was prolonged, lasting in effect from 12 Sep to 17 Oct. It consisted of both eastwards and westwards movements (but with occasional small numbers moving N or S) involving at least 6800 birds. The principal movements were as follows:

		Sep	Oct	Peak counts
Selsey Bill	E	1648	895	840 E on 1 Oct
	W	1470	331	1000 W on 19 Sep in 4¼ hr
Worthing	E	1071	176	223 E on 25 Sep
	W	55	42	

During the Hastings Migration Watch a total of 6962 birds was recorded over 48 dates between 5 Aug and 15 Nov with a maximum count of 1987 E on 30 Sep (but flight directions were not stated). Elsewhere, observers at Seaford Head noted 915 W on 19 Sep and at Beachy Head 330 E on 30 Sep and 700 E on 3 Oct.

In the second winter period there were six records of counts of 50 or more, the largest of which was 100 at Thorney Island on 7 Nov. At Lavington Common on 17 Nov 80 birds were noted going to roost in the heather and on the 23rd a flock of 50 at the Old Airstrip (Ashdown Forest) was put up by a Hen Harrier. [SJB, JAH]

Rock Pipit

Anthus petrosus

Scarce resident and scarce winter visitor; very rare away from coast.

Rock Pipits were recorded in 42 coastal tetrads. Records were spread from Thorney Island to Camber Sands and the approximate minimum monthly totals, assuming that the highest day count was the minimum at a site, were as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of birds	47	28	21	9	13	8	4	2	15	24	48	51
No. of sites	15	10	12	8	7	5	1	1	6	11	16	18

In the first winter period the only counts of six or more were six at Dell Quay on 1 Jan and at Rottingdean on 15 Jan, ten at Fishbourne Channel (Chichester Hbr) on 10 Feb and 12 there on the 13th.

There was one record of confirmed breeding of a bird with food on 3 Jun at Beachy Head and there were three of probable breeding. Probable breeding by pairs in suitable habitat was noted at Rottingdean and Newhaven on 6 May and four birds were displaying at Peacehaven on the same day.

In the autumn period, six birds were recorded at Newhaven on 30 Oct and fives at Ovingdean on 29 Sep and Fishbourne Channel on 17 Oct. Otherwise all counts were of one to three at 12 coastal sites. In the second winter period, counts greater than three birds included ten in Fishbourne Channel on 7 Nov, ten at Telscombe Cliffs on 6 Dec, eight in the Shoreham Hbr area on 13 Nov, four in Pagham Hbr on 9 Nov and also at Newhaven Hbr on the 30th. [SJB]

Three birds showing characteristics of the Scandinavia race *A.p. littoralis* were recorded. One was seen and photographed at Birling Gap from 2-9 Mar (DC, JFC, BK); a second was seen at Telscombe Cliffs on 22 Mar (DHH) and the third on Goring Beach on 11 Apr (DF, CEH, DIS). [JAH]

Water Pipit*Anthus spinoletta*

Scarce winter visitor and passage migrant.

There were many sightings between 1 Jan and 5 Apr and a conservative assessment suggests a minimum of six birds in this period. The first sighting was of one at Pett Level from 1-3 Jan (RBRG). This was followed by one at Apuldram (Chichester Hbr) on 11 Jan (RAI, DM, DIS). At Pett Level, one was sighted on 16 Jan and two on 24 Jan; thereafter one or two were sighted on numerous dates through to 4 Apr when there were three there (CRD,AP,PEJ), but deciding which and how many were wintering before migrating or when new migrants arrived is almost impossible. The final spring record was of one at Pulborough Brooks on 5 Apr (JSW *et al.*).

In the autumn, there were sightings of single birds at Pett Level on 4 Nov, Brede Levels on the 17th, Crowhurst on the 19th and Pett Level again on the 21st and 26th (CRD, AP, RBRG) with possibly four different birds involved. In December, one was sighted at Pett level on the 2nd and 3rd, another was on Brede Levels, also on the 3rd, probably another at Pett Level on the 9th and two there on the 14th (CRD, AP, RBRG) with probably five birds involved. An overall assessment of numbers suggests a total of 15 for the year. [JAH]

Chaffinch*Fringilla coelebs*

Abundant resident, and probably very common passage migrant and winter visitor.

Records for Chaffinch came from across the county and were reported from 473 tetrads, almost half (48%) the total wholly within Sussex; this is very similar to the reporting pattern in 2012 and surely is an under-representation of the true status of this species in the county. During the first winter period, there were over 150 double-figure counts but also over 70 counts of 20 or more and five three-figure counts, with a maximum of 200 at Broad Oak on 3 Jan, Lodge Fm (West Dean) on 11 Jan and near the Sussex Pad (Shoreham) on 21 Jan. During the early SWBS, 753 Chaffinches were recorded in 85 of the 100 1-km squares surveyed with a maximum count of 55 at Cocking on 7 Feb.

Breeding was confirmed in only eight tetrads, five of which were on Ashdown Forest, with probable breeding in a further 36. Birds were noted visiting probable nest sites there from 15 Apr, with food being carried to the nest by 25 Apr. The first fledgling was observed on Ashdown Forest on 21 May. Breeding surveys identified 37 pairs or territories around Pagham Hbr and 83 on the Norfolk Estate.

Post-breeding flocks recorded through July and August were mainly small, with the rather unusual exception of 132 at Pagham Hbr on 18 Aug. Autumn movements at coastal sites were also generally low in number, although at Hastings notable counts included 473 W on 16 Oct, which dwarfed the next highest count of 80 there on 30 Oct. The largest count at Beachy Head was 50 on 7 Oct. Other large flocks recorded were 70 at Stansted on 12 Oct, 50 at Devil's Dyke on 22 Sep and 47 at Sheepcote Valley (Brighton) on 18 Oct. During the second winter period there were a total of 52 double-figure counts, reaching a maximum of 60 at Warnham LNR on 7 Dec and 50 at Henfield on 9 Nov, whilst 45 from the Chichester area on 2 Dec was also well above the average. Only one three-figure count was recorded during this period, 200 at Coates Common on 17 Nov. During the later SWBS 528 birds were recorded in 85 of the 114 1-km squares surveyed with a maximum of 47 at Kirdford on 30 Nov.

Two leucistic birds were noted; one at Pagham Hbr on 11 Apr and another at Beckley on 30 Dec. [DB]

Brambling*Fringilla montifringilla*

Fairly common winter visitor and passage migrant. Schedule 1 species.

Bramblings were recorded in 46 tetrads, again with the bias being towards the west.

	Jan	Feb	Mar	Apr	Sep	Oct	Nov	Dec
No. of birds	23	12	14	7	1	110	66	27
No. of sites	9	6	11	4	1	21	9	5

In the first winter period ca. 68% of records were of single birds and the largest counts were of five at Lower Standean on 19 Jan, five at Monkton on 27 Jan and seven at Warnham LNR on 3 Feb. Several observers noted birds coming to seed feeders in ones and twos, often associating with other finches, and a female was seen feeding on nyger seed at Pett Level on 5 Apr. In contrast to last year, when there were no records in April, this year there were at least seven birds noted from four sites. The latest spring record was a single bird at The Burgh (Burpham) on 16 Apr, contrasting with the 10-year average date of 23 Apr.

The earliest returning bird was recorded on 30 Sep, the same day as last year and three days later than the 10-year average date of 27 Sep. Interestingly, this bird was found inland at the Knepp Estate whereas records for the first half of October were all from coastal sites.

Coastal passage was recorded throughout October with numerous counts of mostly single birds, mainly at Hastings, Beachy Head, Seaford Head and Selsey Bill. Although there were counts of tens at both Wakehurst Place and Old Lodge LNR (Ashdown Forest) in the second winter period, the highest count of the year was a flock of 60 at Blackdown (Fernhurst) on 19 Oct and 27 Oct, whilst 30 were noted feeding on the ground amongst trees at Lavender Platt (Ashdown Forest) on 12 Nov and a flock of 18 were feeding on beech mast with Chaffinches at Old Lodge LNR on the 24th. [SPB]

Greenfinch*Chloris chloris*

Very common resident and possibly fairly common passage migrant and scarce winter visitor.

Greenfinches were recorded in 347 tetrads, slightly fewer than in 2012. In the early SWBS they were recorded in 50 of 100 squares surveyed and in the late survey in 70 of the 114 squares surveyed. During the first winter period 54 double-figure counts were recorded, mostly in February. The highest count of this period was 70 birds, and came from Chichester on 23 Jan, whilst 50 were recorded at both Pagham Hbr on 5 Mar and Pett village on the 18th, just ahead of 45 at Patcham on the 6th and 40 at Bognor Regis on 9 Feb.

Breeding was confirmed in 14 tetrads and was probable in a further 23. Nest building was observed at Lancing on 10 Apr and at Sheepcote Valley (Brighton) on 22 May. Fledging was first recorded from Worthing on 16 Jun, then Sheepcote Valley on 29 Jun and various sites until 11 Aug at Worthing. During a breeding survey at Pagham Hbr 37 pairs or territories were identified.

There were few post-breeding flocks noted although at Kingley Vale 50 were recorded on 9 Aug, increasing to 75 by the 15th, and at Sheepcote Valley a count of 54 was recorded on 28 Aug.

Evidence of autumn movements was noted from Selsey Bill with most birds moving west. In October these included 44 W and 9 E on the 7th, 47 W on the 8th and 24 W on the 9th, whilst at

Beachy Head 43 W were noted on the 29th. The largest count involving birds moving along the coast, however, was from Selsey Bill on 2 Nov with 94 W.

During the second winter period there were 30 double-figure counts, of which the largest was 95 at Almodington (Selsey) on 17 Nov; the next highest count of 34 came from Sheepcote Valley on 30 Oct. The highest count altogether, and the largest of 2013, came on 15 Dec from Chichester which involved a pre-roost flock of 100 in a garden.

There were no reports received during 2013 of any birds with trichomonosis; this is the second consecutive year that this has been the case. [DB]

Serin

Serinus serinus

Very scarce passage migrant; may have bred. Amber listed species of medium conservation concern. Schedule 1 species.

1993: The record of one at Weir Wood Res on 12 May has been withdrawn.

2013: An adult female, seen to arrive over the sea at Selsey Bill on 12 May (MAG, GAH, SH), stayed until the 14th. An adult male was recorded at Beachy Head on the 15th (RHC, MEC). These two raise the county total for this century to 60. [JAH]

Goldfinch

Carduelis carduelis

Probably fairly common resident, common summer visitor and passage migrant and fairly common winter visitor.

Goldfinches were recorded from 408 tetrads across the county with records distributed throughout the year. During the first winter period there were 75 double-figure counts, mostly of flocks of between ten and 30. The highest count for this time came from Ticehurst on 22 Jan when 64 were recorded; 50 at Beachy Head on 9 Mar was the next highest count followed by two counts of 40 thereafter at Pagham Hbr on 22 Jan and on the Downs at Plumpton on 2 Feb. During the early SWBS birds were recorded in 53 of the 100 squares surveyed.

Breeding was confirmed in 14 tetrads and was probable in a further 23. Fledging was first noted from a Brighton garden on 3 Jun where the juveniles were using a feeder containing sunflower hearts. The latest recorded observation of fledging came from Wisborough Green on the comparatively late date of 27 Aug with a third brood of three for the season, high productivity indeed. A breeding survey at Pagham Hbr identified 12 pairs or territories.

Post-breeding flocks began forming from mid-July onwards, the first notable flock being 25 at Plumpton on 7 Jul, numbers increasing from then until the end of August. Ten counts between 24 and 50 were recorded during this time, whilst 50 at High Cross Fm (Uckfield) on 22 Aug had increased to 60 two days later; observers at Truleigh Hill recorded a count of 80 on 26 Nov whilst at Beeding Brooks 140 were recorded on the last day of August, the highest count of the year away from the coastal sites. Autumn movements were small by comparison with 2012. This is apparent when comparing the highest count of 2013, 550 W on 2 Nov at Hastings, with that of 2012, of 3000 at Pett Level on 7 Oct. Although a total of 2923 was recorded on 33 days between 14 Sep and 15 Nov during regular migration watches at Hasting this is fewer than the day total above. There were still 18 three-figure counts in the autumn, however, with another four into the first week of November; these alone gave a total of 3917, including 400 at Beachy Head on both 24 and 29 Oct.

In the second winter period there were fewer than 90 double-figure counts, although some of these in early November probably reflect late autumn movements. There were also seven three-figure counts; those containing winter flocks, as opposed to autumn movements, included 110 at Shoreham Hbr on 12 Nov and near Bolney on 30 Nov, and 100 at Pagham Hbr on 6 Nov. Other notable counts during this time came from Cliff End (Pett) with 95 on 14 Nov, Sheepcote Valley with 85 on 7 Nov and Cissbury Ring with 80 on 29 Nov. During the late SWBS Goldfinches were recorded in 72 of the 114 squares surveyed.

The Steyning RG trapped 128 different individuals at The Mumbles (Steyning) where seed is offered throughout the winter whereas at their other site at Cissbury only four birds were ringed. The provision of food is not the sole reason for the difference as ringers at Ladywell (Coombes) ringed only four birds despite the provision of niger seed. The Rye Bay RG trapped 263 new and 12 retraps of which 175 were young. [DB]

Siskin

Carduelis spinus

Common winter visitor and passage migrant. Very scarce breeder.

During the first winter period there were about 40 records of ten or more with the largest counts being from Warnham LNR with monthly maxima of 140 in January, 150 in February, 100 in March and up to 60 remaining on 5 Apr. Elsewhere 50 were counted at Buchan Park on 28 Feb, 45 at Weir Wood Res on 31 Jan, 35 at Salehurst on 9 Feb and 30s at Pagham Hbr on 2 Jan, Midhurst on the 20th and Stansted Forest on 28 Mar and Pett Level on the 31st. Counts in April (apart from at Warnham LNR above) were significantly lower as birds departed and generally did not exceed ten.

Breeding was confirmed in only two tetrads (as in 2012) and was probable in a further 11. An adult male with a fledgling was recorded in Roffey (Horsham) on 10 May and fledglings were noted in Midhurst on 14 Jun. Only one territory was noted in the *Thames Basin and Wealden Heaths Breeding Bird Survey*.

Into August, the largest count was of 25 birds calling noisily and feeding on birches at Chelwood Gate (Ashdown Forest) on the 15th, probably a post-breeding aggregation. In the autumn, 563 were recorded during an extended migration watch at Hastings from 26 dates between 15 Sep and 15 Nov with a peak count of 100 on 29 Oct. Elsewhere, the highest count was of 50 at Troutbeck (Eridge) on 6 Oct. During the second winter period there were only two records of large flocks; the two highest counts were of 100 at Pett Level and 50 at Sheepcote Valley (Brighton) on 7 Nov. There were a further 11 records of double-figure counts of from ten to 40 or more but, in general, numbers were small from mid-November onwards. [SPB]

Linnet

Carduelis cannabina

Fairly common but decreasing resident and partial migrant. Red listed species of high conservation concern.

During the first winter period there were 17 records of counts of 100 or more, the largest being 400 at Pagham Hbr on 25 Jan, 180 at Coombes on 22 Jan and c.120 at Sheepcote Valley (Brighton) on 16 Jan. There were also counts of 120 at West Dean on 17 Jan, Woodingdean on 30 Jan and Pulborough Brooks on 11 Mar, with 150 at the latter site on 1 Apr.

Breeding was confirmed in ten tetrads and was probable in a further 35. Probable breeding activity was first noted on 20 Mar at Sheepcote Valley. Birds were seen carrying faecal sacs or food for youngsters on 5 Jun at Hindleap Warren (Ashdown Forest) and the first fledged young were recorded on 2 Jun at Ellisons Pond (Ashdown Forest). During the *Thames Basin and Wealden Heaths Breeding Bird Survey* (see page 220) only 33 pairs were found compared to 52 last year and slightly lower than the average of 39 for the previous five.

During June and July numbers were generally unremarkable except for 60 on 28 Jun at Sheepcote Valley and 40s at Beachy Head on 7 Jul and Winchelsea on the 16th. A survey of the Norfolk Estate recorded 178 during this period. One hundred were recorded at Medmerry on 4 Aug but thereafter numbers generally remained low until mid-month with 50 at Pulborough Brooks on the 14th and, on the 29th, 70 at Rye Hbr and 150 at Sheepcote Valley. Numbers increased significantly in the autumn months with 25 records of 100 or more, with high counts of 400 at Cadborough (Rye) on 20 Oct and 250 at Chantry Hill (Storrington) on Sep 29 and at Bopeep (Alciston) on Oct 6. The peak visible migration counts were 250 E in 3 hr at Selsey Bill on 1 Oct and 350 E at Beachy Head on the 3rd. However, during the migration watches at Hastings the species was recorded on 20 dates between 27 Sep and 15 Nov but the total was only 484 with a maximum of 105 E on 14 Oct.

During the second winter period there were only five records in three figures: 500 at The Burgh (Burpham) on 20 Dec, 380 at Brede Levels in two flocks on 7 Nov, 200 at West Dean on 17 Dec and 100 at Pagham Hbr on 16 and 19 Dec. [SPB]

Lesser Redpoll

Carduelis cabaret

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

Lesser Redpolls were reported from 87 tetrads in 2013, a slight drop since 2012. In the first winter period there were nine records of over 40 birds, with the highest counts coming from Warnham LNR with 100 on 29 Jan (with 50 there on 11 Feb), Ashdown Forest with over 80 in the Roman Road area on 20 Feb and 49 at Barnsden (Ashdown Forest) on 9 Mar.

During the spring months there were six records of over ten birds, with the highest counts being 40 at Warnham LNR on 5 Apr, 20 at Greatham Bridge on the 2nd and 19 at Poundgate (Ashdown Forest) on the 10th, but some 70% of records during this period were of ones or twos. Breeding was confirmed in only two tetrads and was probable in a further nine. Birds were noted visiting a probable nest site on Ashdown Forest on 1 May and the first fledglings were noted in the area on the 27th. All the Ashdown Forest breeding records came from 11 1-km squares, suggesting a minimum of 11 pairs or territories. There were only three records of fledged young, all on Ashdown Forest, three at the Old Airstrip on 27 May, one at Hindleap Warren on 14 Jul and a mixed party of adults and juveniles at Stonehill on 8 Aug. During the *Thames Basin and Wealden Heaths Breeding Bird Survey* only two territories were identified (see page 220). During the summer months the highest counts were ten at two sites on Ashdown Forest.

The main autumn passage occurred in late October and early November with 120 and 400 at Pett Level on 24 Oct and 7 Nov respectively and at Beachy Head there were 40 on 24 Oct and 50 on 2 Nov. The migration watchers at Hastings recorded 568 birds on 16 dates between 30 Sep and 15 Nov with a maximum daily count of 222 on 2 Nov. The scale of the autumn passage can be crudely measured by the ringing activities at Pett Level where 1455 were ringed, mostly during the autumn; this is slightly lower than the total of 1814 in 2012 but less than a quarter of the 6681

ringed in 2011. As winter developed fewer were recorded, the most notable being 36 to 46 at three sites on Ashdown Forest and 22 at Warnham LNR on 8 Dec. [PD]



Lesser Redpoll, Warnham LNR, January 2013 (Sandra Palme)

Common Redpoll

Carduelis flammea flammea

Rare vagrant.

There was a remarkable total of 62 birds which doubles the number recorded in the county since the first on 19 Oct 1964. The county total now stands at 124 of which 114 have been recorded this century. All but three were trapped and ringed. The only spring record was one at Steyning on 13 Mar (DRK, SFW). In the autumn, the first record was of one trapped at Whitbread Hollow on 24 Oct (RDME). Thereafter, no less than 57 were trapped at Pett Level between 24 Oct and 22 Nov with peak counts of five on 24 Oct, six on 2 Nov and nine on 7 Nov (RBRG). Meanwhile, one was trapped at Charleston Reedbed on 8 Nov (GD). The final record was of two seen on Ashdown Forest on 25 Nov (MJC, PDC). [JAH]

Common Crossbill

Loxia curvirostra

Irruptive species; usually scarce visitor but fairly common in some years. Very scarce breeder in some years.

Crossbills were recorded in 54 tetrads compared with 91 in 2012. Numbers reported in the first three months were much lower than the previous year with counts of only 12 at West Dean Woods on 27 Jan, 12 at Lavington Plantation on 4 Mar, and 25 at Iping Common on 30 Mar.

In the next three months reports were concentrated in the west of the county. A flock of 26 birds at Blackdown (Fernhurst) on 31 May was the largest reported but double-figure counts were noted on Lavington, Ambersham, Duncton and Iping Commons, and smaller numbers in the Ashdown Forest area. Breeding was confirmed in one tetrad with fledged young being reported from Hindleap Warren (Ashdown Forest). There was probable or possible breeding in three further tetrads; Iping Common and Lavington Common where birds were holding territory and Hesworth Common with a pair in suitable habitat.

In the second half of the year reports were more widespread but numbers still modest. A total of 84 birds was recorded on nine dates between 25 Aug and 10 Nov by the Hastings Migration Watch with peaks of 30 W on 29 Oct and 26 W on 6 Nov. There were ten reports of over 20 birds with the highest counts of 32 at Seaford Head on 29 Oct and 31 at Ambersham on 17 Oct. [PJP]

Parrot Crossbill

Loxia pytyopsittacus

Very rare vagrant.

After just one in March 1870 and another single in Jan-Feb 2012, the long-awaited influx of this species finally occurred in December of this year. Ten were found at Old Lodge LNR on Ashdown Forest on 20 Dec where they remained into 2014 (DC, JFC, BK *et al.*). These birds were part of a widespread influx into Britain in December with birds being recorded across the south-east of England from Hampshire to Suffolk and reached as far north as Yorkshire and west to Brecon (*British Birds* 107:58 and 107:114). [DHH]

Common Rosefinch

Carpodacus erythrinus

Rare vagrant. Schedule 1 species.

Three birds were recorded. The first, a spring male, was at Telscombe on 19 May (CB). The other two were trapped and ringed at Pett Level on 3 Aug and 1 Oct respectively (RBRG). These raise the county total to 32. This species is more frequently encountered in spring in Sussex, as illustrated by the table below. The dates range between 19 May (2013) and 27 Oct (2012). [JAH]

May	Jun	Jul	Aug	Sep	Oct	Total
5	13	1	1	6	6	32

Bullfinch

Pyrrhula pyrrhula

Fairly common or common resident. Amber listed species of medium conservation concern.

The species was recorded in 215 tetrads (273 tetrads in 2012). During the first winter period the highest counts were 14 at North Park Fm (Fernhurst) on 23 Feb, 12 at Canadia (Battle) on 13 Jan, and 11 at Pallingham (Pulborough) and 10 at Blackdown (Fernhurst) both on 21 Feb. In the first SWBS 50 birds were found in 21 squares out of 100 surveyed with a maximum of 11.

Breeding was confirmed in just three tetrads but was probable in a further 22. Recently fledged young were seen at Weir Wood Res on 16 Jun and at North Bersted (Bognor Regis) on 9 Aug and RBRG ringed a brood of nestlings at Sedlescombe in June.



Bullfinch, Arundel WWT, March 2013 (Nick Bond)

In the second SWBS 54 birds were recorded in 25 out of the 114 squares surveyed with a maximum of seven on 9 Dec at Twineham Grange. High monthly maximum counts included 15 at Pulborough Brooks on 9 Dec, and 12 at Pett Level on 21 Nov and again on 22 Dec, and there was a count of ten at Arundel WWT on 10 Dec. [PJP]

Hawfinch

Coccothraustes coccothraustes

Scarce or possibly very scarce breeding resident and very scarce passage migrant. Red listed species of high conservation concern.

During the early part of the year most were seen at West Dean Woods where numbers rose from one on 5 Jan through eight on the 16th, ten on the 26th and peaking at 27 on 19 Feb. Elsewhere, single birds were noted at Bewl Water on 13 Jan and Apuldrum (Chichester Hbr) on 21 Mar, two were seen at Sedlescombe on 29 Mar, and one was seen at Hastings CP on 20 Apr which might have been a migrant, similar to one there on 8 Nov 2012.

There were no records of breeding activity although there were two at Northlands (Warnham) on 3 Jun and up to four at Kingley Vale between 21 Jul and 2 Aug, perhaps indicating possible breeding in these areas.

In the second winter period there were just five records from four locations. Two were noted at West Dean Woods on 22 Nov and two flew over nearby Monkton on the 26th. At Rusper, single birds were recorded on 17 Nov and 10 Dec while the final record was of a single bird at Mountfield on 28 Dec. [DB]

Snow Bunting*Plectrophenax nivalis*

Scarce passage migrant and winter visitor. Amber listed species of medium conservation concern. Schedule 1 species.

The only record in the first winter period was of one flying over at Pagham Hbr on 5 Mar.

The first record for the second winter period was of one at Thorney Island on 20 Oct. A very tame juvenile at Goring on 30 Oct stayed until 10 Nov. At Medmerry, one on the 15th increased to five between 15 and 26 Nov; a party of five at East Head (West Wittering) on 1 Dec, which might have been the Medmerry birds, increased to six on the 2nd but fell to two on the 3rd, which may have been the two seen at Medmerry on the 4th.

Records in East Sussex commenced with a single male at Beachy Head on 24-26 Oct followed by a bird at Pett Level on 4 Nov and one at Rye Hbr on the 7th and another at Seaford Head the next day. At Camber Sands one on 19 Nov increased to six on the 24th and eight on the 25th. In December, there was one at Winchelsea Beach on the 1st but the count at Camber peaked at nine on the 7th of which two remained on the 11th, the last date for the year. It is unlikely that overall numbers in the second winter period exceeded 20. [ACG]

Lapland Bunting*Calcarius lapponicus*

Very scarce passage migrant and winter visitor. Amber listed species of medium conservation concern. Schedule 1 species.

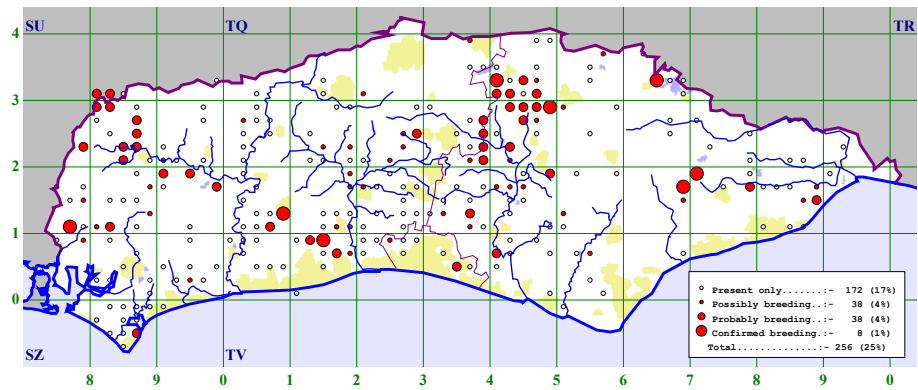
Two birds were recorded: one at Winchelsea Beach on 26 Sep (IDH) and another at Littlehampton on 24 Nov (RNP). These raise the county total this century to 95. [JAH]

Yellowhammer*Emberiza citrinella*

Fairly common resident. Red listed species of high conservation concern.

Yellowhammers were recorded throughout the year but double-figure flocks were only reported from 21 sites during the first winter period. The largest flocks were 65 at Burpham on 11 Feb, 80 at Devils Dyke GC on 24 Feb and 50 at Albourne (Hurstpierpoint) on 17 Jan. Several flocks favoured stubble or game crops, a regular flock of up to 40 fed on seed provided in private gardens at Aldwick (Bognor Regis) until the end of February and three consorted with Goldfinches to eat nettle seeds at High Cross Fm (Uckfield) on 4 Feb. In the first SWBS 160, including the Albourne flock of 50, were recorded in 11 of the 100 1-km squares surveyed.

The first song was recorded at High Cross Fm on 16 Feb. Breeding was confirmed in eight tetrads and was probable in a further 38. Very few Yellowhammers were recorded on Ashdown Forest during the first winter period but they began returning in April with four at Ellisons Pond on the 2nd and eight there on the 16th and there were 14 in the Stonehill/Friends/Misbourne areas on 6 May. Other high breeding season counts were 11 at Roman Road (Ashdown Forest) on 24 Jul, 10 at Birdham on 27 Jun and eight each at Canadia (Battle) on 23 May, Beeding Brooks on 26 May and Devils Dyke GC on 20 Jul. The earliest evidence of successful fledging came from Wadhurst on 15 Jun. Eighteen pairs were noted on the Norfolk Estate and 52 territories were mapped in the *Thames Basin and Wealden Heaths Breeding Bird Survey* (see page 220).



The first substantial flocks of the autumn were 40s at Cuckmere Haven on 4 Oct and Devils Dyke GC on the 24th; there were five other records of double-figure counts in the period. In the second winter period, 40 at Aldwick on 22 Dec was the highest count with double-figure counts from 15 other sites. In the late SWBS 82 were counted in 19 of the 114 1-km squares surveyed. Although the number of records from the west of the county was comparable with those from the east, the number of birds recorded in the west was more than double that in the east despite the plethora of records from Ashdown Forest. This observation is supported by both the winter and breeding atlas relative abundance maps (Newnham and Crabtree 2012). [ACG]

Little Bunting

Emberiza pusilla

Rare vagrant.

One was trapped, ringed and photographed at Pett Level on 24 Oct (RBRG). This was the 16th county record since the first in 1864. Little Buntings have occurred in January (one), March (one), April (one), September (two), October (seven) and November (four). [JAH]

Reed Bunting

Emberiza schoeniclus

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

In the first winter period substantial flocks were present on Ashdown Forest until mid-February, sometimes feeding on Purple Moor Grass, with 120 at Crow’s Nest on 11 Jan and over 100 birds in the Roman Road area receiving the attentions of a Hen Harrier on 7 Feb. There were flocks of 40 or more at The Mumbles (Steyning), Shoreham and Pett Level, where numbers peaked at 60 on 1 Apr; and smaller flocks were widely reported elsewhere. Several observers recorded birds at feeders during the cold weather in February.

The first song was noted at Newhaven on 19 Feb. Breeding was confirmed at five sites and was probable in a further 18 tetrads. Three pairs bred at Medmerry, 13 at Pagham Hbr and at least one at Pett Level; 17 territories were mapped at Filsham LNR and 37 at Rye Hbr.

During the autumn, the only sizeable counts were 100 at Camber on 5 Oct and 40 at Pett Level on the 24th. At Hastings 118 were recorded between 19 Sep and 8 Nov during 23 days of an extended migration watch, with a maximum of 25 on 14 Oct, but only very small numbers were noted elsewhere moving west during October.

In the second winter period double-figure flocks were recorded in eight tetrads, mainly around Pagham Hbr and near-coastal sites in the east but also on Ashdown Forest. The largest counts were 76 roosting at Weir Wood Res on 7 Dec, 40s at Arundel WWT on 5 Nov and Pagham Hbr on 19 Dec and double-figure counts at five other sites across the county.

During the year the Steyning Ringing Group handled 114 different birds with a maximum of 29 on 6 Apr.

After two colder winters the Reed Bunting seems to be holding its own in the county. [ACG]

Corn Bunting

Emberiza calandra

Fairly common but decreasing resident. Red listed species of high conservation concern.

The low numbers recorded at the end of 2012 continued into the first winter period. Counts in double figures occurred from just four areas; the highest of several counts from the Norfolk Estate was at least 60 on 3 Jan and 9 Feb, 35 were at Beeding Brooks on 3 Mar, 18 were at Rodmell on 9 Feb and ten were at Rye Hbr on 21 Jan. The highest counts in spring were 75 at Winchelsea on 28 Mar and 42 roosting in a tree at Burpham on the 25th, 30 at Upper Beeding on the 27th, 25 at Steep Down (Lancing) on 22 May and 20 at Scotney GP on the 6th.

The first song was noted at Winchelsea on 18 Feb and possible breeding evidence, mainly song, was noted from about 33 tetrads, the majority on the South Downs between the rivers Arun and Ouse. Small numbers survive, however, in both the Selsey/Pagham Hbr area and the far east of the county. Breeding was confirmed at Medmerry, Pagham Hbr and Broadbridge Heath and was probable in a further four tetrads. An estimated 36 pairs bred on the Norfolk Estate compared with 46 in the previous two years.

The first sizeable post-breeding flock was of 20 at Pagham Hbr on 29 Sep. The largest flocks of the second winter period were 58 at East Guldeford Level (Rye) on 25 Nov, 50 at Camber on 1 Dec, 40 at Steep Down (Lancing) on 9 Dec, many of them singing, and 50 on the Downs at Denton (Newhaven) on 20 Dec. The highest count in this period on the Norfolk Estate was 20 at The Burgh (Burpham) on 20 Dec. [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 (but not those clearly in captivity) will be welcomed by the Hon. Recorder for this annual feature. In order to track records, particularly those involving wildfowl which are prone to wander between sites, observers are reminded to include the age, sex and, where appropriate, colour morph of individuals when submitting records. Such records should be submitted in the approved way.

The following escaped or feral birds, other than those Category C species in the main list, were recorded in the county in 2013 (unless stated otherwise). It should be noted that the identity of these birds is largely unchecked. A list of useful references can be found in SxBR **62**:210 (2009). This list is compiled by John Hobson unless indicated otherwise. Species names and order follow IOC World Bird Names (v 4.2) available online at <http://www.worldbirdnames.org>.

Helmeted Guineafowl

Numida meleagris

Breeds in Africa, mainly south of the Sahara. Kept domestically elsewhere.

This species was recorded at three sites. The highest count was five at Cocking on 9 Jun. Elsewhere, there were twos at Kingsfold on 17 Apr and 25 Jul and at Shakeham Fm (Shermanbury) on 9 May.

Indian Peafowl

Pavo cristatus

Wild birds are restricted to the Indian subcontinent. A traditional favourite of ornamental gardens.

This species was recorded at only two sites. At Pulborough Brooks, a single bird was seen on several dates from 5 Mar to 26 Jun but then there were six on 9 Aug and ten on the 18th. Elsewhere, there was one seen at Selden Fm (Patching) on 28 Apr.

Southern Black-bellied Whistling Duck

Dendrocygna autumnalis discolor

Breeds from Panama to south-central South America. Intergrades with D.a. autumnalis (the Northern form of southern USA) in Panama.

A single bird was seen at Rye Hbr on 24 Jul.

Bar-headed Goose

Anser indicus

Breeds in central Asia; migrates to northern India for winter. Commonly kept in wildfowl collections. Free flying individuals are liable to wander.

All records of this species were of single birds. In West Sussex, one was recorded at several sites from Sidlesham, Pagham Hbr, Arundel and the Arun Valley on various dates from 3 Jan to 3 Mar and then at Arundel WWT on 2-6 May. Another individual, possibly the same, was at Pulborough Brooks on several dates from 21 Sep to 4 Nov. In East Sussex, presumably the same

individual was seen at either Pett Level or Cuckmere Haven between 13 Jan and 9 Mar. One seen at Troutbeck (Eridge) on 26 Feb was paired with a Canada Goose on 1 Mar but on other dates to the 23rd was associating with a mixed flock of Canada and Greylag Geese. This or another was again at Pett Level on 5 May and one was at Ashburnham Forge on 3 Jul with Canada Geese. Later in the year, one was at Charleston Reedbed on 8 Nov and Cuckmere Haven on 9 Dec (bearing colour rings L green R black) and also on the 20th and 22nd.

Cackling Goose

Branta hutchinsii

Breeds in northern Canada and Alaska and winters mainly in western USA. B. hutchinsii includes the subspecies hutchinsii, leucopareia, minima and taverneri. It is currently not on the British List though a number of records have been accepted by BBRC and submitted to BOURC for admission to Category A.

A single bird was recorded at Petworth Park on 8 Jun.

Black Swan

Cygnus atratus

Breeds mainly in the SE and SW regions of Australia, where it is nomadic, and New Zealand, where it has been re-introduced. Commonly kept in wildfowl collections and on ornamental lakes. Full winged birds are liable to wander. Has bred.

This species was recorded at some 16 sites, compared with only four last year. In West Sussex one was at Fishbourne (Chichester Hbr) on several dates from 6 Sep to 19 Oct associating with a herd of Mute Swans. Another was at Drayton Pond (Chichester GP) on 3 Mar and another was at the usual site of Benbow Pond on 17 and 29 Apr. One noted at Selsey Bill on 1 Sep may have been the one seen in Pagham Hbr on many dates from 6 Apr to 10 Nov, sometimes with Mute Swans and sometimes with Canada Geese. In the Arundel area, one in the water meadows on 11 Mar and 15 Apr was presumably one of the two at Arundel WWT on 13 May and of four there on 24 Jun. Elsewhere there were single birds on Amberley Wildbrooks on 11 Nov and at Widewater (Lancing) on 17 Jul.

In East Sussex one was seen at Pevensey Levels on 12 May. Another frequented the Pett Level/Rye Hbr/Scotney GP area between 13 Jan and 15 Oct. This or another single bird may have been the one which frequented the Cuckmere Haven area between 29 Apr and 12 Jul. Finally, two were at Pett Level on 1 Dec.

Ruddy Shelduck

Tadorna ferruginea

Rare vagrant.

On 25 Aug two birds were found at Scotney GP. They remained there until 15 Oct.

Two birds were then found at Pagham Hbr on 10 Dec, conceivably the same as the Scotney GP birds. They remained around the harbour, and the Ferry Pool, until 31 Dec at least. [AT]

South African Shelduck*Tadorna cana*

Breeds in southern Africa, mainly in Namibia and South Africa. In the southern winter many birds move northeast to favoured moulting grounds where sizeable concentrations occur.

A pair was recorded at Rye Hbr on 1 Jan and these were probably the two seen flying west at Pett Level on the 7th. Two (unsexed) birds were noted in Petworth Park on 15 Feb - might these have been the two from Pett Level?

Australian Shelduck*Tadorna tadornoides*

Breeds in fairly open country in southern Australia and Tasmania. In winter many birds move further north than the breeding range.

A single bird was recorded at Petworth Park on 26 Sep and 17 Oct.

Muscovy Duck*Cairina moschata*

Native to Mexico and Central and South America. Widespread in its domesticated form.

Two birds at Swanbourne Lake (Arundel) on 2 Jan had increased to ten on the 21st and then 19 on 25 Mar, then there were only 13 on 21 May but 15 on 14 Dec. An uncounted number at Warningcamp (Arundel) on 11 Sep may have been from Swanbourne Lake. Seven were noted on the pond at Selsey East Beach between 29 Nov and 20 Dec.

Wood Duck*Aix sponsa*

Breeds northern USA, winters southern USA. Commonly kept in wildfowl collections. Not recorded in the UK as a vagrant although some individuals might conceivably be of wild origin.

Four (unsexed) were seen in Tilgate Park (Crawley) on 6 Jan and three at Wivelsfield St. Georges on 10 Apr.

Chestnut-breasted Teal*Anas castanea*

Commonly distributed in SE and SW Australia and Tasmania. Often kept in wildfowl collections.

A male was recorded at Pett Level on several dates from 14 to 29 May and again on 25 Jun and 25 Nov. This was the first sighting of this species in Sussex since 1988.

Harris's Hawk***Parabuteo unicinctus***

Breeds from SW USA south to Chile and central Argentina; it is non-migratory. Popular in falconry from which it sometimes escapes.

A single bird was recorded at Chichester GP on four dates between 24 Jan and 12 Feb and again on 9 May.

Red-tailed Hawk***Buteo jamaicensis***

Breeds commonly throughout much of North America and the Caribbean; some move south to winter in Central America. Often kept in captivity.

Records came from six sites in West Sussex of what could have been one wandering individual. One was seen at Cocking (where one had been seen in 2013) on 7 Feb, 28 Apr and 9 Jun. Other sightings were from Waltham Brooks on 30 Apr, near the Knepp Estate on 10 Jun, Pulborough Brooks on 16 Sep, Bury on 2 Oct and Applesham (Coombes) on 7 Oct.

Cockatiel***Nymphicus hollandicus***

Common Australian nomad. One of the commonest aviary birds.

A single bird was seen flying east along the coast road at Worthing on 10 Dec.

Eastern Rosella***Platycercus eximius***

Native to SE Australia and Tasmania; introduced and feral in north island New Zealand. Inhabits lightly wooded country, parks and gardens.

One was seen at The Midrips on 10 Jun.

Budgerigar***Melopsitticus undulatus***

Common Australian nomad. One of the most common aviary birds.

Single birds were recorded at Chilgrove on 17 Feb, Selsey Bill on 8 May and Bognor Regis on 13 Jul.

Zebra Finch***Taeniopygia guttata***

Common resident or nomad in Australia; native in Indonesia. One of the commonest aviary birds. A prolific breeder.

Two single birds were seen: one in Portslade on 3 Aug and a male with House Sparrows at Durrington on 31 Oct.

Breeding Bird Survey (BBS) results for Sussex 2009-2013

For each species recorded, 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 2009-2013. Species which have only been recorded in single squares have been omitted from the list, but are included in the total numbers of species recorded. Red-listed and amber-listed species of conservation concern are shown in the relevant colours.

	Year (and total no. of squares surveyed)									
	2009 (134)		2010 (138)		2011 (145)		2012 (149)		2013 (156)	
	n	%	n	%	n	%	n	%	n	%
Mute Swan	18	13	16	12	18	12	17	11	15	10
Greylag Goose	14	10	11	8	16	11	15	10	16	10
Greylag Goose (domestic)	1	1			1	1	2	1	1	1
Canada Goose	38	28	28	20	41	28	40	27	37	24
Egyptian Goose			2	1	2	1	2	1	1	1
Shelduck	6	4	7	5	4	3	7	5	11	7
Mandarin Duck	6	4	5	4	7	5	5	3	7	4
Gadwall	2	1	2	1	3	2	1	1	4	3
Mallard	74	55	80	58	81	56	88	59	87	56
Mallard (domestic)	1	1	2	1	1	1			1	1
Tufted Duck	7	5	6	4	8	6	9	6	9	6
Red-legged Partridge	19	14	23	17	17	12	16	11	19	12
Grey Partridge	2	1	2	1	7	5	3	2	1	1
Pheasant	104	78	110	80	121	83	118	79	123	79
Cormorant	15	11	14	10	12	8	18	12	10	6
Little Egret	6	4	7	5	7	5	5	3	7	4
Grey Heron	39	29	36	26	30	21	37	25	30	19
Little Grebe	2	1	4	3	2	1	3	2	1	1
Great Crested Grebe	1	1	2	1	3	2	3	2	4	3
Red Kite	1	1	1	1	4	3	1	1	4	3
Marsh Harrier	1	1	2	1			1	1		
Sparrowhawk	12	9	13	9	16	11	13	9	18	12
Buzzard	39	29	47	34	60	41	74	50	79	51
Kestrel	33	25	36	26	42	29	41	28	34	22
Hobby	1	1	3	2	2	1	3	2	2	1
Peregrine	2	1			3	2	1	1	1	1
Moorhen	57	43	52	38	56	39	47	32	51	33
Coot	15	11	18	13	16	11	22	15	17	11
Oystercatcher	6	4	2	1	2	1	3	2	5	3
Lapwing	14	10	18	13	15	10	14	9	15	10
Whimbrel			2	1	1	1	1	1	3	2
Curlew	2	1	2	1	2	1	4	3	5	3
Redshank	3	2	2	1	1	1	1	1	6	4
Black-headed Gull	22	16	16	12	19	13	20	13	22	14
Mediterranean Gull	2	1	2	1	5	3	6	4	4	3
Common Gull	1	1	6	4	2	1	6	4	6	4

	Year (and total no. of squares surveyed)									
	2009 (134)		2010 (138)		2011 (145)		2012 (149)		2013 (156)	
	n	%	n	%	n	%	n	%		
Lesser Black-backed Gull	13	10	14	10	12	8	12	8	18	12
Herring Gull	63	47	69	50	76	52	85	57	96	62
Great Black-backed Gull	6	4	6	4	5	3	3	2	5	3
Sandwich Tern	1	1	1	1	3	2	2	1	1	1
Common Tern	3	2	6	4	4	3	2	1	3	2
Feral Pigeon	33	25	42	30	34	23	39	26	37	24
Stock Dove	35	26	40	29	55	38	49	33	59	38
Woodpigeon	134	100	137	99	144	99	148	99	154	99
Collared Dove	88	66	87	63	88	61	89	60	89	57
Turtle Dove	10	7	5	4	7	5	7	5	4	3
Cuckoo	47	35	45	33	55	38	39	26	41	26
Barn Owl	7	5	5	4	1	1	3	2	3	2
Little Owl	3	2	6	4	4	3	4	3	4	3
Tawny Owl	3	2	9	7	5	3	10	7	5	3
Swift	47	35	41	30	42	29	42	28	43	28
Kingfisher			1	1			1	1		
Green Woodpecker	85	63	90	65	97	67	102	68	104	67
Great Spotted Woodpecker	81	60	92	67	93	64	100	67	110	71
Lesser Spotted Woodpecker					2	1	1	1	1	1
Magpie	125	93	122	88	130	90	129	87	135	87
Jay	55	41	66	48	68	47	67	45	82	53
Jackdaw	106	79	109	79	121	83	120	81	130	83
Rook	67	50	76	55	80	55	85	57	88	56
Carriion Crow	130	97	134	97	139	96	143	96	153	98
Raven			1	1	4	3	4	3	7	4
Goldcrest	35	26	45	33	57	39	63	42	46	29
Firecrest	1	1	2	1	3	2	2	1		
Blue Tit	129	96	132	96	142	98	145	97	153	98
Great Tit	124	93	128	93	139	96	137	92	150	96
Coal Tit	47	35	37	27	43	30	44	30	37	24
Marsh Tit	14	10	9	7	19	13	14	9	13	8
Woodlark	2	1	2	1	2	1	2	1	1	1
Skylark	68	51	73	53	74	51	78	52	75	48
Swallow	85	63	89	64	107	74	100	67	109	70
House Martin	32	24	32	23	36	25	29	19	29	19
Cetti's Warbler	4	3	5	4	6	4	5	3	6	4
Long-tailed Tit	77	57	71	51	61	42	65	44	53	34
Chiffchaff	113	84	122	88	123	85	123	83	120	77
Willow Warbler	29	22	25	18	33	23	31	21	41	26
Blackcap	108	81	110	80	123	85	127	85	130	83
Garden Warbler	28	21	29	21	33	23	36	24	30	19
Lesser Whitethroat	15	11	18	13	18	12	9	6	20	13
Whitethroat	77	57	83	60	101	70	83	56	89	57

	Year (and total no. of squares surveyed)									
	2009 (134)		2010 (138)		2011 (145)		2012 (149)		2013 (156)	
	n	%	n	%	n	%	n	%	n	%
Sedge Warbler	9	7	7	5	9	6	5	3	8	5
Reed Warbler	10	7	12	9	14	10	13	9	16	10
Nuthatch	56	42	64	46	67	46	73	49	66	42
Treecreeper	24	18	29	21	35	24	42	28	27	17
Wren	125	93	131	95	138	95	142	95	146	94
Starling	94	70	91	66	93	64	105	70	101	65
Blackbird	133	99	138	100	144	99	147	99	155	99
Song Thrush	118	88	122	88	122	84	129	87	131	84
Mistle Thrush	42	31	45	33	44	30	39	26	50	32
Spotted Flycatcher	5	4	4	3	7	5	2	1	2	1
Robin	131	98	134	97	142	98	146	98	152	97
Nightingale	5	4	11	8	12	8	16	11	18	12
Stonechat	1	1	2	1	1	1	3	2	2	1
Wheatear	5	4	3	2	2	1	6	4	8	5
Duncock	108	81	113	82	110	76	117	79	121	78
House Sparrow	102	76	101	73	107	74	106	71	108	69
Yellow Wagtail	1	1			2	1			1	1
Grey Wagtail	4	3	7	5	4	3	3	2	5	3
Pied/White Wagtail	66	49	53	38	55	38	55	37	55	35
Tree Pipit	1	1	2	1	4	3	1	1	3	2
Meadow Pipit	13	10	10	7	11	8	16	11	14	9
Chaffinch	129	96	135	98	142	98	146	98	154	99
Greenfinch	104	78	110	80	111	77	107	72	108	69
Goldfinch	79	59	99	72	103	71	107	72	114	73
Siskin	4	3	3	2	3	2	3	2	7	4
Linnet	49	37	45	33	46	32	49	33	45	29
Lesser Redpoll	4	3	1	1	3	2	1	1		
Common Crossbill			2	1	2	1	4	3		
Bullfinch	32	24	25	18	38	26	43	29	25	16
Yellowhammer	58	43	65	47	61	42	61	41	58	37
Reed Bunting	13	10	10	7	15	10	16	11	18	12
Corn Bunting	6	4	6	4	7	5	7	5	6	4
Number of species	115		119		128		123		132	

Breeding Bird Survey (BBS) population trends in Sussex 1994-2013

Sussex BBS population trends for 37 common species for the period 1994-2013 are presented in the table below, along with population trends for the period 2012-2013. Those trends that are considered statistically significant are indicated by asterisks. The size of the difference between the upper 95% confidence limit (UCL) and the lower 95% confidence limit (LCL) for each 1994-2013 trend gives an indication of the accuracy of the population trend. The sample size is the mean number of squares per year in which each species was recorded during 1994-2013, and trends are calculated only for species with a mean sample size of at least 30 squares.

	Change 1994-2013 (%)	UCL	LCL	Change 2012-2013 (%)	Sample size
Mallard	173*	336	71	11	46
Pheasant	-27*	-11	-41	-25	66
Moorhen	-11	51	-48	-2	32
Woodpigeon	-5	9	-17	-4	83
Collared Dove	37*	65	13	-19	52
Cuckoo	-25	13	-50	159*	31
Green Woodpecker	-35*	-12	-52	-60*	58
Great Spotted Woodpecker	231*	393	122	-21	54
Magpie	49*	91	16	3	74
Jay	-52*	-33	-65	-51*	40
Jackdaw	380*	511	278	48	65
Rook	185*	238	140	48*	46
Carriion Crow	183*	265	120	107*	81
Goldcrest	-55*	-31	-71	-77*	32
Blue Tit	61*	88	38	1	81
Great Tit	62*	90	38	43*	79
Skylark	-42*	-21	-57	-40	46
Swallow	157*	229	100	37	56
Long-tailed Tit	-24	7	-46	49	38
Chiffchaff	5	37	-19	-6	69
Blackcap	26	61	-1	-36	66
Whitethroat	213*	351	117	-24	49
Nuthatch	-13	29	-41	-30	38
Wren	-18*	-7	-27	-7	79
Starling	-67*	-53	-77	-28	61
Blackbird	45*	61	30	41*	83
Song Thrush	18	39	0	11	74
Mistle Thrush	-92*	-86	-95	0	31
Robin	7	24	-8	10	81
Duncock	-48*	-35	-58	-19	70
House Sparrow	20*	40	3	0	62
Pied Wagtail	-7	24	-30	166*	36
Chaffinch	-10	0	-20	48*	82
Greenfinch	-44*	-30	-56	17	66
Goldfinch	220*	308	151	27	52
Linnet	46	128	-7	24	31
Yellowhammer	-59*	-44	-70	-21	38

Sussex Winter Bird Survey (SWBS) results Nov 2011–Feb 2014

For each species recorded during a SWBS visit there are four columns per 'winter'.

Column 1 gives the total number of 1-km squares surveyed in Sussex in which that species has been recorded (n) with the percentage for that winter (%). **Column 2** gives the total number of individuals of that species recorded during SWBS for that winter period. In all cases this represents the sum of the early survey plus the late survey and may include two recordings of the same bird. **Column 3** is derived by dividing the total number of individuals recorded by the number of completed surveys that winter period. This can produce a comparable figure from one year to another despite variation in the number of surveys undertaken. The average is to one decimal place. **Column 4** gives the position of that species amongst all the species recorded in that particular winter period. Red-listed and amber-listed species of conservation concern are shown in the relevant colours.

	Winter 1: Nov 2011–Feb 2012				Winter 2: Nov 2012–Feb 2013				Winter 3: Nov 2013–Feb 2014			
	139 1-km squares surveyed 255 surveys completed 114 species recorded				114 1-km squares surveyed 210 surveys completed 99 species recorded				113 1-km squares surveyed 208 surveys completed 104 species recorded			
	1 n (%)	2 Total	3 Mean	4 Rank	1 n (%)	2 Total	3 Mean	4 Rank	1 n (%)	2 Total	3 Mean	4 Rank
Little Grebe	3 (2)	22	0.1	75	1 (1)	1	0.0	77	3 (3)	24	0.1	69
Gt Crested Grebe	2 (1)	13	0.1	84	1 (1)	4	0.0	78	1 (1)	6	0.0	89
Cormorant	24 (17)	152	0.6	46	17 (15)	38	0.2	46	15 (13)	42	0.2	48
Little Egret	6 (4)	20	0.1	64	6 (5)	8	0.0	59	9 (8)	18	0.1	55
Grey Heron	29 (21)	54	0.2	43	23 (20)	43	0.2	42	16 (14)	28	0.1	47
Mute Swan	20 (14)	92	0.4	48	20 (18)	165	0.8	43	21 (19)	189	0.9	44
Greylag Goose	8 (6)	457	1.8	57	6 (5)	108	0.5	60	4 (4)	473	2.3	61
Domestic Goose	2 (1)	12	0.0	85	1 (1)	4	0.0	79	2 (2)	4	0.0	76
Canada Goose	20 (14)	252	1.0	49	16 (14)	107	0.5	47	14 (12)	239	1.1	50
Brent Goose	3 (2)	1460	5.7	76					3 (3)	707	3.4	70
Egyptian Goose					1 (1)	4	0.0	80	1 (1)	10	0.0	90
Common Shelduck	3 (2)	10	0.0	77	1 (1)	1	0.0	81	2 (2)	20	0.1	77
Mandarin Duck	2 (1)	15	0.1	86	3 (3)	7	0.0	70	1 (1)	2	0.0	91
Eurasian Wigeon	5 (4)	2567	10.1	65	4 (4)	35	0.2	62	4 (4)	23	0.1	62
Gadwall									2 (2)	84	0.4	78
Eurasian Teal	7 (5)	58	0.2	60	6 (5)	102	0.5	61	6 (5)	80	0.4	59
Mallard	52 (37)	863	3.4	34	40 (35)	761	3.6	32	40 (35)	831	4.0	32
Domestic Mallard	3 (2)	11	0.0	78	1 (1)	1	0.0	82	2 (2)	15	0.1	79
Pintail	1 (1)	1	0.0	87								
Shoveler			0.0						1 (1)	7	0.0	92
Common Pochard	1 (1)	1	0.0	88	1 (1)	4	0.0	83	2 (2)	13	0.1	80
Tufted Duck	2 (1)	4	0.0	89	4 (4)	54	0.3	63	3 (3)	55	0.3	71
Red-brst Merganser									1(1)	9	0.0	93
Goosander					1 (1)	2	0.0	84	1 (1)	5	0.0	94
Red Kite	1 (1)	1	0.0	90	1 (1)	1	0.0	85	5 (4)	6	0.0	63
Marsh Harrier					2 (2)	2	0.0	73	1 (1)	1	0.0	95
Hen Harrier	1 (1)	1	0.0	91								

	Winter 1: Nov 2011–Feb 2012				Winter 2: Nov 2012–Feb 2013				Winter 3: Nov 2013–Feb 2014			
	1 n (%)	2 Total	3 Mean	4 Rank	1 n (%)	2 Total	3 Mean	4 Rank	1 n (%)	2 Total	3 Mean	4 Rank
Sparrowhawk	25 (18)	30	0.1	45	16 (14)	19	0.1	48	17 (15)	17	0.1	46
Common Buzzard	75 (54)	162	0.6	24	60 (53)	128	0.6	22	76 (67)	181	0.9	15
Kestrel	53 (38)	77	0.3	32	39 (34)	60	0.3	34	29 (26)	38	0.2	37
Merlin	1 (1)	1	0.0	92	2 (2)	2	0.0	74	1 (1)	1	0.0	96
Peregrine	4 (3)	5	0.0	70	2 (2)	2	0.0	75	8 (7)	10	0.0	57
Red-legged Partridge	8 (6)	49	0.2	58	8 (7)	35	0.2	55	5 (4)	33	0.2	64
Grey Partridge	4 (3)	25	0.1	71					1 (1)	5	0.0	97
Common Pheasant	83 (60)	709	2.8	18	70 (61)	646	3.1	16	73 (65)	828	4.0	17
Moorhen	48 (35)	191	0.7	36	30 (26)	97	0.5	37	36 (32)	149	0.7	34
Coot	12 (9)	40	0.2	54	12 (11)	87	0.4	51	13 (12)	168	0.8	51
Oystercatcher	3 (2)	24	0.1	79	1 (1)	10	0.0	86				
Avocet	1 (1)	10	0.0	93								
Golden Plover	1 (1)	39	0.2	94	1 (1)	1	0.0	87				
Grey Plover	1 (1)	8	0.0	95								
Lapwing	18 (13)	1482	5.8	51	13 (11)	1286	6.1	52	11 (10)	1283	6.2	52
Sanderling	1 (1)	1	0.0	96								
Dunlin	2 (1)	61	0.2	97	1 (1)	112	0.5	88				
Ruff	2 (1)	3	0.0	98	1 (1)	1	0.0	89				
Common Snipe	6 (4)	11	0.0	66	7 (6)	13	0.1	57	4 (4)	21	0.1	65
Woodcock	2 (1)	2	0.0	99	4 (4)	5	0.0	64	1 (1)	1	0.0	98
Black-tailed Godwit	3 (2)	71	0.3	80								
Curlew	6 (4)	251	1.0	67	1 (1)	164	0.8	90	2 (2)	117	0.6	81
Common Redshank	4 (3)	26	0.1	72	1 (1)	1	0.0	91	1 (1)	2	0.0	99
Greenshank	1 (1)	1	0.0	100								
Green Sandpiper	1 (1)	1	0.0	101					2 (2)	2	0.0	82
Turnstone	1 (1)	6	0.0	102								
Mediterranean Gull	1 (1)	3	0.0	103					1 (1)	3	0.0	100
Little Gull									1 (1)	6	0.0	101
Black-headed Gull	74 (53)	2767	10.9	25	59 (52)	3228	15.4	24	60 (53)	2582	12.4	24
Common Gull	24 (17)	1450	5.7	47	27 (24)	1158	5.5	41	19 (17)	1119	5.4	45
Lesser Black-bk Gull	7 (5)	30	0.1	61	5 (4)	10	0.0	65	3 (3)	6	0.0	72
Herring Gull	85 (61)	2657	10.4	17	74 (65)	1910	9.1	15	69 (61)	2135	10.3	18
Great Black-bk Gull	7 (5)	22	0.1	62	3 (3)	9	0.0	71	4 (4)	61	0.3	66
Feral Pigeon	35 (25)	519	2.0	39	21 (18)	834	4.0	44	25 (22)	353	1.7	42
Stock Dove	33 (24)	171	0.7	40	28 (25)	152	0.7	39	30 (27)	158	0.8	36
Woodpigeon	134 (96)	12,600	49.4	1	110 (96)	10893	51.9	3	111 (98)	9503	45.7	4
Collared Dove	65 (47)	484	1.9	29	52 (46)	463	2.2	29	58 (51)	365	1.8	27
Barn Owl	1 (1)	2	0.0	104	1 (1)	1	0.0	92				
Little Owl	3 (2)	3	0.0	81	1 (1)	2	0.0	93	2 (2)	2	0.0	83
Tawny Owl	3 (2)	3	0.0	82	1 (1)	1	0.0	94	2 (2)	2	0.0	84
Short-eared Owl	1 (1)	2	0.0	105								
Kingfisher	4 (3)	4	0.0	73					4 (4)	5	0.0	67
G. Woodpecker	80 (58)	153	0.6	20	59 (52)	116	0.6	25	64 (57)	111	0.5	21

	Winter 1: Nov 2011–Feb 2012				Winter 2: Nov 2012–Feb 2013				Winter 3: Nov 2013–Feb 2014			
	1 n (%)	2 Total	3 Mean	4 Rank	1 n (%)	2 Total	3 Mean	4 Rank	1 n (%)	2 Total	3 Mean	4 Rank
G. S. Woodpecker	92 (66)	229	0.9	14	65 (57)	175	0.8	20	59 (52)	124	0.6	26
L. S. Woodpecker	1 (1)	1	0.0	106								
Woodlark	1 (1)	3	0.0	107	1 (1)	2	0.0	95	1 (1)	2	0.0	102
Skylark	50 (36)	322	1.3	35	31 (27)	208	1.0	36	40 (35)	205	1.0	33
Barn Swallow					1 (1)	1	0.0	96				
Meadow Pipit	28 (20)	147	0.6	44	21 (18)	253	1.2	45	24 (21)	240	1.2	43
Grey Wagtail	8 (6)	9	0.0	59	3 (3)	4	0.0	72	10 (9)	11	0.1	53
Pied Wagtail	71 (51)	233	0.9	27	59 (52)	241	1.1	26	67 (59)	227	1.1	19
Wren	112 (81)	620	2.4	9	89 (78)	501	2.4	10	96 (85)	543	2.6	8
Duncock	110 (79)	523	2.1	11	87 (76)	415	2.0	12	79 (70)	394	1.9	12
Robin	132 (95)	1916	7.5	4	108 (95)	1766	8.4	4	111 (98)	1636	7.9	5
Eurasian Stonechat	7 (5)	19	0.1	63	5 (4)	12	0.1	66	6 (5)	14	0.1	60
Blackbird	134 (96)	2332	9.1	2	113 (99)	2333	11.1	1	112 (99)	1629	7.8	2
Fieldfare	79 (57)	2603	10.2	23	57 (50)	2805	13.4	27	53 (47)	1494	7.2	29
Song Thrush	101 (73)	404	1.6	12	88 (77)	317	1.5	11	75 (66)	273	1.3	16
Redwing	65 (47)	1474	5.8	30	52 (46)	2012	9.6	30	60 (53)	1679	8.1	25
Mistle Thrush	37 (27)	78	0.3	38	30 (26)	60	0.3	38	28 (25)	62	0.3	39
Cetti's Warbler	1 (1)	1	0.0	108					2 (2)	3	0.0	85
Dartford Warbler	1 (1)	1	0.0	109					1 (1)	1	0.0	103
Blackcap	1 (1)	1	0.0	110	1 (1)	1	0.0	97	3 (3)	4	0.0	73
Chiffchaff	6 (4)	7	0.0	68	5 (4)	6	0.0	67	2 (2)	2	0.0	86
Goldcrest	66 (47)	264	1.0	31	40 (35)	109	0.5	33	43 (38)	103	0.5	31
Firecrest	2 (1)	2	0.0	111	2 (2)	2	0.0	76	4 (4)	4	0.0	68
Long-tailed Tit	83 (60)	652	2.6	19	64 (56)	507	2.4	21	57 (50)	357	1.7	28
Marsh Tit	18 (13)	51	0.2	52	11 (10)	19	0.1	53	8 (7)	11	0.1	58
Coal Tit	44 (32)	153	0.6	37	37 (32)	132	0.6	35	29 (26)	62	0.3	38
Blue Tit	132 (95)	3298	12.9	5	107 (94)	2668	12.7	5	113 (100)	2030	9.8	1
Great Tit	130 (94)	1723	6.6	6	100 (88)	1389	6.6	8	106 (94)	1109	5.3	6
Nuthatch	68 (49)	236	0.9	28	56 (49)	206	1.0	28	46 (41)	127	0.6	30
Treecreeper	34 (24)	64	0.3	41	28 (25)	63	0.3	40	26 (23)	57	0.3	41
Jay	80 (58)	229	0.9	21	70 (61)	176	0.8	17	61 (54)	159	0.8	22
Magpie	130 (94)	1288	5.1	7	107 (94)	1180	5.6	6	104 (92)	1014	4.9	7
Jackdaw	111 (80)	3673	14.4	10	97 (85)	4139	19.7	9	95 (84)	3866	18.6	10
Rook	73 (53)	3513	13.8	26	66 (58)	3817	18.2	19	67 (59)	2644	12.7	20
Carriion Crow	134 (96)	3083	12.1	3	112 (98)	2137	10.2	2	112 (99)	1881	9.0	3
Raven	6 (4)	9	0.0	69	11 (10)	15	0.1	54	3 (3)	4	0.0	74
Common Starling	101 (73)	6493	25.5	13	76 (67)	5158	24.6	14	82 (73)	4762	22.9	11
House Sparrow	92 (66)	2132	8.4	15	83 (73)	1678	8.0	13	79 (70)	1377	6.6	13
Chaffinch	130 (94)	2001	7.8	8	104 (91)	1355	6.5	7	96 (85)	1011	4.9	9
Brambling	2 (1)	10	0.0	112	1 (1)	3	0.0	98	2 (2)	12	0.1	87
Greenfinch	81 (58)	568	2.2	22	60 (53)	435	2.1	23	61 (54)	399	1.9	23
Goldfinch	90 (65)	728	2.9	16	69 (61)	563	2.7	18	79 (70)	772	3.7	14
Siskin	14 (10)	176	0.7	53	8 (7)	49	0.2	56	9 (8)	63	0.3	56

	Winter 1: Nov 2011–Feb 2012				Winter 2: Nov 2012–Feb 2013				Winter 3: Nov 2013–Feb 2014			
	1 n (%)	2 Total	3 Mean	4 Rank	1 n (%)	2 Total	3 Mean	4 Rank	1 n (%)	2 Total	3 Mean	4 Rank
Linnet	20 (14)	389	1.5	50	15 (13)	340	1.6	50	10 (9)	84	0.4	54
Lesser Redpoll	12 (9)	101	0.4	55	7 (6)	13	0.1	58	2 (2)	4	0.0	88
Common Crossbill	4 (3)	8	0.0	74								
Bullfinch	53 (38)	175	0.7	33	44 (39)	111	0.5	31	32 (28)	88	0.4	35
Snow Bunting	1 (1)	1	0.0	113								
Yellowhammer	32 (23)	242	0.9	42	16 (14)	185	0.9	49	27 (24)	173	0.8	40
Reed Bunting	11 (8)	36	0.1	56	5 (4)	12	0.1	68	15 (13)	78	0.4	49
Corn Bunting	3 (2)	18	0.1	83	4 (4)	4	0.0	69	3 (3)	10	0.0	75
Red-tailed Hawk	1 (1)	2	0.0	114	1 (1)	1	0.0	99	1 (1)	1	0.0	104

Sussex Winter Bird Survey top 20 species based on presence in 1-km squares

Winter 1: Nov 2011–Feb 2012	Winter 2: Nov 2012–Feb 2013	Winter 3: Nov 2013–Feb 2014
1 st Woodpigeon	1 st Blackbird	1 st Blue Tit
2 nd Blackbird	2 nd Carrion Crow	2 nd Blackbird
3 rd Carrion Crow	3 rd Woodpigeon	3 rd Carrion Crow
4 th Robin	4 th Robin	4 th Woodpigeon
5 th Blue Tit	5 th Blue Tit	5 th Robin
6 th Great Tit	6 th Magpie	6 th Great Tit
7 th Magpie	7 th Chaffinch	7 th Magpie
8 th Chaffinch	8 th Great Tit	8 th Wren
9 th Wren	9 th Jackdaw	9 th Chaffinch
10 th Jackdaw	10 th Wren	10 th Jackdaw
11 th Dunnock	11 th SongThrush	11 th Common Starling
12 th Song Thrush	12 th Dunnock	12 th Dunnock
13 th Common Starling	13 th House Sparrow	13 th House Sparrow
14 th Great Spotted Woodpecker	14 th Common Starling	14 th Goldfinch
15 th House Sparrow	15 th Herring Gull	15 th Common Buzzard
16 th Goldfinch	16 th Common Pheasant	16 th Song Thrush
17 th Herring Gull	17 th Jay	17 th Common Pheasant
18 th Common Pheasant	18 th Goldfinch	18 th Herring Gull
19 th Long Tailed Tit	19 th Rook	19 th Pied Wagtail
20 th Green Woodpecker	20 th Great Spotted Woodpecker	20 th Rook

ARRIVAL AND DEPARTURE DATES OF SUMMER VISITORS, 2013

	First recorded date			Last recorded date		
	2013	1960 to 2012	10-yr average (\pm SD in days)	2013	1960 to 2012	10-yr average (\pm SD in days)
Garganey	23 Mar	2 Feb	8 Mar (± 11)	20 Oct	13 Dec	2 Oct (± 21)
Quail	2 Jul	6 Feb	13 May (± 11)	10 Jul	15 Nov ²	6 Sep (± 26)
Osprey	5 Apr	4 Mar	20 Mar (± 10)	28 Oct	9 Dec	27 Oct (± 8)
Hobby	10 Apr	21 Mar	4 Apr (± 6)	24 Oct	9 Nov	23 Oct (± 15)
Little Ringed Plover	7 Mar	6 Mar	16 Mar (± 6)	14 Sep	8 Oct	26 Sep (± 10)
Wood Sandpiper	26 Apr	11 Feb	5 May (± 23)	25 Oct	16 Nov	26 Sep (± 13)
Pomarine Skua	14 Apr	10 Mar	18 Apr (± 4)	25 Aug	31 Dec	18 Sep (± 66)
Little Tern	9 Apr	1 Apr	8 Apr (± 4)	22 Sep	4 Nov	28 Sep (± 15)
Black Tern	9 Mar ¹	2 Apr	17 Apr (± 6)	24 Sep	16 Nov ³	9 Oct (± 15)
Common Tern	24 Mar	14 Mar	25 Mar (± 7)	10 Nov	26 Nov	24 Oct (± 14)
Roseate Tern	5 May	17 Apr	7 May (± 18)	22 Aug	5 Oct	28 Jul (± 37)
Arctic Tern	8 Apr	2 Apr	10 Apr (± 5)	1 Oct	31 Dec	26 Oct (± 14)
Common/Arctic Tern	6 Apr	10 Mar	4 Apr (± 8)	21 Sep	31 Dec	22 Oct (± 16)
Turtle Dove	14 Apr	5 Feb	6 Apr (± 14)	11 Sep	18 Dec	25 Sep (± 10)
Common Cuckoo	25 Mar	21 Mar ⁴	1 Apr (± 4)	30 Sep	23 Oct ⁵	14 Sep (± 8)
Nightjar	2 May	14 Apr ³⁴	1 May (± 10)	27 Sep	5 Nov	14 Sep (± 10)
Common Swift	15 Apr	7 Apr	12 Apr (± 4)	13 Oct	24 Nov	6 Oct (± 17)
Wryneck		9 Mar	20 Apr (± 14)	29 Oct	2 Nov ⁶	20 Oct (± 9)
Sand Martin	10 Mar	27 Feb	11 Mar (± 8)	14 Oct	1 Dec ⁷	22 Oct (± 17)
Barn Swallow	20 Mar	4 Feb	7 Mar (± 12)	19 Nov	28 Dec	23 Nov (± 10)
House Martin	29 Mar	1 Feb	14 Mar (± 13)	24 Nov	18 Dec ⁸	11 Nov (± 10)
Wood Warbler	16 Apr	7 Apr	17 Apr (± 7)	22 Sep	7 Oct	15 Sep (± 14)
Willow Warbler	21 Mar	4 Mar	18 Mar (± 6)	15 Oct	27 Nov ⁹	31 Oct (± 11)
Garden Warbler	19 Apr	28 Mar	3 Apr (± 4)	15 Oct	16 Nov	11 Oct (± 9)
Lesser Whitethroat	14 Apr	4 Apr	10 Apr (± 5)	15 Oct	18 Nov ¹⁰	11 Oct (± 12)
Common Whitethroat	14 Apr	19 Mar	1 Apr (± 5)	14 Oct	17 Dec	26 Oct (± 17)
Grasshopper Warbler	19 Apr	2 Apr	9 Apr (± 6)	13 Oct	1 Nov	15 Oct (± 7)
Sedge Warbler	13 Apr	23 Mar	28 Mar (± 4)	9 Oct	29 Oct	11 Oct (± 12)
Reed Warbler	14 Apr	2 Apr	7 Apr (± 3)	30 Oct	1 Dec	5 Nov (± 15)
Ring Ouzel	31 Mar	9 Feb ¹¹	30 Mar (± 7)	13 Nov	26 Dec	13 Nov (± 6)
Spotted Flycatcher	11 Apr	10 Apr ¹⁵	26 Apr (± 6)	30 Sep	18 Nov	15 Oct (± 8)
Common Nightingale	10 Apr	21 Mar	4 Apr (± 6)	23 Sep	1 Oct ¹²	14 Sep (± 10)
Common Redstart	11 Apr	5 Mar	26 Mar (± 10)	18 Oct	26 Dec	30 Oct (± 22)
Whinchat	18 Apr	18 Feb	1 Apr (± 17)	17 Nov	2 Dec	29 Oct (± 8)
Northern Wheatear	9 Mar	13 Feb	4 Mar (± 9)	19 Nov	31 Dec	11 Nov (± 9)
Pied Flycatcher	17 Apr	1 Apr	12 Apr (± 5)	22 Sep	1 Nov	1 Oct (± 8)
Yellow Wagtail	4 Apr	12 Feb	24 Mar (± 9)	17 Nov	23 Nov ¹³	24 Oct (± 8)
Tree Pipit	12 Apr	24 Mar ¹⁶	29 Mar (± 4)	6 Oct	9 Nov	15 Oct (± 10)

Notes: ¹county record date; ²excludes historic December records; ³excludes one in Cuckmere Valley 13-21 Nov 1954; ⁴excludes one at Fairlight Cove on 15 Mar 1936; ⁵excludes one at Goodwood on 11 Nov 1928; ⁶excludes one at The Crumbles on 5 Nov 1947; ⁷excludes record from unknown location on 5 Dec 1911;

⁸excludes three at Fishbourne on 22 Dec 1894; ⁹excludes two historic records on 26 Dec 1892 and 1949; ¹⁰excludes one at Burgess Hill on 21 Nov 1957 and known wintering birds; ¹¹excludes one at Mannings Heath on 2 Feb 1905; ¹²excludes one at North Bersted on 19 Oct 1943; ¹³excludes one at Sidlesham between 11 Dec 1960 and 14 Jan 1961; ¹⁴excludes one at Pulborough on 8 Apr 1912; ¹⁵excludes one at Hastings on 8 Apr 1909; ¹⁶excludes record from unknown location on 17 Mar 1922.

DEPARTURE AND ARRIVAL DATES OF WINTER VISITORS, 2013

	Last recorded date			First recorded date		
	2013	1960 to 2012	10-yr average (\pm SD in days)	2013	1960 to 2012	10-yr average (\pm SD in days)
Bewick's Swan	10 Mar	26 Apr	4 Mar (\pm 11)	16 Nov	6 Oct	12 Nov (\pm 18)
White-fronted Goose	3 Apr	25 May	22 Mar (\pm 34)	1 Oct	12 Sep	17 Oct (\pm 28)
Long-tailed Duck	7 May	14 Jun	27 Apr (\pm 43)	25 Oct	12 Aug	3 Nov (\pm 13)
Velvet Scoter	9 May	15 Jun	19 May (\pm 14)	3 Nov	2 Aug	25 Oct (\pm 16)
Goldeneye	28 Apr	31 May	22 Apr (\pm 16)	20 Sep	6 Aug	9 Oct (\pm 31)
Smew	5 Mar	24 Apr	4 Mar (\pm 14)	11 Dec	22 Oct	29 Nov (\pm 19)
Goosander	27 Mar	14 Jun	15 Apr (\pm 32)	4 Nov	12 Sep	26 Oct (\pm 14)
Black-throated Diver	27 May	21 Jun	24 May (\pm 7)	29 Sep	3 Aug	3 Oct (\pm 21)
Great Northern Diver	9 Jun	21 Jun	29 May (\pm 10)	29 Oct	16 Sep	23 Oct (\pm 16)
Red-necked Grebe	6 May	19 Jun	9 Apr (\pm 19)	10 Sep	13 Aug ²	30 Sep (\pm 31)
Hen Harrier	22 May	19 Jun	20 May (\pm 15)	27 Aug	4 Aug	22 Aug (\pm 14)
Purple Sandpiper	28 Apr	4 Jun	2 May (\pm 19)	18 Oct	1 Jul	24 Aug (\pm 33)
Jack Snipe	17 Apr	19 May	18 Apr (\pm 13)	19 Sep	24 Aug	23 Sep (\pm 13)
Great Grey Shrike		5 May ⁴	2 Apr (\pm 17)	17 Oct	26 Sep ³	12 Oct (\pm 8)
Fieldfare	22 Apr	5 Jun	26 Apr (\pm 12)	24 Sep	6 Aug	3 Oct (\pm 8)
Redwing	13 Apr	26 May ⁵	16 Apr (\pm 10)	23 Sep	6 Aug	20 Sep (\pm 18)
Water Pipit	5 Apr	28 May	22 Mar (\pm 17)	4 Nov	1 Sep	1 Nov (\pm 7)
Brambling	16 Apr	12 May	19 Apr (\pm 14)	30 Sep	3 Sep	29 Sep (\pm 6)
Snow Bunting	5 Mar	6 May	16 Feb (\pm 25)	20 Oct	17 Sep	22 Oct (\pm 8)

Notes: ¹earliest county record; ²excludes one off Brighton on 3 Aug 1872; ³excludes one at The Crumbles on 7 Sep 1899; ⁴excludes one at Rye Hbr on 14 May 1950; ⁵excludes two undated historic records of birds found dead in June.

Arrival and Departure Dates

The tables include information from 1960 with earlier notable records in notes. 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 for the current year 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 10-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.

SUMMARY OF HEATHLAND BREEDING BIRD COUNTS

Thames Basin and Wealden Heaths Breeding Bird Survey 2013, West Sussex

	AC	BD	BH	CC	CL	HC	IC	LC	LS	SC	WC	WD	WH
Hobby	-	-	-	1	-	-	1	1	-	1	-	-	-
Woodcock	9	1	-	1	1	-	-	1	-	-	1	1	-
Stock Dove	-	-	-	-	1	1	-	3	1	-	-	3	1
Turtle Dove	-	-	-	-	-	-	-	-	-	-	-	-	-
Nightjar	19	2	-	10	-	1	6	3	1	2	3	1	-
Green Woodpecker	-	-	-	2	3	2	3	1	3	2	5	7	2
Great Sp. Woodpecker	1	-	-	4	2	2	5	8	3	3	4	8	2
Woodlark	2	3	4	2	5	1	6	2	-	3	1	3	-
Skylark	-	-	-	-	-	-	-	-	-	-	-	-	-
Tree Pipit	2	2	-	1	-	-	7	3	-	3	3	2	-
Meadow Pipit	-	-	-	2	-	-	-	-	-	-	-	-	1
Common Redstart	-	2	-	2	1	-	1	-	2	1	-	1	-
Stonechat	-	1	-	-	1	-	7	3	-	2	-	-	1
Dartford Warbler	1	-	-	-	-	-	2	-	-	-	-	1	-
Common Whitethroat	3	4	2	8	5	-	5	5	2	-	8	2	1
Siskin	-	-	-	-	-	-	-	1	-	-	-	-	-
Linnet	6	2	1	3	2	-	8	5	-	2	2	1	1
Lesser Redpoll	2	-	-	-	-	-	-	-	-	-	-	-	-
Common Crossbill	-	-	-	-	-	-	1	1	-	-	-	-	-
Yellowhammer	6	-	2	2	4	-	9	9	-	6	7	4	3
Reed Bunting	-	-	-	-	-	-	1	-	-	-	-	-	-

Figures relate to pairs or territories. The hyphen (-) indicates that no territories were identified.

Key to sites:

AC: Ambersham and Heyshott Commons

BD: Blackdown (Fernhurst)

BH: Broad Halfpenny

CC: Chapel Common (Liphook)

CL: Coates Common and Lords Piece (Fittleworth)

HC: Hesworth Common

IC: Iping Common

LC: Lavington and Duncton Commons and Lavington Plantation

LS: Linchmere and Stanley Commons

SC: Stedham Common

WC: Woolbeding Common

WD: Weavers Down (Liss)

WH: West Heath Common

The above heathland sites were the only ones surveyed this year.

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NB: For an explanation of the superscripts, see the footnote below the table.

C Abell ^T	B Banks	G Boorman ^B	M Burns
M Acott ^T	DG Barber ^{BH}	S Boorman ^T	D Burt ^N
P Adelen	E Barber ^T	A Borlase ^T	RA Butler ^{BW}
J Aidley ^T	CJR Barfield ^{BCNTW}	RM Borwick ^T	C Bynes
B Akinola	RG Barnett ^{TW}	S Bosanquet	D Calder ^T
J Alford	RJ Bassett	SA Boswell ^T	P Calladine
E Allen ^X	JD Batchelder ^N	LD Bower ^B	T Callaway ^W
T Allen ^T	GS Batho ^T	NJG Bowie ^T	P Callis
L Allen-Williams ^X	S Bayley ^{NT}	AL Bowley	IK Callister
R Allison	L Beadell	PS Bowley	M Cam
A Allum ^{NW}	VR Beaney ^T	R Bown ^{BCNT}	DK Campbell ^T
AE Almeida ^{BNW}	G Beck	J Boyes	C Campion
LEF Ambler ^{BCNTW}	M Becker ^T	J Bradbury	S Card
D Andrews ^W	H Behrens ^X	RC Bradbury	S Carey ^T
F Annette ^N	J Beirne ^T	I Bradshaw	N Carpichael
A Appleby	J Bell ^N	CLG Brand	D Carrington
D Archer ^T	J Bell ^N	C Brewer ^X	B Carter
AC Armitage ^{NT}	C Bentley ^W	D Bridges ^X	HM Carter ^{BNT}
G Armstrong ^T	DP Bentley	A Bright ^T	PD Carter ^T
J Arnott ^W	VP Bentley ^{BCTW}	R Brook ^T	PM Carter ^T
P Arnott ^W	AJ Benton ^T	I Brooker	R Carter ^X
R Ash	E Bew ^{BN}	D Brookes ^X	S Carter
T Ash	M Bew ^N	C Brooks ^{BCNT}	SJC Carter ^{BNW}
D Asher ^{BCT}	R Bicker ^X	W Brooks	R Carver ^W
P Ashley	N Biddulph ^{BCN}	C Brown	MC Casemore
J Atkinson	SA Bigg	J Brown ^T	A Cashford ^T
K Attree	A Biggs ^T	M Brown ^T	MGR Cattell ^T
BP Austin ^T	SM Bignold ST	R Brown ^T	A Caulkett
DV Avis ^T	C Billinghurst ^W	R Brown	M Causer ^W
M Ayling ^{BN}	RM Billings ^T	SA Brown ^T	KG Cawte ^{BCN}
JWP Bacon	JH Bingley ^T	T Brown ^W	H Chambers ^T
E Bagguley ^X	LR Bird	WR Brown ^T	GL Champion
JTA Bagley ^{EN}	Birdguides ^T	JJ Bryant ^{BT}	P Chandler ^X
J Bailey ^N	J Birdsey ^T	P Bryant ^T	B Chapman
A Baillie ^T	J Birkett ^T	D Buckingham ^{NT}	CB Chapman ^T
S Baines ^T	RA Black ^{LBNW}	C Buckle ^{BCNTW}	SE Chapman ^{BCNTW}
A Baird ^N	V Blandford ^T	D Bucknell	ME Charlwood
R Baker ST	M Blencowe ^{BN}	J Bujok	RH Charlwood
CF Ball ^W	C Blowers ^X	A Bullock	J-P Charteris
H Ball ^T	M Boakes	C Burbidge ^N	P Chatfield ^X
TG Ball ^T	D Boddington ^{BCNTW}	KR Burch	MJ Chattaway ^{BCNTW}
M Bambrick ^T	S Boggio ^T	DJ Burges ^T	PD Chattaway
N Bamford ^B	N Bond ^T	SJ Burgess ^T	AP Chick ^T
PC Bance ^W	PF Bonham	ANM Burns ^{BCT}	C Chown ^W

J Christlieb	DC Crawford ^T	RA Draper	A Fletcher ^X
SS Christou ^X	P Crawford ^X	L Dray	JD Fletcher ^T
A Clark ^N	DE Crawley ^T	FJ Dummigan ^T	G Flinn ^T
FC Clark ^T	SPJ Creasey ^T	KP Duncan	AR Flint ^T
L Clark ^N	NC Crighton ^{NT}	DP Dunk	T Flower ^T
G Clarkson ^T	J Crix ^T	JAG Dunlop	L Flowers ^T
BR Clay ^{CNTW}	LSM Crook ^T	G Durey ^W	TD Folland ^T
PJ Clay ^T	A Cross	MR Eade ^T	BF Forbes ^S
JC Cleal ^T	JK Cross ^H	R Eade	A Ford ^S
K Cleaves ^N	M Crutch ^T	R Eagles ^T	AE Ford ^T
J Clements ^T	CSU Horsham Records	AR Eales ^W	N Ford ^T
S Cocker ^W	MJ Cuff ^T	C Eames	R Foreman ^X
J Coit ^W	J Curson ^{NT}	M Eames	HM Forrest ^K
MA Cole ^T	L Curson ^{TX}	R Eastwood ^{NTX}	TJ Forward ^T
PR Cole ^T	SPM Curson ^X	RDM Edgar ^N	CW Foster ^T
CB Collins ^W	J Curtin ^W	B Edmonds ^N	P Fosterjohn ^T
CF Collins	MAJ Cutts ^T	M Edmonds ^{BN}	BJ Fowkes ^T
M Collins ^B	A Dale ^N	PJ Edmonds ^N	T Fowler ^T
MA Collins	RC Dalrymple ^T	EY Edwards ^T	CJ Fox
MJ Collins ^T	J Darley ^W	T Eldridge ^T	TP Fox ^{BNT}
A Colyer ^S	W Davies ^T	J Ellel	A Francis ^C
R Comerford ^T	AM Davis ^T	M Emberson ^{BC}	CEH Francis ^T
S Conway ^T	C Davis ^{BCTW}	MJ Emery ^W	D Francis
AS Cook	M Davis	C Evans ^T	TJ Fraser ^{CT}
J Cook	MH Davis	GD Evans	MG Freeman ^W
DC Cooke ^N	P Davis	GM Evans ^T	CD French ^{BCT}
BE Cooper	S Dawes ^W	MJ Evans ^{BTW}	RI French ^W
C Cooper ^T	MD Dawson ^T	P Evans	Friends Warnham LNR
D Cooper	J Day ^{TW}	S Evans	O Froom
DR Cooper	A de Potier ^W	SJ Evans ^W	NF Fuller ^{BNT}
J Cooper ^T	R de Souza	JJ Everitt ^{HNTX}	TP Fuller ^T
JF Cooper	CH Dean ^{BCHNTW}	RJ Fairbank	WW Fuller ^{BCHNTW}
S Cooper ^T	S Delahunt	MW Fairley ^T	M Funnell ^X
S Cooper ^T	MN Denness ^H	JA Faithfull	R Fussell ^T
G Coppard ^T	P Denyer ^N	S Farey ^W	MA Galtry ST
C Corrigan ^{BT}	J Derricott	JA Feast	AH Gardiner ^T
D Cousins	RJ Discombe ^T	BJ Fellows ^{NW}	D Gardiner ^T
D Couzens	C Dixon ^T	I Fennemore ^X	S Gardiner
JR Cowser ^{BCHNW}	JMP Dixon	C Fentiman	PG Gardner ^T
BR Cox	PC Dixon ^X	J Ferguson ^T	J Garratt
E Cox	JW Dodd	JE Fields ^B	DT Gasson ^N
JM Cox ^T	C Donovan	L Filtress	R Gaterell
P Cox	R Donovan	K Fingland ^X	N Gates
PC Cox ^S	P Douch ^T	N Fish ^T	J Gearty
R Coyne	SJ Dove ^T	D Fisher	CM George ^{BCHNT}
ES Crabtree ^N	EJ Dowding ^T	T Flanagan ^T	A Giacomelli ^{CT}
HM Crabtree ^{BCHNTW}	RJ Downes	S Flaw ^W	I Gibb ^B
C Crawford ^X	FT Downing ^T	P Fleming	K Gibb ^B

TE Gibson-Poole ^T	DJ Gruar ^T	N Henry	ML Hortin ^T
S Gilbert ^W	AJ Guest ^{BCNT}	J Herrtage ^T	A House
S Gill ^T	J Guiver ^T	S Hibbard ^N	A Howard ^W
KB Gillam ^T	A Gurr ^T	AP Hibberd ^B	T Howard
J Gillham ^T	AC Gutteridge ^{BCNT}	MS Hickey ^T	T Howard-Jones
BR Gilmore	H Gutteridge ^N	A Hill	DH Howey
CW Glanfield	TJ Guy	C Hill	I Hubbard
J Glen ^T	K Hackett	CA Hill	DG Hughes
C Glennie	PRJ Hadland ^{BCNST}	M Hill ^X	G Hughes
A Glossop	RK Haggard	R Hill ^W	PH Hughes ^{NW}
J Glossop	JSW Hakeman ^N	S Hill	R Hughes
C Glover ^T	CP Hall	G Hinchon	S Hughes ^K
J Glover	M Hall ^T	R Hirst ^B	N Hulme
T Godby ^T	MP Hall ^T	RS Hitcher ^B	BJ Humphrey ^N
A Goddard ^T	P Hall	RS Hoad ^{BC}	G Hunt ^N
DJ Goldsmith ^N	S Halpin	NL Hoare	JH Hunt
A Gomez ^T	CH Hamilton ST	R Hobbs	ID Hunter ^{CNT}
JR Goodspeed ^N	M Hampton	JA Hobson ^{BNT}	S Hunter ^{BN}
H Gordon	T Hanks	TN Hodge ^T	J Hutcheon
W Gordon ^{TW}	F Harmer ^T	H Hodson ^X	EW Hutchings ^T
K Gorringer ^B	P Harmes ^X	C Hoff	NP Hutchinson ^{BNTW}
S Gorringer ^B	A Harris	P Hogan ^T	AM Hutson ^{CNW}
AN Gorsuch ^T	CA Harris ^T	AJ Holcombe	C Hyde ^T
L Gould	E Harris ^N	BJ Holcombe	C Hyde Wear
JS Gowers ^{NT}	RG Harris ^{NT}	AM Holden	R Iredale ^T
AS Grace	SM Harris ^T	DLJ Holdstock	B Ives ^T
MR Grace	PR Harrison ^T	G Hollamby ^T	RA Ives
JH Grant ^T	D Hart ^E	PK Holland ^{BNT}	E Ivis ^N
J-L Grant ^X	H Hart ^E	R Hollins	K Jackson
A Gray	PR Hart	F Hollis ^N	RA Jackson ^T
CC Gray ^N	R Hart ^T	D Hollow ^{ES}	RJB Jackson ^T
R Greaves ^X	WG Harvey ^{BCNT}	LG Holloway ^X	S Jacobs ^T
MA Grech ^T	P Haskell ^N	AL Holmes ^T	B James
AE Green ^T	R Hastings ^T	RG Holmes ^{BCNT}	C James ^N
D Green ^B	R Hatch	JC Holt ^W	D James
M Green	S Hatch ^B	CA Holter ^T	G James ^N
P Green ^X	S Hatch	J Holter ^{TW}	P James ^{NT}
S Green	W Hatton ^T	T Holter ^W	CR Janman ^{BCNT}
NM Greenaway ^W	M Hawkins	J Hook ^N	DF jarrett ^T
RR Greenhalf	MJ Hawkins	S Hook ^N	G Jarvis ^X
G Griffin ^W	JN Hawtree ^T	C Hooker ^T	L Jarvis ^X
S Griffin ^X	G Hay	S Hooper	EJ Jenkins ^T
AJ Griffiths	K Hazelgrove	P Hopcroft	GG Jenner ^W
D Griffiths ^T	S Healey ^T	CE Hope ^W	M Jenner
R Grimmett ^T	G Heath	DR Hopkins	S Jennings ^T
RD Gross ^T	GA Heath	H Horne ^N	DJ Jode ^{TWX}
H Grover ^T	SA Heavens ^X	JHM Horne ^{BCT}	A Johnson ^W
J Grover	M Henderson ^{BET}	J Horner ^B	CA Johnson ^B

JM Johnson	B Klinkenberg ^x	K Lynn ^N	CW Melgar
PJ Johnson	AR Knight ^T	M Lynn ^N	CA Melhuish ^{BCTX}
RJ Johnson ^{HW}	DC Knight ^{NT}	G Lyons	M Mellors
S Johnson ^T	L Knight ^{BCT}	A MacFarlane	D Melville ^T
S Johnson ^x	R Knight	DJ Madgin ^T	R Menhenett ^W
S Johnson	R Knight ^W	R Maher	JH Menz ^T
A Johnston ^{BCNT}	RW Knight	S Mair ^T	N Merchant ^{BT}
J Joiner	A Knowles ^N	M Mallalieu ^T	M Merritt ^T
A Jones ^W	DR Knowles ^{BCT}	MC Mallett	SJ Message
D Jones ^T	F Koppeschall ^T	A Malpass ^x	K Mewett
MGM Jones ^T	A Kuepfer ^W	AC Manley ^T	GA Michelmore ^{BCNT}
PE Jones ^{BCNT}	T Lambert	RC Mann	B Michie ^x
RI Jones ^T	R Land	SJ Mansfield	G Middleton ^x
RJ Jones ^T	D Lane	MV Mansson ^x	PM Midwinter ^T
SEI Jones ^T	DC Lang ^{HW}	J Marchant ^B	S Miles
T Jones	IM Lang ^{HTW}	JH Marchant ^T	A Millar ^T
T Jones	P Langdown	MJ Marchant ^H	G Millard
T Jones	JL Langiewicz	C Marrable ^x	R Milsom ^N
J Joyce ^N	B Larkom ^{EN}	N Marriner ^T	O Mitchell ^T
S Judd ^x	S Lawless	S Marsdon ^N	G Mitchelmore ^W
D Julian ^T	P Lawrance ^T	S Marsh ^T	D Monk ^x
J Jupp	R Lawrence ^x	G Marshall ^x	P Moon ^W
K Jupp	NC Lear ^N	SK Marshall ^T	A Moore ^T
ME Kalaher	HJA Lee ^{BCENW}	AJ Martin ^N	C Moore
B Kay	PJ Lees ^W	J Martin ^B	CH Moore
DJ Kelly ^T	CL Leeves ^T	J Martin	J Moore
M Kelly ^x	K Lerwill ^x	M Martin ^{BCN}	S Moore
RS Kelly	D Leversedge ^{BCN}	P Martin	NJ Moran ^T
M Kemp	SM Lewis ^H	DD Martin-Jenkins ^N	R Morris ^W
R Kemp ^T	P Lifton ^N	JM Maskell ^T	D Morrison
A Kensitt	T Lifton ^{BN}	D Mason	P Morrison-Price ^x
J Kiley ^x	TJ Lincoln	MJ Mason	C Mortimer ^{TX}
AJ Killick ^T	C Lindfield	S Mason	SD Morton ^T
DE Killick	SH Linington ^T	W Masters ^T	PL Mulcahy ^T
J Killick	S Litchfield	J Matson ^T	MF Mullen ^{BT}
J Kinchington ^T	D Livingstone	PD Matson	MJ Mullis ^N
D King ^x	AH Lloyd ^W	NV McCanch ^T	Y Munro ^T
DR King	P Loader	SFH McCullagh ^{BNT}	K Murphy ^{BCNT}
JW King	TG Lock	M McGee	M Murphy ^N
MN King ^{CNT}	C Lodge ^T	S McGeeney ^T	AJ Musgrove ^T
R King	E Lough	E McGregor ^W	D Mutters ^T
RJ King	M Love ^{BC}	PAF McKenzie Lloyd ^T	J Mycock ^N
G Kinnard ^T	RE Lowe	C McLean ^x	S Nash
W Kirby	C Lowe	M McManus ^{ETW}	E Neller ^T
M Kirk ^T	AR Loweth ^T	DF McNair ^{BCT}	M Netherwood ^T
C Kirkpatrick	PJ Luffingham ^{HN}	D Meagher	M Newbold ^x
A Kirkwood ^W	S Luker ^x	JI Medford ^T	JA Newnham ^{BCNTW}
AR Kitson	T Lux ^T	C Meek	M Newton ^N

SJ Newton ^{BCNT}	SJ Patton ^X	J Pullen ^W	A Roffey
C Nicholson	PN Paul ^{NT}	RN Pulley	BM Rogers ^E
D Nicholson ^X	A Pearce ^W	B Puttock ^{TW}	DP Rogers ^{BCT}
J Nobbs ^S	G Pearson	M Puxley	A Rogerson
JL Nobbs ^{BCENT}	R Peck ^T	RJ Pyrah ^T	MD Rolfe ^T
RK Norman	A Pedliham ^{BNT}	J Quayle ^T	AJ Roman ^T
D Norris	J Pell ^T	AJ Quelch ^X	C Roper ^X
C Northwood	CJ Pennells ^{CT}	C Rackham	C Roper ^X
J Norton ^T	B Pennock	M Radford ^T	PP Roper ^X
A Nottage ^{NT}	RF Penticost ^{BCNW}	B Rainbow ^X	C Rose ^W
M O Shea	RT Pepper ^T	NM Ratcliffe ^T	J Rosser ^T
C Odey ^X	L Percival ^{CW}	J Rawles ^T	H Rouse
C OFlynn ^T	A Perrett ^W	T Rawlings	P Rouse ^T
M Oldfield ^X	A Perry ^{ET}	S Rayburn ^T	A Rowe
PJ Oliver ^T	R Perry	EM Raynor	S Rowledge ^X
P Osborn ^T	M Perryman	PJ Raynor	E Rowse ^{lNW}
BA Osborne ^T	CB Peverett ^{NT}	C Reay ^{CHT}	K Ruff ^X
G Osborne ^{BC}	AL Phillips ^T	A Redman	I Ruffles ^N
N Ostler	D Phillips	N Redman ^N	SJR Rumsey
J Oswald ^N	J Phillips	M Reed	G Rupniak ^X
RA Oswald ^N	M Phillips ^W	SG Reeds	L Russell ^T
JJ Otway	MJ Phillips ^W	R Rees ^N	MG Russell ^{NX}
E Outhwaite ^T	S Phillips ^T	B Reeve ^{HN}	SA Russell ^{BCT}
P Outhwaite	SM Phillips	JP Reeves ^X	ND Rutherford ^{BCNW}
T Outram ^X	A Piggot ^W	R Reeves	L Ryan ^T
L Overy ^T	R Pike	R Regan ^X	Rye Bay RG ^T
L Owen	I Pitts	RF Rettke-Grover ^T	D Sadler
MP Owen ^{BC}	PJ Plant ^{BNT}	N Reynolds ^T	JF Sanderson ^{BC}
RC Owen	R Platt ^T	G Richards ^N	M Scarlett
CF Page	D Plummer ^X	JP Richards ^T	B Scott ^X
S Pagett ^W	AH Podmore ^{NW}	T Richards ^N	J Scott ^T
S Pain	CR Poole ^{BCT}	JE Richardson ^{NST}	M Scott-ham ^{BNT}
A Palethorpe ^T	CR Pople ^N	L Richardson ^{BHN}	P Scutt ^T
KJ Palmer ^T	NR Porter ^T	S Ridley	AM Seabrook
DJ Pankhurst	BC Potter ^{TX}	J Rieley	T Seabrook ^{BCNTW}
N Pappas ^T	D Potter	SB Rix	J Searle ^B
PJ Pappas ^T	DA Potter	C Roach ^T	CM Seaton
A Parfitt ^{NTW}	GR Potts	ET Roberts ^T	RC Self ^{FX}
K Park ^T	DG Powell ^T	GCM Roberts ^{HT}	C Sell ^T
N Park ^T	P Prayag ^T	H Roberts ^W	J Sellwood ^T
A Parker ^N	HDV Prendergast ^T	M Roberts ^T	RJ Senior ^W
M Parker	G Prescott	P Roberts ^X	V Senior ^X
TW Parmenter	L Prevost	J Robertson ^T	J Sennitt ^N
C Parrot	R Price ^{BW}	PA Robinson ^T	MV Sennitt ^N
C Parry ^T	C Prince ^{HW}	R Robinson ^T	K Sexton ^T
R Parsons ^W	JP Prodder	S Robinson ^{NW}	M Shaft ^H
RA Pask	S Pryor ^N	A Robjohns ^T	RJ Shanks ^{BCT}
S Patmore ^T	H Pude ^T	SJ Roddis ^T	PJ Sharp ^T

C Shaw ^N	PJ Strangeman ^{BT}	WH Truckle ^{HT}	AD Whitcomb
F Shaw ^T	R Street ^X	P Tucker ^T	PJ Whitcomb ^{TX}
MD Shaw ^{BCTW}	PJ Stroud ^X	M Turner ^{BHNW}	C White ^T
CR Shawyer	S Strugnell ^T	G Turrell	K White ^X
M Shelley ^S	S Stuart ^T	J Turton ^X	G Whitehead ^T
J Shiltoe ^W	K Styles	WM Twitchett ^T	AM Whitman
K Shiltoe ^W	C Summers ^T	D Tyler ^T	JH Whitman
EM Shilland ^T	K Sutton ^N	P Tyler ^T	K Whittleton ^T
G Siddle ^W	L Sutton ^N	F Tyson ^X	M Wiggins ^T
M Simmonds	P Sutton ^T	ST Underdown	Wildcall Recorder ^X
T Simon	S Sutton ^{HX}	J Underwood	B Wildish
A Simpson ^W	JL Swallow ^T	C Upton	J Wilkinson ^T
IM Simpson ^{HTW}	DR Taylor ^T	ED Urquhart ^W	J Wilks
RN Simpson	K Taylor ^T	J Van Breda ^X	JR Willett ^T
SP Simpson ^{BCNTW}	KP Taylor ^N	P Varkala ^T	DC Williams
T Simpson	M Taylor	H Vaughan ^{BN}	G Williams ^X
A Skerl ^T	NTW Taylor	H Vaughan ^N	P Williams ^X
A Skerl ^W	R Taylor	C Vince ^W	RD Williams ^T
AJ Skinner ^{BW}	SR Taylor ^{NW}	C Vine ^W	R Williamson ^W
C Small ^N	CR Tazzyman	D Walker ^W	RLC Williamson ^W
A Smith	S Teale ^X	J Walker ^T	J Willsheer
D Smith ^T	RC Theobald ^T	L Wallace	M Wilson
DI Smith	A Thomas ^T	SF Walsh	PJ Wilson
M Smith	A Thomas ^X	LA Walther ^{NT}	TJ Wilson
PA Smith ^T	AB Thomas	S Walton	D Wiltshire ^T
RJ Smith ^T	T Thomas ^T	GC Ward ^T	I Wiltshire ^{BT}
S Smith	E Thomason ^T	N Ward ^B	M Wiltshire ^T
S Smith	PS Thompson	HM Warne ^{NT}	JS Winder ^T
S Smith	J Thorpe ^T	N Warne ^B	T Winstanley ^X
AC Smither ^{BCNSTW}	PA Tinning ^X	N Warren ^T	D Winter ^X
D Sneller ^{BCW}	PC Tinning ^X	D Washington	LF Winter ^T
A Snelling ^T	GA Tocher	D Waterhouse ^N	J Wood ^X
MA Snelling ^T	R Tofts	T Waters ^{NW}	V Wood ^B
TG Snow ^{BC}	M Tomlins ^{NW}	AB Watson ^H	CW Woodburn ^W
E Soden ^N	A Tomlinson ^T	LJ Way	I Woodburn ^W
R Spano ^X	MP Toms ^T	R Webb ^T	S Woollard ^T
P Spiers ^W	C Tong ^B	PJ Webster ^T	I Woolsey ^N
J Spooner ^X	E Tooth ^N	DJ Wedd ^{CN}	A Wooton
T Stachnicki ^T	B Tragett ^T	J Wedd ^N	S Wootton
R Standing ^T	P Treen ^T	P Welch	JA Worrall ^{BN}
I Standivan ^W	C Tremletts ^N	M Welcome ^W	RV Worrall ^N
H Statham	S Trenerry ^T	PJ Wells	B Worsfold
MJ Stenning ^B	C Trew	AJ Wende ^T	JM Worthington Wilde ^B
P Stent	G Trew ^{NW}	DR West ^{BCNT}	K Wratten ^T
PC Stevens ^W	P Trodd	E West	CH Wright
P Stokes ^B	CE Trollope ^{NT}	R West ^T	CMV Wright ^{BCNT}
O Stone-Lee	D Trott ^T	JD Weston ^W	D Wright ^X
M Stott ^T	JE Trowell ^W	MJ Wheeler ^T	J Wright ^W

K Wright ^W	S Wyers	D Yelland	S Younger ^W
M Wright ^T	R Yarham ^N	F Young	
S Wright ^X	BJ Yates ^{NW}	R Young	

The superscripts in the above table indicate the particular survey(s) in which contributors participated, as follows:

- B Breeding Bird Survey (BBS)
- C Sussex Winter Bird Survey (SWBS)
- E Thames Basin and Wealden Heaths Breeding Bird Survey
- H Heronries Census
- N Nightingale Survey
- S Sussex Ornithological Society species surveys (Wood Warbler)
- T Contributors via *BirdTrack*
- W Wetland Bird Survey (WeBS)
- X Contributors via Sussex Biodiversity Records Centre (incl. iRecord and Living Records)

ASSISTANCE TO RECORDER

The society thanks all who enter their observations through the various online recording systems particularly those based with the BTO. The Recorder and Database Manager are especially grateful to the following team of helpers for coding and inputting the other records onto the computer: D Andrews, J Atkinson, CJR Barfield, C Buckle, T Callaway, M Cam, BR Clay, CB Collins, JR Cowser, HM Crabtree, DE Crawley, RDM Edgar, J Everitt, BF Forbes, B Fowkes, MG Freeman, BR Gilmore, Ms H Gordon, Mrs P Green, G Heath, JA Hobson, AM Holden, CE Hope, A House, T Howard-Jones, RA Ives, PJ Johnson, R Knight, IM Lang, S Linington, Mrs BM Mortlock, A Parker, A Perry, GR Potts, GCM Roberts, Ms H Rouse, E Rowsell, Mrs IM Simpson, DI Smith, P Stevens, Dr AB Watson, PJ Whitcomb, JH Whitman, I Woolsey and BJ Yates.

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.

Breeding Bird Survey (BBS): This BTO annual national breeding survey, based on selected 1-km squares, is organised in Sussex by Dr Helen Crabtree (hcrabtree@gmail.com). Thanks are due to the 122 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 (see table on page 220) is undertaken in collaboration with the RSPB and the bird clubs of Berkshire, Hampshire and Surrey. The Sussex organiser is A Perry (alan@alanperry.uk.com). Thanks are due to the 12 observers involved who are indicated by ^E in the list of contributors.

Heronries Census: This long-standing national census is organised in Sussex by Dr Helen Crabtree (contact details as above). Counts of known heronries are given in the systematic list. Thanks are due to the 25 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 R Bown (hr.bown@btinternet.com). Coordinating the counts in large areas has been undertaken by local reserve wardens as shown below. Thanks are due to these and the 139 counters who are indicated by ^W in the list of contributors.

Sussex Ornithological Society surveys: The breeding season survey of Wood Warblers was completed in 2013 and was organised by Clare Buckle (surveys@sos.org.uk) and the 14 participants are indicated by ^S in the list of contributors.

Sussex Winter Bird Survey (SWBS): This county survey, based like the BBS on selected 1-km squares, was organised in Sussex for 2013 by Dr Helen Crabtree (contact details as above). Thanks are due to the 74 observers involved who are indicated by ^C in the above table. The coordination of this survey from 2014 will be undertaken by Christine George (sussex.wbs@gmail.com).

Nightingale survey: This BTO study aimed to survey each tetrad where Nightingales had been previously recorded, and in Sussex was mostly conducted in 2012 but was extended into the spring of 2013. This paper-based survey was organised by Dr Helen Crabtree (contact details as above) and the participants who surveyed tetrads are shown by ^N in the above table.

Woodcock survey: This national survey jointly organised by the BTO and Game & Wildlife Conservation Trust (GWCT) involved surveying randomly selected 1-km squares by conducting 75-minute dusk point counts for roding Woodcocks. Participants provided their survey results online. This study was extended into 2014; the Sussex results and acknowledgements to participants will be published in a future bird report.

Winter thrushes survey: This national online-only survey operating through the BTO website commenced in September 2012 and has been extended to cover the 2013-14 winter. Observers were invited to set up routes, based loosely on 1-km squares, for repeated winter walks and to record locations of all thrushes observed, including details about habitat and feeding activity. The excellent response in Sussex was promoted and coordinated by Dr Helen Crabtree (contact details as above). Thanks are due to the observers involved who will be acknowledged when the results of this survey are available.

Coordination of seawatching records: The annual coordination of these records for the society is carried out by Dr JA Newnham (j.newnham1@ntlworld.com).

SUMMARIES OF OBSERVATIONS

We are grateful for summaries of detailed observations at Chichester Harbour from E Rowsell; Thorney and Pilsey Islands from CB Collins; Medmerry from P Hughes; Selsey Bill from J Atkinson; Pagham Harbour from IM Lang; Arundel WWT from P Stevens; Norfolk Estate from GR Potts; Pulborough Brooks and the Arun valley from D Andrews; Worthing from Dr JA Newnham; Shoreham District O.S. from CE Hope; Horsham District Council reserves from J Everitt; Weir Wood Reservoir from Mrs BM Mortlock; Ashdown Forest from PJ Johnson; Telscombe Cliffs from DH Howey; Splash Point (Seaford) from BR Gilmore; Seaford Head from M Eade; Beachy Head from RDM Edgar and D & JF Cooper; Hastings area migration watches from A Parker; Bewl Water from MG Freeman; Pannell Valley NR from Rye Bay Ringing Group and Rye Harbour from Dr BJ Yates. We also thank Mrs P Green at the Sussex Biodiversity Records Centre for providing ornithological records from the centre, iRecord and Living Records involving 104 observers (marked ^X in the above table). The online recording of the British Trust for Ornithology (BTO) surveys provided a plethora of records; the 442 Sussex contributors to BirdTrack are marked with a ^T in the above table. The records from Birdguides for 2013 were

channelled through BirdTrack. Thanks are due to the BTO for the county BirdTrack records, as well as county records for the Nightingale survey, the Breeding Bird Survey and the Wetland Bird Survey.



Fieldfare, Fernhurst, January 2013 (Paul Matson)

RINGING

Thanks are due to S Walsh for maintaining detailed records of ringing in the county and to all ringers who contributed data.

NEW SPECIES for SUSSEX in 2013

Another new species was added to the county list in 2013 bringing the total up to 399.

The species concerned was a Semipalmated Plover which was first seen on Hayling Island, Hampshire, but then spent the period 18 to 21 Oct in Chichester Harbour before returning to Hayling Island. This is only the fourth British record of this transatlantic visitor with the others being on the Isles of Scilly in 1978, in Devon in 1997/98 and on the Outer Hebrides in 2012. The details surrounding the finding of the Sussex bird are described below.

Semipalmated Plover

Charadrius semipalmatus

A New Species for Sussex in Chichester Harbour

Barry Collins

On 17 Oct 2013 I received a text message from Andy Johnson at 17:45, saying that he had found a first-winter Semipalmated Plover at Black Point, Hayling Island, Hampshire during the high-tide period that day and that it had flown east into Chichester Harbour on the falling tide. Knowing that most of the Ringed Plovers and Sanderlings, at this time of year, feed at Pilsey Sands on rising and falling tides, before flying over to Black Point to roost during the high-tide period, the following morning I decided to check my local patch on the rising tide. I arrived at Pilsey Sands at 09:00 and weather conditions were perfect. After searching carefully through the Ringed Plovers I noticed a smallish plover, superficially resembling a Kentish Plover, some 60 yards away. I then carefully walked through the other waders to within 25 yards of the bird which was feeding in amongst Ringed Plovers and to my amazement I was looking at a first-winter Semipalmated Plover! After the sudden adrenaline rush of finding the bird I wrote the following description in my notebook:

Crown, nape and rest of upperparts: brown (to my eyes the same colour as the first-winter Ringed Plovers it was with) with pale silvery-fringed upper wing-coverts. With a white hind neck collar and white forehead and supercilium, it also had a narrow white wedge above its gape. Underparts white except for a brown chest band which was the same colour as the upperparts.

Bare parts: stubby dark bill with an orange patch at the base of the bill mainly on the lower mandible, eyes dark with a narrow pale eye-ring. Legs greenish/yellow with a brighter hind tibia contrasting with its dull fore tibia, feet greenish/yellow with webbing between the inner and middle toes.

Size: smaller than Ringed Plover reminding me of a Kentish Plover at times, especially when viewed from a distance.

In flight a narrow white wing-bar with white outer tail feathers were observed. Heard calling in flight etc giving Spotted Redshank-like calls che-wee. On one occasion it got agitated with the other waders and gave chip-chip calls.

At 09:40 two Peregrines, working as a team, attacked the waders and they all flew off into the harbour, with the Semipalmated Plover calling as it did so, giving Spotted Redshank-like calls, 'che-wee, che-wee'. I then 'phoned Andy to let him know about the bird and shortly afterwards I got a text saying it had just arrived back at Black Point. I returned in the afternoon on the falling

tide and after waiting for about an hour the waders started to arrive. Shortly afterwards I relocated the Semipalmated Plover and once again it gave me some fantastic views, while it was feeding at Pilsey Sands before flying further out on to the mudflats to feed with the other waders. I had a WeBS count to do the next day and decided to put the news out on the SOS website just before I left to do my counts that morning. I did not want anybody disturbing the waders before I started the counts at Pilsey Island.



Semipalmated Plover, Chichester Harbour, October 2013 (Andy Johnson)

I recorded the Semipalmated Plover during the WeBS count before it flew back to Black Point to roost. The next day my wife Margaret and I arrived a bit later than we had planned, after celebrating Peter Potts' 50th birthday at The Ship Inn, Langstone the night before. The weather conditions had changed overnight to strong SW winds and as we arrived at Pilsey Sands we found several hardened Sussex birders huddled together in the sand dunes only to learn that the Semipalmated Plover had flown off to Hayling Island but it was very pleasing to hear that it had been seen by Richard Fairbank and David Copper before it did so.

The winds were even worse on Monday, the 21st, as Margaret and I arrived at the hide overlooking Pilsey Sands, only to find the weather-beaten Richard Kelly sheltering inside; he too had seen the Semipalmated Plover. It was especially pleasing given the blustery conditions.

There were no more positive sightings in Sussex after that, as the high tides got later in the day. Viewing conditions were not ideal over the following week especially on sunny days with the glare of the sun on the sands but fortunately it could still be seen well at Black Point, Hayling Island during the high-tide period, throughout the rest of its stay. It was last seen by Andy on 29 Oct.

I am very grateful to Andy Johnson for his skill and fieldcraft in finding and identifying the Semipalmated Plover at Black Point and for alerting us all to his find and for his photographs which he has kindly let us use in this account.



Semipalmated Plover, Chichester Harbour, October 2013 (Andy Johnson)

The Sussex Ringing Report for 2013

Sue Walsh

The weather in 2013 was unusual and, in Sussex, reflected what happened across Britain and Ireland as reported by the British Trust for Ornithology (BTO) in their provisional analysis of the figures. They report the coldest spring since 1962 with temperatures dipping 1-2°C below average across much of the country, and this was followed by the warmest summer since 2006. This meant it was an unusual breeding season. Migrants arrived in lower numbers and both migrants and residents delayed laying by 1-2 weeks in response to the low spring temperatures. Breeding success was reduced for many March/April nesters especially Blue Tits and Great Tits, but later breeders fared better. (*N.B. All numbers, including those in the tables, have been adjusted to reflect numbers of birds ringed in previous years but only recently notified to the author. All observations on species and numbers ringed refer only to those reported to the author or the BTO. Details of annual totals can be found on the BTO website at <http://www.bto.org/volunteer-surveys/ringing/publications/online-ringing-reports>.)*

Table 1. A summary of ringing totals in the counties of south-east England as compared to the totals for Britain and Ireland for 2009-2013. Figures for the Rye Bay Ringing Group (RBRG) are shown in brackets.

	2009	2010	2011	2012	2013	Change in 2013 (%) compared with previous 4-year mean
Sussex (RBRG)	74,104 (51,927)	82,689 (59,199)	102,203 (79,870)	68,767 (53,439)	51,020 (34,752)	-38% (-43%)
Surrey	17,240	18,403	22,676	15,546	18,921	2%
Kent	25,746	29,329	34,048	27,126	25,423	-27%
Hampshire	12,869	19,029	25,384	20,318	21,085	9%
Britain and Ireland	930,325	1,100,713	1,151,461	942,754	930,963	-10%

Table 1 shows there was a marked reduction in the number of birds ringed in Sussex in 2013 compared with previous years. The 38% decrease compared to the mean of the previous four years is nearly four times the decrease countrywide and a greater change than observed for the neighbouring counties. The table also shows that this decrease is partly due to far fewer birds being ringed at Pett Level by the Rye Bay Ringing Group (RBRG) and this reduction is related to change of practice as well as possibly fewer birds passing through. A comparison of the 2013 species totals with the average for the past 10 years (2003-2012) shows changes in numbers ringed of certain species which are not only to do with the changes at Rye Bay. There are many more species showing a drop in numbers ringed than there are showing an increase. Table 2 shows those species in which the average annual total is greater than 99 birds and where the increase or decrease is greater than plus or minus 40%.

Twenty three individuals and groups reported a total of 51,020 birds of 106 different species ringed in Sussex in 2013. Despite the decrease in the number of birds ringed by the RBRG its contribution comprised 68% of all birds ringed in Sussex and accounted for the higher ringing totals in Sussex and ensured the county remained that with the highest annual ringing totals.

Table 2. A comparison of the 2013 species totals with averages for the past 10 years (2003–2012) for those species in which the average annual total >99 birds and where the percentage change is greater than plus or minus 40%. Birds of conservation concern (Eaton et al. 2009) are marked as: **red-listed; * amber-listed.

	Change (%)		Change (%)
Barn Owl*	-82	Grasshopper Warbler**	-44
Goldcrest	-82	Coal Tit	-43
Meadow Pipit	-78	Long-tailed Tit	-43
House Martin*	-68	Bullfinch*	-41
Cetti’s Warbler	-62	Sand Martin*	52
Reed Bunting*	-47	Starling**	61
Great Tit	-45	Jackdaw	95

Rarities and notable records

There were a number of species ringed in 2013 which are not ringed often in Sussex which included (with the Sussex total record in brackets): one Ortolan Bunting (5); two Common Rosefinches (6); one Little Bunting (9); one Melodious Warbler (10); one Penduline Tit (18); four Avocets (20); two Yellow-browed Warblers (29); one Lesser Spotted Woodpecker (37); three Wrynecks (55); one Turtle Dove (103); and one Jack Snipe (113).



Yellow-browed Warbler, Cissbury Ring, October 2013 (Val Bentley)

This was the best year ever for ringing Common Redpolls, more than doubling the total number ringed in Sussex. Fifty-three were ringed in total in 2013 bringing the total ringed in Sussex to 108 since this species was given full species status in 2001. This reflects an increase in ringing

totals across Britain and Ireland for both this species and Lesser Redpoll which is important as they tend to travel in mixed flocks. Thomas (2014) states: “The phenomenal increase in Common Redpoll records is almost certainly due to ... a wider understanding of the identification criteria following its elevation to full species status.”

Table 3 shows those ringing totals for species where the ringing numbers in Sussex are declining. Detailed figures for other species mentioned above can be found on the BTO website.

Table 3. *Species reflecting declining numbers ringed in Sussex. Birds of conservation concern (Eaton et al. 2009) are marked as: **red-listed; *amber-listed.*

Species	2009	2010	2011	2012	2013	Sussex 1979-2013	Britain & Ireland 2013
Northern Lapwing**	4			7		691	2045
Turtle Dove**	1	2	4	1	1	103	70
Common Cuckoo**		3		3	3	82	74
Little Owl	6	3	2		1	296	421
Lesser Spotted Woodpecker**	1		2	1	1	39	5
Willow Tit**						456	283
Skylark**				1	1	202	379
Wood Warbler**	2	2	3	6	4	149	706
Willow Warbler*	3149	4100	4094	4014	2672	81,568	21,589
Grasshopper Warbler**	915	1238	1635	526	431	14,145	1381
Common Starling**	133	294	331	332	450	14,936	11,788
Spotted Flycatcher**	25	70	38	27	26	1526	858
Common Redstart*	24	29	70	50	26	1707	1886
Mistle Thrush*	2	11	9	1	3	700	285
House Sparrow**	110	300	362	195	282	5384	14,545
Meadow Pipit*	548	1009	619	319	150	10,177	19,411

Top 20 species ringed

Table 4 lists the 20 most ringed species in Sussex during 2013. These figures are more reflective of the habitat of the sites where ringing takes place than populations of birds in the county. The 20 most ringed species account for 89% of all the birds ringed in Sussex during 2013. This compares to the same figure in 2012, 92% in 2011 and 89% in 2010. Blackcap remains at the top of the list as it has for the last five years although the total continues to fall in comparison to the record year in 2011.

All the top 20 species show a decline in numbers ringed compared to last year with the exception of Reed Bunting. Some of this is due to the impact of changes within the RBRG mentioned above and does not necessarily reflect changes in the numbers of birds moving through the area. However, it was a particularly poor year for Robin and Blackbird. Both species are augmented by birds from the continent in the autumn (Wernham *et al.* 2002). Robins come from NE Europe and Blackbirds from a wider area. The total number of Blackbirds ringed in Sussex in 2013 was 40% lower than in 2012 and the lowest since 2002. This compared to a fall of 20% in the number of Blackbirds ringed in Britain and Ireland in 2013 compared to 2012 and the lowest total since 2008. The total number of Robins ringed in Sussex in 2013 shows a 22% fall compared with the number ringed in 2012 and this is the lowest number ringed since 2006. This fall is not reflected nationwide where there was only a 10% reduction but the total was particularly high

in Sussex in 2012 and the total for 2013 remains high compared to recent years. The number of Sedge Warblers ringed in Sussex declined by 38% and was the lowest total since 1989 contrary to the national figure which was up by 10% on the 2012 figure.

Table 4. *Sussex ringing totals for the 20 most ringed species in 2013. Birds of conservation concern (Eaton et al. 2009) are marked as: **red-listed; *amber-listed.*

Ranking	Species (with position in 2012)	2013		2012	
		Total	RBRG	Total	RBRG
1.	Blackcap (1)	6835	4850	7904	6180
2.	Sand Martin* (7)	5509	5507	4315	4314
3.	Chiffchaff (2)	5108	3299	7868	7620
4.	Sedge Warbler (3)	4797	4496	7757	6552
5.	Reed Warbler (4)	4653	3850	5374	5091
6.	Barn Swallow* (5)	3262	3053	4909	4574
7.	Blue Tit (6)	2730	628	4542	1612
8.	Willow Warbler* (8)	2672	1673	4130	3444
9.	Lesser Redpoll* (9)	1825	1455	2290	1814
10.	Common Whitethroat* (11)	1419	857	1732	1302
11.	Goldfinch (10)	1099	237	2067	893
12.	Great Tit (12)	1061	275	1698	709
13.	Robin (14)	869	359	1107	653
14.	Blackbird (15)	671	277	1103	656
15.	Chaffinch (18)	631	183	715	393
16.	Greenfinch (16)	578	174	903	445
17.	Dunnock* (20)	562	169	599	304
19.	Wren (19)	541	223	642	391
20.	Reed Bunting* (25)	530	346	416	252

Highs and lows

Apart from species already noted above there are other highs and lows shown by the ringing records although, unfortunately, 2013 is notable for its lows rather than its highs. Several species show a marked decline in the numbers ringed in 2013. Numbers of Great Spotted Woodpeckers ringed dropped by 58% over the previous year which is far in excess of the national decrease of 19%. Research (Smith 2005) suggests that Great Spotted Woodpecker breeding success is due to the drop in Starling numbers with reduced competition for nest sites and less subsequent interference. A decline of 53% was also seen in the number of Meadow Pipits ringed although this is part of a marked decline over several years. The national picture is quite different for these pipits with only a 25% decrease in numbers ringed. Whinchat and Stonechat also show a marked decline in 2013 with the lowest figures since 1985 (although there was a low figure for Whinchat in 2002). This is different from the national picture where there is an increase for Whinchat and only a slight decrease for Stonechat. Although Meadow Pipit has a wider range all three of the pipit and chat species mentioned above are heathland species and little ringing is done in this type of habitat in Sussex.

It was a very bad year for ringing Goldcrest with virtually no autumn passage and the number ringed in 2013 was 88% down on 2012; this was the lowest year for this species since 1979. National figures are down too but by a lesser figure of 52%. Balmer *et al.* (2013) say: “*Goldcrest*

abundance can be affected by winter weather and severe spells of cold weather... resulting in high mortality." It is likely that the autumn passage of birds from the continent was adversely affected by the weather conditions.



Wryneck, Charleston Reedbed, August 2013 (Graeme Dunlop)

Three warbler species have been doing badly over the last two years in terms of the numbers of birds ringed: Lesser Whitethroat, Garden Warbler and Willow Warbler. In Britain and Ireland the numbers ringed have all fallen by around 30% compared to the exceptional 2011 figures two years earlier. It is unsurprising that this nationwide fall is reflected in the Sussex ringing figures as most birds are ringed at Rye Bay and are likely to be passage birds coming from other British breeding sites. The percentage falls are even greater in Sussex at 44%, 58% and 35%, respectively, compared to 2011. Some finches also fared badly with significant falls in the numbers ringed for Greenfinch, Goldfinch, Siskin, Linnet and Bullfinch. The ringing totals for both Greenfinch and Goldfinch have increased several-fold since 2001 but have decreased by 54% and 38%, respectively, over the last two years from their peak numbers in 2011. The number of Siskins ringed has decreased by 58% compared to 2011 and in contrast to the figure for Britain and Ireland which increased by 41% compared to 2011 and is at its highest level since records began. This may be due, at least in part, to the retirement of one local ringer whose own garden was previously a productive site for ringing Siskins. However, Thomas (2014) notes that Siskin numbers fluctuate and that the reasons are complex with birds coming both from Northern England and Northern Europe and numbers driven by both breeding success and the seed crop of their food sources. The number of Linnets ringed is the lowest ever total with the exception of 2007 and the figure for Bullfinch is the lowest since 1996. Both of these reflect lower national figures. In a national context 40% of Sand Martins, 31% of Grasshopper Warblers, 25% of Rooks and 21% of Sedge Warblers were ringed in Sussex, almost entirely due to the work of the RBRG.

Nestlings

A total of 1373 nestlings of 35 different species was ringed in 2013 which was 2.7% of the annual ringing total and a low proportion compared to previous years. Four of the 35 species (Peregrine, Avocet, Black-headed Gull and Common Tern) were ringed solely as nestlings and 11 species had 40% or more of their total ringed as nestlings.

Colour-ringing and tagging projects

Cuckoos In 2013 the SOS supported the BTO Cuckoo Tracking Project by sponsoring the tag for a Sussex Cuckoo. In May a male Cuckoo was caught and tagged on Ashdown Forest. The SOS decided to name the Cuckoo “Sussex”. Regular signals were received from the tag from 14 May until 22 Oct by which time “Sussex” appeared to be settled in an area of mixed savannah and gallery forest in the Central African Republic. From 22 Oct, however, concerns grew about the lack of movement from the Cuckoo which was expected to move on to the Congo within a few weeks. On 12 Nov it was confirmed that the last signals received showed a lower than expected body temperature and this combined with the lack of further signals suggested that unfortunately “Sussex” was probably dead. For a full account of this project see the article on pages 244-250 of this report and the BTO website <http://www.bto.org/science/migration/tracking-studies/cuckoo-tracking>.

Barn Owls It was a disastrous year for Barn Owls in terms of breeding success. Just 51 adults and 37 nestlings were ringed in 2013 as compared to a total of 319 adults and 286 nestlings in 2012. This reduction in numbers demonstrates a genuine decrease in the population and a decrease in the number of nesting adults. The Barn Owl Trust reports that this species has suffered from the run of cold winters and wet summers since 2009. Nationwide, only 12% of Barn Owl nesting sites were occupied in 2013 compared with a more usual average of 51%, and where pairs managed to survive and breed the average number of young in the nest was just two rather than the four or five that are needed for population recovery. See more at www.barnowltrust.org.uk.

Peregrines The Peregrine colour-ringing project, studying dispersal and survival rates since 1998, continues to be run in Sussex by Graham Roberts, Jon Franklin and Phil Everitt. “Black 15”, ringed as a chick at Chichester Cathedral in May 2005, bred for its fifth consecutive year at Sussex Heights in Brighton. Several other colour-ringed birds bred at confidential sites in the county. A tiercel (“Green 44”) ringed as a chick at Sussex Heights in May 2011 made a brief appearance on 20 Jun 2013 on a webcam monitoring a nest on Charing Cross Hospital, Fulham, London. Interestingly, the breeding female at Fulham (“Green 19”) originated from East Sussex, being colour-ringed as a chick in May 2007. She took up residence at Charing Cross Hospital in October 2007 where she has nested since 2010. Details of all sightings of colour-ringed Peregrines should be sent to Graham Roberts (Graham.C.M.Roberts@btinternet.com).

Tree Sparrows The RSPB, in partnership with the Sussex Wildlife Trust, Kent Wildlife Trust and Natural England, continued a Tree Sparrow recovery project in Sussex described in the 2012 Sussex Bird Report. In 2013, for the second year, metal rings were put on Tree Sparrow pulli in the nest boxes. The number of pulli fledged at Pevensey in 2013 was 66 compared to 76 in 2012 and this fall is in line with the national Tree Sparrow breeding figures (D. Leech *pers. comm.*). In 2013, for the first time, 23 adults were colour-ringed at Pevensey. A dark-blue colour ring with two large, white letters (easily read if observed through binoculars) was put on the right leg of each bird. A BTO metal ring was put on the left leg if the bird had not already had such a ring put on as a pullus in 2012. To date four of these colour-ringed birds have been re-sighted. Details of all sightings of ringed Tree Sparrows should be sent to Richard Black (Richard.Black@rspb.org.uk).



Tree Sparrow, Pevensey, July 2013 (Sue Walsh)

Greenshanks The Farlington Ringing Group (FRG) working in partnership with Chichester Harbour Conservancy has undertaken a colour-ringing study into the movements, site faithfulness and longevity of Greenshanks using Thorney Island (Chichester Harbour). The aim is to learn more about the movements of these under-recorded birds to help in their conservation. Between 2001 and October 2007 the FRG colour-ringed 179 Greenshanks at Thorney Island, which is one of the main roost sites in The Solent. The results from this work suggest that Greenshanks wintering in Chichester Harbour and The Solent come from a wide geographical area across the breeding range from Scotland to west Russia. Results for the birds migrating through the area suggest a wide wintering range from The Solent and south-west Britain to West Africa. However, this information is based on just a handful of colour-ring sightings and ringing recoveries. The FRG are planning to refine and add to the data available by fitting geolocators in addition to colour-ringing birds. Geolocators record light levels, indicating day length and dawn and dusk times, and from this it is possible to work out the positions of the birds to which they are fitted.



Greenshank with geolocator, Chichester Harbour (Sue Walsh)

This gives information about the movements of birds without the need for sightings. Unfortunately the devices do not transmit the data and the birds have to be caught again and the data downloaded from the devices. Wintering birds are being targeted as observations over 10 years by the FRG show that many of the birds are highly site-faithful, returning annually to winter in the same place, thus making recapture easier. Each bird caught is fitted with a BTO metal ring and a colour ring combination and fitted with a geolocator which is attached to the upper ring on the right leg.

Starting in 2013 with an initial stock of 25 geolocators the first devices were fitted to five birds. Three were caught in March and two more in September. Four of those birds were retrapped in January 2014 and work is underway to analyse the data. More information will be available in the 2014 report. The FRG is grateful to the SOS and the other sponsors of this project: Migrate Technology, British Birds, Chichester Harbour Conservancy and Hampshire Ornithological Society. For more information on the project and how to report birds visit the website www.greenshank.info.

Recoveries

Listed below are a selection of the more interesting recoveries which were reported in 2013.

Wintering flocks of **White-fronted Geese** are usually of the European race *albifrons* which breed in Siberia. Thomas (2014) notes that the majority winter in Russia but good numbers also in the Low Countries. One such bird ringed in The Netherlands in December 2005 was seen on 27 and 28 Jan 2013 at Pett Level, a regular East Sussex site for wintering geese. There has been only one previous recovery of a bird in Sussex in 1963 ringed in Gloucestershire in 1959.

In contrast, **Greylag Geese** seen in Sussex are more likely to be from resident populations (Thomas 2014) and the single ringed bird recovered in 2013 had not moved far. It was shot and killed near Barcombe 6 years after having been ringed at Pett Level. Two other, luckier, birds ringed in Kent in 2006 have been sighted in Sussex. One was seen in subsequent years at locations in Horsham, Scotney Gravel Pit and, at the end of May 2013, at Rowhook, and the other was seen just once in February 2013 at Pett Level.

A male **Shelduck** ringed as a first-year bird on Thorney Island on 8 Sep 2002 was caught by a ringler over 10 years later on 15 Jan 2013 in Slimbridge, Gloucestershire.

Some **Tufted Ducks** are resident and breed in Britain but our population is increased by winter visitors from north-east Europe (Thomas 2014). Of two recoveries in 2013, the first was ringed as an adult male at Pett Level in February 2000 and was shot and killed on 15 May in north-east Russia; the first Sussex recovery from that country but a known breeding ground for birds ringed in south-east England (Wernham *et al.* 2002). The second was found freshly dead on 17 Jan near Scaynes Hill having been ringed in March 2003 as an adult male in Cambridgeshire and likely to have been wintering in Britain.

Thomas (2014) states that adult and young **Grey Herons** disperse around the county and beyond although they are not strictly migratory. This was shown by a bird ringed as a nestling on 16 Apr 2010 at Warnham MP and found dead almost 3 years later on 10 Mar in Matfield, Kent.

A colour-ringed female **Honey-buzzard** ringed as a nestling in Sussex on 4 Aug 2001 has been returning to its breeding site and seen regularly in Sussex in July each year in 2011, 2012 and 2013. The sighting in 2013 set a longevity record of 11 years 11 months. A less fortunate bird ringed as a nestling in Sussex on 13 Aug 2007 was found dead in Sierra Leone on 9 Jan 2013. This is consistent with what we know of the wintering grounds of this species in the forests of tropical Africa (Wernham *et al.* 2002). If the previous bird had travelled to the same wintering grounds each year it would have travelled over 115,000 km.

A **Red Kite** tagged in Northamptonshire in July 2012 was identified by its wing tag at West Dean Estate in Sussex on 12 Dec 2013.

A **Kestrel**, ringed as a small grey downy chick 3 to 4 weeks prior to fledging, on 24 Jun 2013, was found freshly dead in a house 32 km away in Etchingham just 35 days after being ringed.

Little is known about the movements of **Coots** because few are ringed and because, if they do move, they migrate at night (Thomas 2014). Wernham *et al.* (2002) refer to autumn movements of birds from south-east England to south-west France and Spain and this was reinforced by the recovery of a bird ringed at Pett Level on 11 Oct 2013 and recovered 35 days later in Somme, France on 15 Nov.

Two **Herring Gulls**, both originally ringed on Goring beach on 6 Dec 1980, broke the previous national longevity record. One ringed as an adult was seen off Flatholm, Glamorgan on 17 Apr 2013, 32 years and 4 months later, and the other, originally ringed in its second year, was seen at Clydach, also Glamorgan, on 1 Oct 2013, 32 years and 9 months after it was ringed.

The 2012 Sussex Bird Report mentioned that, as there are only about 20 accepted records of **Caspian Gull** having been sighted in Sussex since records began, it was amazing that three of those sightings have been colour-ringed and that two of those were seen in 2012. One of those birds, ringed at Paczow in Poland and seen twice in Sussex in December 2012, was seen again in 2013 at Skegness, Lincolnshire on 2 Apr having travelled at least 1,184 km since it was ringed.

Movements of **Great Black-backed Gulls** are not well documented so it is interesting that there were several recoveries in 2013 showing movement both within the UK and abroad. A bird colour-ringed as a nestling in Cornwall in June 2011 was seen at Shoreham in July 2013, and a bird colour-ringed in Basildon, Essex as a first-year bird in February 2011 was seen at Pett Level on 28 and 29 Mar 2013. Three birds ringed as nestlings in France were subsequently seen at different sites on the Sussex coast in 2013; most previously reported foreign-ringed birds in the county have come from the Channel Islands or Norway.

There was an odd recovery of a female **Barn Owl** found freshly dead in April 2013 in West Wickham in Kent. It had been ringed 62 km away in 2007 in a nest box along with an adult male and usually paired adults stay near the nest area even if not breeding. Sometimes Barn Owls are found dead near the roadside and it is possible these birds have been hit by vehicles and carried some distance from the impact site. However, this bird was nowhere near a road.

In the 2012 Sussex Bird Report it was noted that **Goldcrests** travel considerable distances in their short lives. A male ringed as a first-year bird in Sweden on 22 Sep 2012 was killed by a cat in Peacehaven on 16 Apr 2013. Interestingly, the only other Swedish-ringed Goldcrest subsequently found in the UK was also found freshly dead near Brighton.

Great Tits rarely move far from the natal site (Wernham *et al.* 2002) so it was interesting to find at Pett Level on 11 Jan 2013 a male which had been ringed as a first-year bird in Belgium three months before. A study on Belgian Great Tits (Dhondt and Hublé 1968) found that fledglings from late nests were more likely to move significant distances from the natal site because of a reduction in quality and quantity of food.

Swallows usually travel on a direct route southwards to South Africa and back on migration. So, it was unusual to have a recovery from Slovakia which is considerably further east than the normal migration route and the first recovery from that country of a bird ringed in Sussex. The bird was ringed at Pett Level on 31 Aug 2012 and caught and released by a ringer in Perin, Slovakia on 10 May 2013. It may have been blown off-course on its way north.

For birds which winter in Africa due south of the UK it is interesting that there are many movements of **Chiffchaffs** on an east-west axis both before and after the breeding season when

they are arriving from and returning to Africa. Looking at the migration map of this species (Wernham *et al.* 2002) it seems they cross country in order to cross the English Channel at the narrowest point. Thus, many birds pass through Sussex, and particularly Pett Level and Beachy Head which sit near the narrowest point. Typically birds travel west to Wiltshire, Wales, Gloucestershire, Dorset or Devon, and east to Kent and Norfolk. Two examples are from the Steyning Ringing Group at Cissbury. One bird ringed there in its first year on 29 Sep 2012 was recovered in Wiltshire the following year on 25 Sep 2013, and another bird also ringed in its first year at the same site in Wiltshire on 25 Sep 2013 was caught at Cissbury 10 days later on 5 Oct.

One **Reed Warbler** recovered in 2013 was close to the longevity record of nearly 13 years set in 2001. A bird ringed in its first year at Pett Level on 10 Aug 2002 was caught by a ringer in Kent almost 11 years later on 6 Aug 2013. The average life expectancy of these birds is around three years so this one has done well making the annual round trip to Africa somewhere south of the Sahara eleven times.

There are not many recoveries of **Fieldfares**. In 2013 there were two; one, a female ringed in its first year at Pett Level on 14 Jan 2010 was found dead in May 2013 in its breeding ground of Finland. The second was ringed on 21 Jan 2013 also at Pett Level and, unfortunately for that bird, was taken nearby by a bird of prey the following day.

A **Siskin** ringed on 3 Mar 2011 in East Grinstead was found dead in Finland on 14 Mar 2013, a distance of 1,857 km away and only the second Sussex-ringed Siskin to be recovered in Finland. By contrast, 15 Siskins ringed in Sussex have been recovered in Belgium with two birds, both ringed at Pett Level, recovered in Belgium in March and April 2013.

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The BTO Cuckoo tracking project: tagging and satellite-tracking a Sussex Cuckoo

Clare Buckle

Introduction

The Cuckoo *Cuculus canorus* is a species that has been in decline in the UK since the early 1980s. Data from the Common Birds Census (CBC) and Breeding Bird Survey (BBS) showed a rapid decline, with over half of breeding Cuckoos being lost in the last 25 years (Eaton *et al.* 2013). In 2009 the decrease in Cuckoo abundance was sufficient for the species to be added to the 'red list' (Eaton *et al.* 2009), it having previously been moved from the green to the amber list in 2002.

There was some regional variation in this trend however, with the decline in England being greater than that in Scotland and Wales. The BBS population trend for the South East region of England for the period 1995-2011 was a 59% decrease (Risely *et al.* 2013), and the BBS population trend for Sussex for the period 1994-2012 was a 71% decrease (Crabtree 2012). Thomas (2014) also noted a one-fifth decrease in the number of tetrads in Sussex in which Cuckoos were recorded between the 1988-1992 and 2007-2011 atlas projects.

Concerned about the fortunes of the Cuckoo, the British Trust for Ornithology (BTO) wanted to understand more about why this species was suffering such a rapid decline. In order to understand more about Cuckoos, it was important to look at what was happening to Cuckoos throughout their annual cycle, including migration and wintering locations. Little was previously known about Cuckoos once they left the UK. The only UK-ringed Cuckoo to have been recovered in Africa was found on 30 Jan 1930 in Cameroon, having been ringed in Berkshire in June 1928.

By 2011 advances in tracking technology resulted in the production of satellite tags weighing just under 5 g, meaning that smaller birds such as Cuckoos could now be tagged. The BTO decided to fit tags to five birds in May 2011 to find out more about migration routes, including the stop-over sites being used and the ultimate wintering destinations. It was hoped that the information generated by satellite tracking would help in understanding the pressures and challenges facing British Cuckoos, and what could be contributing to increased Cuckoo mortality. In turn this could inform conservation efforts (<http://www.bto.org/science/migration/tracking-studies/cuckoo-tracking>).

The five Cuckoos tagged in 2011 were all tagged in East Anglia. Four of these were tagged in the Norfolk Broads and the fifth was tagged in Thetford Forest.

Since the first group of Cuckoos were tagged in 2011, the BTO have tagged and monitored a new group of Cuckoos every year to date. Interested to learn more about the differences between birds from the east and west of the UK, as well as whether the more successful Scottish birds were using different migratory routes, in 2012 the project was expanded to include birds from Scotland and Wales. The BTO were also curious about whether there might be any difference in migration routes between "reedbed" birds, such as the 2011 Broads birds, and "forest" birds.

Cuckoo tracking technology

The Cuckoos were each fitted with a 5-g PTT-10 (Platform Transmitter Terminal) manufactured by Microwave Telemetry in the USA. By 2007 the company had developed a type of tag small enough to be attached to birds weighing as little as 100 g. This type of tag was first tested on Red Knots in Florida in January 2007, and from 2009 was offered on a limited production-run basis.

These tags each consist of a solar transmitter measuring 24 x 14 mm, with a nylon-covered stainless steel antenna 213 mm long. The tags are solar-powered with internal rechargeable batteries charged by solar arrays and under the control of internal microprocessors. This gives each tag the capacity to run for a number of years without being limited to the life of a lithium battery. When fully charged the batteries are able to transmit during the night. Other features of the tags are temperature and battery voltage sensors and mounting loops, allowing the tags to be fitted to the birds. As the tags are fitted next to the bodies of the birds, the temperature sensors can provide valuable information. Anything other than body temperature, such as an unusually low temperature, or temperatures that reflect fluctuations in the ambient environment, can suggest a problem.

The PTTs are each scheduled to transmit for 10 hours before going into a 'sleep' mode for 48 hours, during which time the battery recharges. Sometimes scheduled transmission cycles can be interrupted or re-set, for example by the magnetic fields from overhead power cables, resulting in early or late transmission of signals. Because the batteries rely on solar power the tags are only suitable for habitats with plenty of sunlight. In areas where there is dense cover of vegetation a lack of light can prevent the tags from charging up sufficiently to transmit signals.

PTT transmitters work with the Argos Satellite System and are programmed to send signals to satellites at set intervals. Polar-orbiting satellites collect the data and then relay it back to the earth to receiving stations which pass the data to one of two processing centres. Here data is processed and information such as transmitter identification numbers and calculated tag locations is passed to users.

In order to calculate tag locations, the PTTs exploit the Doppler effect, in this case the shifts in the wavelengths of radio transmissions as satellites pass overhead. By identifying this effect in the radio wavelengths, the ground-based part of the satellite system can calculate the locations of the PTTs, and thereby the birds that are tagged, to within 500 m. This is not as accurate as GPS technology which can provide a location to within a few metres, but GPS technology adds weight to a tagging unit and GPS tags are currently too heavy to be used on Cuckoos. Despite the 500-m inaccuracy, the tags are very accurate on a global and regional scale and provide reliable and detailed tracking information.

The tagging of a Sussex Cuckoo

In 2012 the Sussex Ornithological Society (SOS) agreed to fund one of the BTO tagged Cuckoos for the following year, and work began to identify suitable sites for tagging a Cuckoo. As county records indicated that the Ashdown Forest was one of the best locations for Cuckoos in Sussex it was agreed to explore locations in this area for the capturing and tagging of a bird. This would also provide the BTO with a "forest" Cuckoo to help explore whether there might be differences in migration between this group and "reedbed" Cuckoos.

A number of habitat criteria were provided by the BTO to increase the likelihood of a successful capture. These included finding a site with low vegetation (such as a reedbed or scrub) with a single tree or bush present. A tape lure can be placed in the isolated bush and a decoy in or near it. Specially-designed mist nets suitable for catching Cuckoos can then be placed in a 'V' shape around the bush and once the nets are set up the tape is deployed. Having an isolated bush in low habitat means that Cuckoos can be lured in at a low level as any tall trees nearby would allow the Cuckoos to fly in from a height and avoid the nets.

At the beginning of May 2013 a small team of SOS members identified some suitable sites in the Ashdown Forest area and on 14 May the capturing and tagging procedure was attempted (Chattaway 2013). The tape was placed in a small Scots pine tree on a south-facing slope, with

the nets arranged around it, with the idea of funnelling in any males towards the female decoy which was placed next to the tree. Two male Cuckoos were captured, and these were measured and weighed to ensure that they met the minimum weight criteria for carrying the 5-g tags. The first Cuckoo at 112 g was below the ideal weight of >120 g so it was processed and released. The second Cuckoo weighed 127 g, much closer to the average weight of 130 g for an adult male Cuckoo, and was therefore suitable for tagging. The tag was fitted and the bird, named “Sussex”, was released.



Male Cuckoo “Sussex” being fitted with the satellite tag (Joanne Chattaway)

Migration route of “Sussex”

For the first month after tagging, Sussex remained in the Ashdown Forest area, moving little from the tagging site. However, by mid-June he had moved from Ashdown Forest and became the first of the BTO tagged Cuckoos to leave the UK in 2013. By 18 Jun he was in Normandy, in a wooded area around 28 km inland, north-east of Saint-Saëns. He was in central France by 20 Jun, having flown 350 km in a south-easterly direction. Another two days later he was apparently a further 300 km south-east in the Hautes-Alpes region.

Around this time some of the satellite transmissions being received were of poorer quality, and it was possible that Sussex was further south. This proved to be the case and on 26 Jun transmissions suggested he was 185 km north-west of Rome. By 27 Jun he was in Sardinia.

From the data received it was not possible to tell whether he made landfall in Italy. When the first and last messages from a PTT are collected during a satellite pass, two possible locations are given and the most likely one is selected based upon accuracy estimation; “mirror signals” occasionally occur when the processing system selects the wrong location from the data available. The signal apparently received from Italy may have been a mirror signal and Sussex may have flown straight to Sardinia.



“Sussex” ready to be released after the tag had been fitted (Joanne Chattaway)

Having been in Sardinia on 27 Jun, by 29 Jun Sussex was further north in Corsica. This reversal of direction appeared concerning, but in fact it is a fairly common strategy for birds that arrive

in undesirable places to then retrace their steps to find better quality habitat (P. Atkinson *pers. comm.*). It seems that Sussex had overshot his target and backtracked to the Etang de Biguglia nature reserve in Corsica. This is an 18-km² area of mainly wetland habitat in the north-east of the island. Sussex stayed here for a month but on 30 Jul the satellite signals suggested he was on the move again. Poor-quality signals again caused some uncertainty, but showed that he may have been over the sea between Sardinia and Sicily. By mid-morning on 1 Aug, transmissions showed that he was in Chad. The following week he was further south-east by another 270 km and by 14 Aug he had travelled another 230 km south.

Chad proved to be just a stop-off point for Sussex and by 31 Aug he was in the Central African Republic, 280 km south of his previous location. At this stage Sussex was further south than any of the other BTO tagged Cuckoos, but he remained largely in the same area and was soon overtaken by most of the other Cuckoos. By 28 Oct only two other Cuckoos were further north.

After this date concerns began to grow for Sussex, as the temperature signal from his tag had been unusually low at the time of the last transmission. By 12 Nov his tag had not transmitted for over two weeks and unfortunately it was assumed that Sussex was dead.

Knowledge gained from the Cuckoo tracking project

In 2011, the first year of the BTO Cuckoo tracking project, all five of the tagged birds completed the journey to Africa. One of the key things revealed by this group was just how early their autumn migration began. The first bird (Clement) departed from the UK on 5 Jun 2011 and all five tagged birds had left the country by 22 Jul 2011. Clement's movements were a full month ahead of the expected date that migration would start. With an average arrival date in the UK of 19 Apr, this meant that some Cuckoos might be in this country for as little as 6-8 weeks. Clement had been aged as a second-year male and BTO scientists wondered if age might have some bearing upon migration timing, with juvenile and adult birds leaving at different times.

Further new information was gained about the routes that these Cuckoos took to reach Africa, including a previously unknown migration route through Spain and West Africa. One bird moved east across the North Sea to the Netherlands, two went south-east across the North Sea towards Belgium, and the final two crossed the English Channel to go south through France. It was thought that all of the birds were heading towards Italy, but then two of the birds moved towards Spain. There had previously only been two ringing recoveries of Cuckoos from Spain so it was not thought to be an important staging post for migration. Both of these birds stopped north of Madrid, revealing a possibly important stop-over site. The remaining three birds continued south towards Italy as anticipated, and spent around a month in the watershed area of the River Po. This is a known important fattening site for British Cuckoos, as a number of British-ringed birds have previously been recorded from the area.

By the end of November 2011 all five tagged birds had arrived in the Congo rainforest. The westerly migration route taken by two birds was much longer with a potentially hazardous journey across the Sahara. However, by taking a route down the western edge of the Sahara to Senegal and Gambia, the distance across the Sahara was minimised. In taking this route Clement and Lyster became the first British Cuckoos to be recorded in West Africa. Birds previously caught in this area as part of ringing projects had all been thought to be of the smaller Iberian race. Unfortunately in March 2012 it was presumed that one bird, Clement, had died in Cameroon, as there had been no transmissions from his tag since 25 Feb.

At the beginning of the spring migration, all four remaining tagged birds visited further previously unknown stop-over sites, this time in Ghana and the Ivory Coast. These sites just south of the Sahara provided important fattening points before the long desert crossing. Of the

three birds that had flown south through Italy just one (Chris) retraced the autumn route. One of the other two (Martin) took the longer Spanish route back, but hit bad weather in southern Spain and died. The final Cuckoo from the Italian route (Kasper) flew directly over the Sahara but then transmission was lost in Algeria. It is possible that he encountered the same bad weather in southern Spain, or it could be that the tag failed. Finally, the only bird remaining that had taken the Spanish route south (Lyster) avoided southern Europe and returned to Britain directly over the Mediterranean and through France.

The two birds making it back to England had taken just two months to complete the journey from Africa and had both been the last to leave their wintering areas. A considerable amount of this time was spent at stop-over points in West and North Africa or in southern Europe. The tag transmissions showed that the flights across the Sahara and mainland Europe were made rapidly and seemingly in non-stop flights.

The death of one bird, and possibly of a second bird, in southern Spain in very bad weather highlights the hazards presented to migrating birds by adverse weather conditions. The BTO were able to identify that at the time Martin died in the Lorca area of southern Spain there were strong northerly winds, hail and thunderstorms across the Mediterranean.

In 2012 the BTO expanded the tagging project to include birds from Scotland and Wales. It was known that the Scottish Cuckoo population seemed to be faring better than those in England and Wales, so the BTO were interested to know what migration strategies these birds might use, as well as whether there were differences in migration routes between birds from the east and west of the UK. In spring 2012 the BTO tagged a further 11 Cuckoos, including five from Scotland, four from Wales and another two from East Anglia. However, an extremely wet summer with a paucity of insects may have resulted in a number of the Cuckoos being in poor condition before leaving the UK, and by December 2012 there were believed to be just five birds remaining, although some of the losses may have been attributable to tag failure. Three of the newly tagged birds again took the longer westerly route through Spain, but none of these survived to complete their migration. Interestingly, all of these three were East Anglian birds. Chris, the only English bird to take the more easterly route, again survived the journey south to his wintering grounds in the Congo. The Scottish and Welsh birds took a more easterly route even than Chris, over-flying the southern coast of the Mediterranean, with some of them using countries to the east of the Adriatic as staging posts. Once in Africa, it became apparent that the Welsh birds were wintering further east than any of the Scottish or English birds.

In 2013 the BTO tagged a further group of Cuckoos, with another group from East Anglia, a group from Scotland, four from Dartmoor in Devon and the one in Sussex. The Devon birds proved to be interesting because two of them took the westerly Spanish migration route and the other two headed towards France and Italy, both making island stop-overs on the way at Mallorca and Corsica. Previously only East Anglian birds had taken the Spanish route. The bird that stopped on Mallorca (Dart) was likely to have died there; there was a huge wildfire on Mallorca shortly after Dart arrived, highlighting another hazard for birds on migration.

One Scottish Cuckoo did take a Spanish route in 2013 but did not progress any further and is thought to have died in Spain. Of the five East Anglian birds tagged in 2013, four went via France and Spain but had greater success than Cuckoos in previous years. All of them made the journey to Africa, although one is thought to have died in September 2013 in Cameroon. It is possible that better weather conditions helped to improve the chances for Cuckoos taking this route in 2013.

Chance factors such as bad weather can play a large part in the success of migrating birds. The BTO estimate the annual survival rate of Cuckoos ringed in Britain at around 60%. By being able to pinpoint where the three non-surviving Cuckoos from 2011 died, difficult points in the annual

cycle can be identified, and this will hopefully contribute to an understanding of what might be causing the decline in Cuckoo numbers in Britain.

Future research

Although the Cuckoo tracking project has revealed much fascinating and useful information so far, the monitoring has also generated further questions. The BTO hope to be able to tag female Cuckoos in the future, although females are smaller than males and therefore much less likely to meet the weight criteria for having tags fitted. It is known that female Cuckoos leave later than males to make the most of breeding opportunities, but what is not known is whether there are differences in the migration routes taken by males and females.

The information gained to date has shown interesting differences in the migration routes taken, but bigger samples of birds from different regions are needed to look in more depth at these differences. Other areas of focus will be to look in more depth at the effect of weather conditions, the timing and routes taken by juveniles compared to adult birds and whether host species have any effect on migration. To that end, the BTO intend in 2014 to tag more “forest” birds by capturing birds in the New Forest, and the SOS hope to contribute further to this research by funding the tagging of a further two birds from Ashdown Forest.

Conclusions

The BTO Cuckoo tracking project has revealed much information about Cuckoo migration since its inception in 2011, most notably the variation in routes taken by migrating British Cuckoos, the importance of previously unknown stop-over points, and the impact of extreme weather events on mortality. It is hoped that the additional research planned from 2014 onwards, including the tagging of more Cuckoos from Sussex, will provide more valuable information for informing conservation efforts in the future.

Acknowledgements

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The Common Birds Census on Stedham Common 1993–2012

Robin Crane

Stedham Common Nature Reserve

Stedham Common is a 35.2-hectare ancient heath on the Folkestone beds of the Lower Greensand ridge (grid reference at car park SU853220). Together with Iping and Trotton Commons, it forms one of the most important heathland nature reserves in the South Downs National Park. It is part of the Iping Common SSSI, which was designated particularly for its invertebrate fauna and as a breeding site for heathland birds. It is also designated as part of the Iping Common LNR. The Sussex Wildlife Trust (SWT) purchased the freehold of Stedham Common in 1985 and its timber rights in 1986. The common is separated from Iping Common only by a road that is mostly edged by woodland.

Before Stedham Common was acquired by the SWT, part of its western edge had been used as a timber yard for several years. There were some dense pine plantations and areas of birch or mixed woodland. The more open areas were scrub-covered and numerous naturally sown conifers had been encouraged to flourish. Between 1988 and 1990 the SWT undertook a major programme of scrub, birch and pine clearance over much of the reserve and this ground was scraped to remove the vast amount of pine litter. This work led to substantial areas of heathland gradually regenerating over the bare areas. In these newly formed open spaces some specimen trees of Scots pine and one or two oaks were retained to provide perching posts and feeding and nesting sites for birds. Several areas of woodland were also retained.

The damp northern boundary of the common alongside the A272 consists of a stand of mature pine and, at its western end, some mature mixed woodland with some fine oaks. All of this woodland has an understorey of scrub and bracken. In the 1960s the A272 was re-routed slightly further to the north and its old route between the new road and this woodland has evolved into a mix of birch trees and scrub. The eastern side of the reserve is an area of birch trees and bracken scrub and includes a splendid block of quite mature birch woodland. On the lower, southern side of the common there is an area of wet heath and bog with a small pond that periodically dries out. The southern boundary adjoining a quarry was a dense area of pine and rhododendron. A section of this was cleared between 1992 and 2000 and most of this area has now become a mix of pine, birch and birch scrub. On the western side the SWT left a large commercial pine plantation to await maturity. About a third of it was cleared in 2003-4 and another third in 2008-9. In the centre of the common there is another small area of planted conifers and two more small areas of woodland and scrub that have been left unmanaged and are much used by birds: the 'Pits and Pines' area has a few mature pine trees and a lime tree and a separate block of birch and scrub has justifiably earned the label 'Willow Warbler Patch'.

In the 1970s a major gas main was laid underground right across the whole of Iping and Stedham Commons from west to east. This ground disturbance presented ideal conditions for gorse and so, since it was cleared again on Stedham in 1989-90, an almost continuous line of this shrub has gradually grown on each side of the open track. Much of this gorse is now very mature and has formed thickets intermingled with birch. In addition there are a few isolated patches of gorse on the open heathland.

From the very beginning there has been a major problem caused by masses of birch seedlings rapidly colonising most of the areas of young heather soon after areas have been cleared. There has therefore been a never-ending programme to remove the birch and pine scrub, either

mechanically, with herbicides or by hand. This has been a very challenging task and in many places birch scrub has quickly grown into young trees. In 1985 and 2006 there were summer fires that created small areas of bare ground that were re-colonised by heather. Firebreaks have been periodically mown that have also provided some open areas. In 1999-2000 the SWT fenced the common and since then a small number of cattle have been on the reserve for a few months at a time at varying seasons of the year. These animals have helped to diversify the habitats by grazing, browsing shrubs and trampling vegetation.

Since 1985, the interaction of all the management and natural processes on this ostensibly heathland reserve has produced a rich array of habitats (see Figure 1). These changes have been shown to be beneficial for birds at a time when many of them are under threat in the wider countryside.

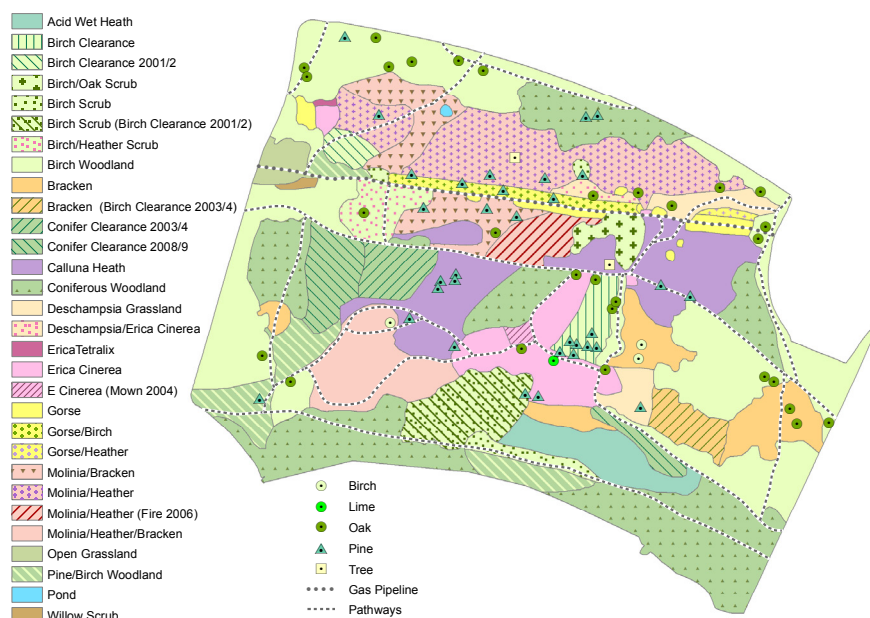


Figure 1. Map of Stedham Common showing the habitats present in 2009 (map supplied by the Sussex Wildlife Trust).

The Common Birds Census

In 1993 the author decided to conduct an annual survey of the avifauna on Stedham Common, with the object of assessing the impact on the reserve of the management by the SWT. This study continued for 20 years. The author undertook the survey with the late Leslie Osborne until the latter retired in 1998. Dr Brian Rogers then took Leslie Osborne's place. In the last two years the author was unfit for site visits and was replaced by Dr Hugh Horne.

This study began in collaboration with the British Trust for Ornithology (BTO), using their Common Birds Census (CBC) methodology (Marchant 1983). This entailed making a series of morning visits and a few evening visits between mid-March and July during which every bird except the ubiquitous Woodpigeon was identified by sight or sound and recorded on a map created for each individual visit. The morning visits, starting between 0730 and 0800 hrs, took about two

and a quarter hours to complete and covered the whole reserve except the extreme southern edge. Exactly the same route was taken each time (see Figure 2). The evening visits began about an hour before dusk. The numbers of visits made in each year of the study are given in Appendix 1.

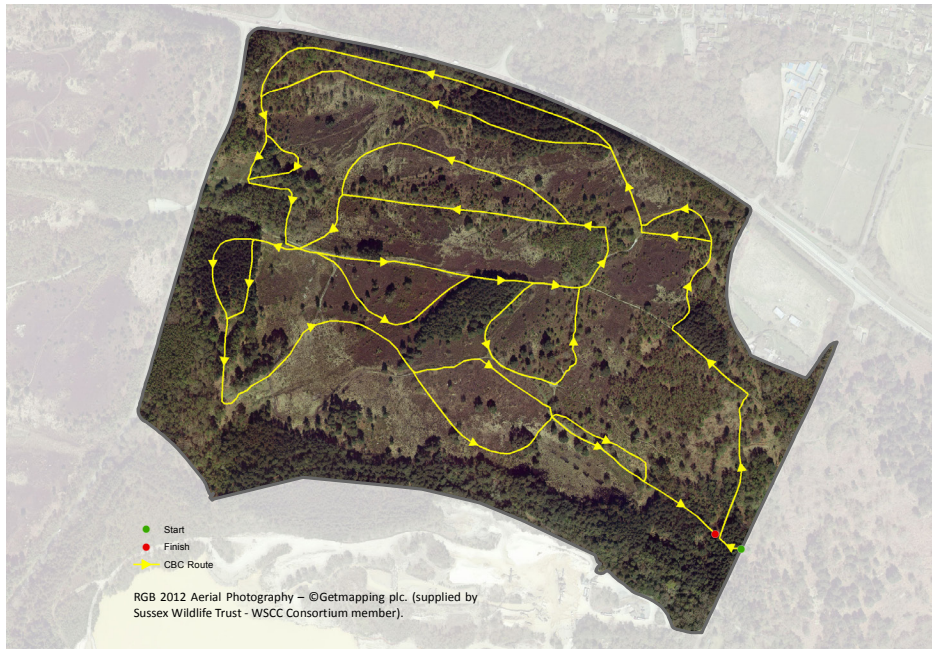


Figure 2. *The walking route used on every survey visit to Stedham Common during the study period 1993 to 2012 (map supplied by the Sussex Wildlife Trust).*

From the visit maps, the data for each individual species was transferred to a series of species maps. Using a strict set of criteria, clusters of activities were assessed from which the numbers of individual territories were identified. If insufficient evidence was available to confirm territories, the birds were simply recorded as being present.

When the national CBC was formally ended by the BTO in 2000, they nevertheless agreed that the CBC mapping method was the best one for our study, given that this methodology was particularly suited to measuring the effects of habitat management and the fact that it had been used from the beginning of the study. They therefore chose Stedham Common as a core site that they continued to monitor until 2007. Their methodology has been rigidly adhered to ever since the BTO had to withdraw. In undertaking this work the author never expected it to yield such interesting and surprising results.

Survey results

The results of the annual surveys, in terms of the numbers of territories of each species identified in each year, are given in full in Appendix 1. Figure 3 shows the total numbers of bird territories recorded in each year, and Figure 4 shows the total numbers of species recorded each year. The BTO advised that the dramatic decline in territories in 1997 reflected the national trend

following a very bad breeding season in 1996. There was appalling weather during the survey in 1998. A full survey was not possible in 2001 because regulations imposed during the disastrous Foot and Mouth Disease outbreak denied public access to the reserve for a large part of the spring and so average figures from the 2000 and 2002 survey results have been inserted.

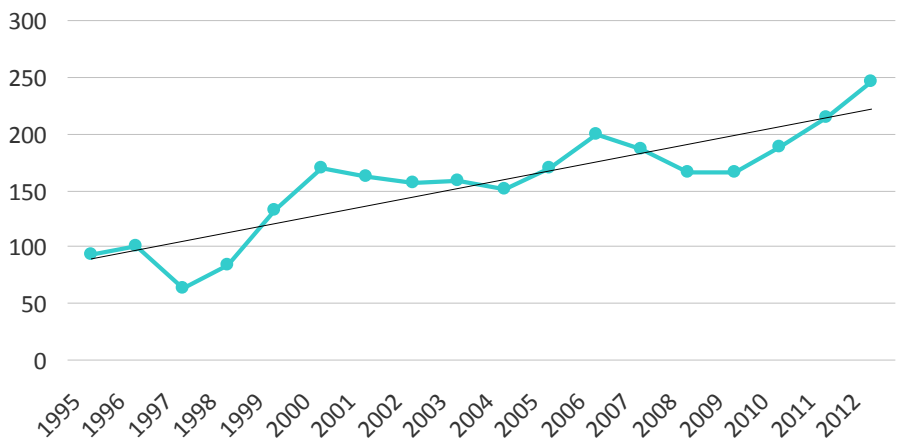


Figure 3. The total numbers of bird territories of all species recorded in each year on Stedham Common.

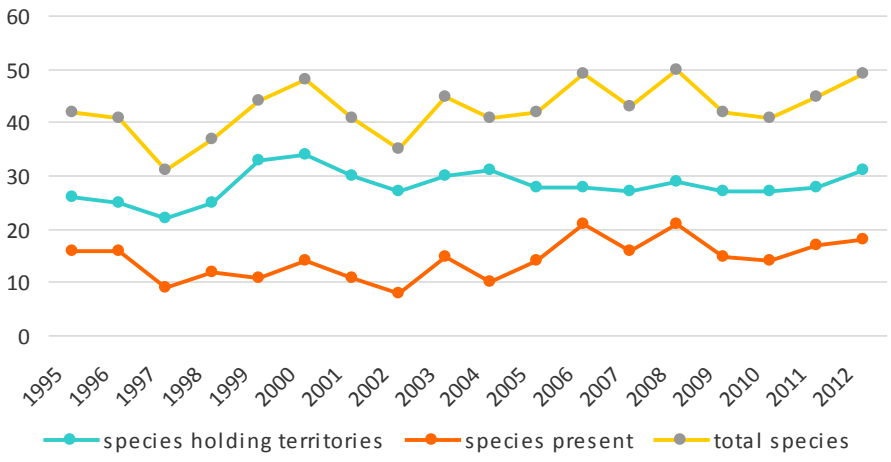


Figure 4. The total numbers of different species recorded in each year on Stedham Common, also separated into those species which held territories and those present but without sufficient evidence to confirm territories.

Analysis of the survey results

Given the apparently dramatic changes in the avifauna recorded in these surveys, one must scrutinise the results rigorously. On looking back, it is clear that there was inadequate coverage of the site in the first two years and bird numbers were almost certainly underestimated. The results for 1993 and 1994 have therefore been excluded from the analysis although the data has been retained in Appendix 1.

Could one team have been less efficient than another? One can discount this possibility by noting that the trend line is consistent and that during the 12 years of recording by the author and Brian Rogers, the number of territories rose from 133 in 1999 to 189 in 2010, an increase of 42%. This trend continued in the two years of recording by Brian Rogers and Hugh Horne.

It is relevant to note that the results that Dr Brian Rogers recorded for the Thames Basin and Wealden Heaths Breeding Bird Survey (2000–12), which entailed more visits to Stedham Common over a longer period each year than the Common Birds Census, very rarely differed from the results of this study.

An explanation for the increase in bird populations becomes clear when one compares maps of the distributions of the bird territories in 1995 and 2012 (Figures 5 and 6). These reveal that the greatest increases occurred where the habitats had become more beneficial for birds. Two prime examples are the gas main area, which was completely open after the clearance in 1990 and was then gradually colonised by gorse and birch, and parts of the southern boundary where dense pine trees and rhododendron bushes were removed between 1992 and 2000 and which only became fully inhabited by birds other than Carrion Crows and Woodpigeons in 2004–5 (see Table 1).

Table 1. *Areas where there were the greatest increases in bird territories between 1995 and 2012.*

	Increase 1995–2012
Gas main path: growth of gorse and birch	20
Open heathland where birch scrub has grown	13
Increase in birch scrub around ‘Pits and Pines’ area	16
Southern boundary area where rhododendron and pine were cleared and birch trees and scrub have grown	15
Heather burnt in 1985, now old heather with gorse and birch	10
Northern boundary birch and scrub on south side of A272 and south of the pine plantation	8
Maturing woodland and scrub with woodland edge	
a. North-west corner	17
b. South-western boundary	10
c. Eastern boundary	20
d. Old birch woodland	5
Increases in non-specific areas	21
Total increase in territories between 1995 and 2012	155



Figure 5. *The distribution of bird territories on Stedham Common in 1995 (map supplied by the Sussex Wildlife Trust).*

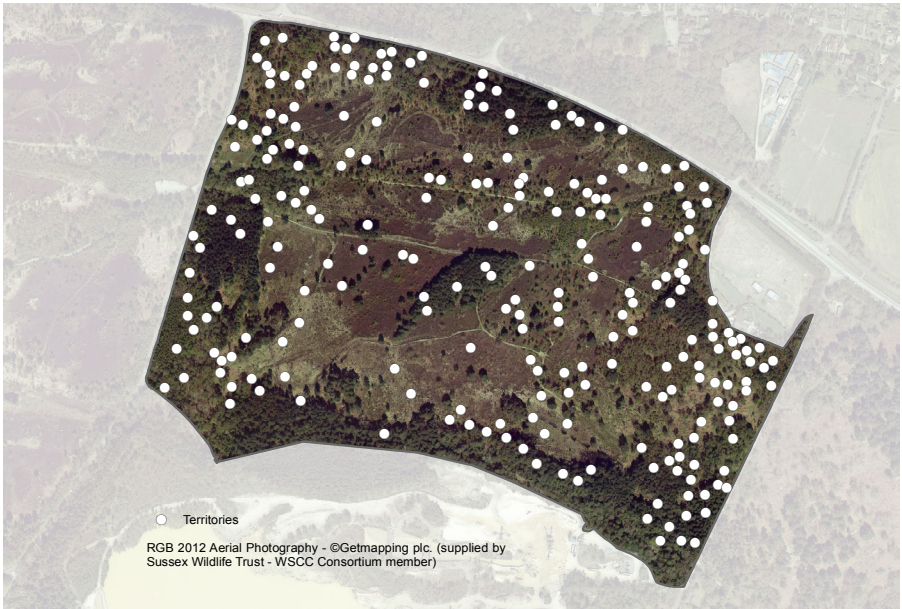


Figure 6. *The distribution of bird territories on Stedham Common in 2012 (map supplied by the Sussex Wildlife Trust).*

Heathland specialists

European Nightjars were present every year. It is difficult to assess exactly how many territories there are in a relatively small area unless one hears two or more males churring at the same time. However, the combination of their calls and their faithfulness to specific territories led us to be confident that there were between one and three territories of these delightful birds each year.

Leslie Osborne, in his painstaking and detailed studies of the **Woodlark** conducted almost daily on and around Iping and Stedham Commons, noted how difficult it is to make an accurate assessment of the numbers of breeding pairs (Osborne 1997, 1998). Confusion can be caused by unpaired males singing for longer periods than paired males and feeding areas can overlap between Iping and Stedham Commons. To minimise disturbance, nests were not sought and rarely found. Ironically, an adder was seen taking fledglings from one of the few nests that were located. However, what is certain is that Woodlarks will breed only if they have suitable open habitats. In the early days of the study there were freshly cleared areas of heathland on Stedham Common. Since 2003 the clearance of stretches of the stands of commercial pinewood on the western side of the reserve left areas of bare ground that have provided ideal habitat for this species. The population of these fascinating birds has therefore remained stable at between one and four pairs throughout the study. Their continued presence will be guaranteed only if there is an ongoing plan to clear fresh areas on a regular basis.

From 1993 to 2009 there were between one and three **European Stonechat** territories on Stedham Common. The winter of 2009-10 was exceptionally cold, with snow lying for a long time, and it was expected that this weather would lead to significant changes in the bird populations. In fact most species survived remarkably well, but Stonechats on Iping Common had their territories reduced from six to three in 2010 and there were insufficient records to establish a territory on Stedham Common that year. Unfortunately none were present in 2011 and 2012, although they did make a recovery on Iping Common.

The gradual increase in the stands of maturing gorse and a succession of mild winters probably accounts for the presence of the **Dartford Warbler** from 1999 until 2009. As expected, the severe winter of 2009-10 was catastrophic for this predominantly Mediterranean species. Although some have returned to Iping Common, they had not re-colonised Stedham Common by 2012.

Species of open habitats

In the early years of the survey a **Woodcock** was occasionally found hiding in bracken under the tree canopy and between 1996 and 2006 birds were seen roding during the evening visits. None were present from 2007 to 2011. Their disappearance was perhaps not surprising, given that nationally there was a 61% loss between 1966 and 2000, and that the Sussex 2007-11 atlas survey noted that the breeding range had shrunk by over half from that recorded in the 1988-91 atlas (Newnham and Crabtree 2012, Thomas 2014). Woodcocks returned to Stedham Common in 2012 and it is hoped that this a good sign for the future.

There used to be a thriving colony of **Sand Martins** nesting in the sand pit adjoining the southern boundary of the reserve. By 2011 there were only six or seven holes occupied and in 2012 there were none. Whilst the colony was viable a few were usually seen from 1999 onwards. **Common Swifts**, **Barn Swallows** and **House Martins** were occasional visitors. An unforgettable event occurred on 10 June 2003 when there was a feeding frenzy going on low over the reserve. It was extremely difficult to count numbers, but there were at least 20 Sand Martins, five Swifts, five House Martins and one Barn Swallow scooping up insects at high speed.

Although four **Green Woodpecker** territories were identified in 2004 and three in 2002, 2006 and 2007, there were usually only one or two. The numbers did not match the substantial increase in Great Spotted Woodpeckers in the last ten years. Part of the reason may possibly be because Green Woodpeckers prefer more substantial trees than birch for nesting (for example, on this site an old Scots pine was used for several years, a different hole being excavated each season). Green Woodpeckers, in their search for ants, may also need much larger territories than Great Spotted Woodpeckers.

The policy of retaining a few isolated pine trees in open heathland was particularly beneficial for **Tree Pipits**, and with the exception of a blank year in 2009 up to four territories of these most attractive birds were recorded each spring.

Until recently, none of the wide range of habitats on this site seems to have suited the **Common Whitethroat** and the few records of its presence were mostly in the hedgerow adjoining a neighbouring rough meadow on the eastern boundary.

In conducting a long-term study one becomes acutely aware of the extraordinary loyalty that some birds have to very specific sites. It is especially fascinating to find migrants, or their progeny, that winter in Africa returning every year to precisely the same patch. Throughout the 20 years of this survey **Garden Warblers** consistently occupied a territory around the car park on Iping Common and the neighbouring margins of Stedham Common. By the same token, **Willow Warblers** returned annually to occupy a territory on Stedham Common referred to earlier as ‘Willow Warbler Patch’. The number of other territories established by this species varied, as shown in Figure 7, and was dependent upon factors such as the success of the annual migration and the amount of birch scrub available for occupancy. In 2012 there was a jump from four to ten territories. Five of the new ones were established in areas where there had been a recent surge in the growth of birch.

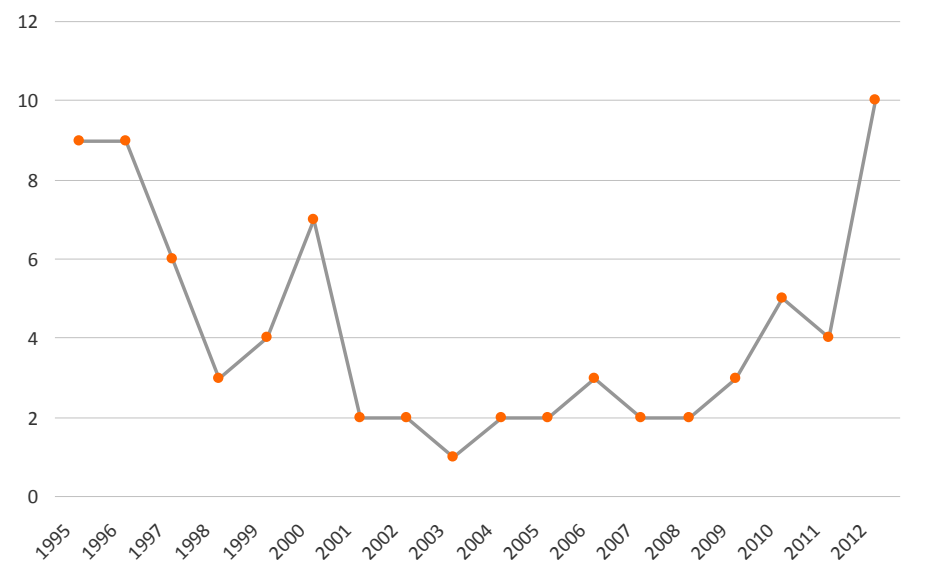


Figure 7. The numbers of Willow Warbler territories recorded each year on Stedham Common.

One pair of **Linnets** was recorded annually in and around gorse next to the gas main at the eastern end of the reserve. Occasionally there was a second pair, also associated with gorse. **Bullfinches** were present from time to time but only twice were firm territories established.

Yellowhammers were always present and their numbers peaked in the most recent four years of the study. This is a welcome trend, given that their numbers have been diminishing, both nationally and locally (Risely *et al.* 2013, Crabtree 2012). Another bird suffering severe losses in its heathland habits is the **Reed Bunting**. A pair was present on Stedham Common in 1994 and 1995, but regrettably they were then lost for no explicable reason.

Woodland species

There were extraordinary increases in **Great Spotted Woodpeckers**, over both the 20-year period and in the last ten years. The number of territories rose from one in 1993 to seven in 2011 and 2012. These figures mirror the national and Sussex trends: the Breeding Bird Survey showed a 139% population increase nationally between 1995 and 2011 (Risely *et al.* 2013) and a 320% increase in Sussex between 1994 and 2012 (Crabtree 2012). There is no doubt that the increasing number of mature birch trees on Stedham Common, which provided both nesting and feeding sites, must have been a significant factor on this particular reserve.

There were significant increases in both **Blackcaps** and **Chiffchaffs** over the course of this study, which mirror the general success of these warblers nationally and in Sussex (Risely *et al.* 2013, Crabtree 2012). Over the last ten years Blackcaps numbers were stable, with a dramatic increase in 2012, whilst the Chiffchaffs increased in the last decade.

Goldcrests were exclusively confined to the dense pinewoods, and with their very high-pitched calls were not the easiest of birds to record. They were found in varying numbers every year, except for 2009 and 2010. **Marsh Tits** were inconsistent visitors that were recorded in only 11 of the 20 years. When a territory was established it was usually in the mature deciduous, damp woodland in the north-west corner of the reserve.

Nuthatches were present most years and nest holes were occasionally found. **Eurasian Treecreepers** are secretive birds which, given the slightest disturbance, tease ornithologists by slipping behind tree trunks. However, they were consistently present from 2003 onwards and were found in the mature deciduous woodlands around the boundaries of the reserve.

The territory of a **Jay** appears to cover a very large area and only once was there more than one pair present on the whole of Stedham Common.

Common Crossbills were occasionally present. In 1994 a pair built their nest on a lone pine tree near the gas main, only for it to be blown away by a severe gale. They were present in the last three years and in 2012 a pair was firmly established, with the male very vocal in the central pinewood. Unfortunately no definite proof of breeding could be obtained.

Generalist species

There was a highly significant increase in the number of **Wren** territories in the first ten years of the study and the numbers remained stable thereafter. Wrens are known to suffer major losses after severe winters and it was therefore an agreeable surprise to find that the population had actually increased in the spring of 2010 following the 2009-10 ice and snow.

Dunnocks were mostly confined to the woodland edges of the reserve and maintained a steady presence. The diversity of habitats that developed on Stedham Common as result of the active management apparently benefited the **Robin** more than any other species. In 1995 there were 22 territories and in 2012 there were 43 territories.

There was a significant increase in the number of **Blackbirds** over the first ten years of the study and the numbers remained stable for the most recent ten years. The number of **Song Thrushes** varied from year to year without any consistent pattern. **Mistle Thrushes** graced the area annually with their beautiful song but they never had more than one territory after 1997.

There were substantial increases in the populations of **Coal**, **Blue** and **Great Tits** in the first ten years of the study, as shown in Figure 8. There was a further increase in numbers of Great Tits in the most recent ten years, whilst the numbers of Coal and Blue Tits remained stable. The annual fluctuations in the numbers of territories of Coal, Blue and Great Tits did not move in parallel, which suggests that there was no over-riding common factor that dictated the fates of these species.

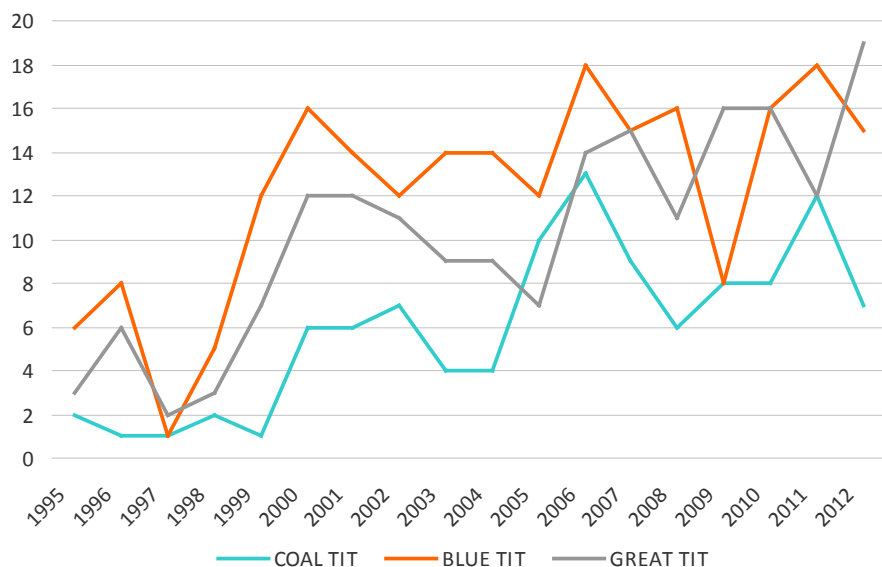


Figure 8. The numbers of Coal Tit, Blue Tit and Great Tit territories recorded each year on Siedham Common.

Magpies were present every year, but only once was there more than one territory. No **Jackdaws** were seen until 2000, when it was thought that one pair was nesting in the far south-west corner of the reserve. Thereafter they were present every year.

Carrion Crows were always patrolling the reserve and were recorded frequently in the course of every daytime visit. It is no wonder that other species are always extremely cautious when approaching their own nests. It was a matter of concern that the number of Carrion Crow territories rose from one to four during the 20-year study because of their increasing threat to the specialist heathland species.

Roos were not seen until 2008 when they were frequently seen flying across the reserve on a north-south axis. This behaviour continued in the following years in a manner which suggests either that there was a new rookery north of the A272 or that there was a new feeding area created by farming operations south of the reserve.

There was a significant increase in the numbers of **Chaffinches** in the first ten years and they were stable in the most recent ten years. There was an unexplained dip in 2008, which might have been the consequence of trichomonosis disease, but they recovered the following year and have flourished ever since. **Greenfinches** were present annually from 2004 onwards.

Birds of prey and owls

Sparrowhawks were present every year. Once one was seen feeding on a Woodpigeon, but otherwise they were only recorded patrolling high in the sky. (They have nested nearby on Iping Common and on the Fitzhall Estate.) **Common Buzzards** were present every year from 2004 onwards, except in 2007. Occasionally they lingered in the conifers on the western boundary but there were no suggestions of any attempt to breed, although they have almost certainly bred on the Fitzhall Estate. **Common Kestrels** nested on the reserve in 1999, 2000 and 2004, but otherwise they only appeared intermittently. As **Hobbies** are always more likely to be seen in the late afternoon or evening, it is not surprising that they were recorded in the surveys only once (2011), despite being present on Iping and Stedham every year since 1999.

Tawny Owls were only recorded in five of the 20 years, when they were usually heard hooting in the trees on the southern boundary during the course of evening visits to record Nightjars and Woodcock. They are probably present most of the year, but our crepuscular visits were late in the year for Tawny Owls to be calling.

Other species and absentees

A lone **Wood Warbler**, which sang for some time, was an unexpected guest in 1996, but it was unfortunately not joined by a female. **Siskins** were frequent early-spring visitors and there have been hints that they might stay to nest in the conifer plantations. **Bramblings** were recorded in two years and twice a **Redwing** was seen very late in the season. **Meadow Pipits** were occasional visitors to Iping Common for a few years following the massive summer fire on Iping in 1976 and winter flocks use Iping and probably Stedham Commons for winter roosting. Surprisingly, they were recorded on Stedham during the CBC visits only once in 20 years, despite the fact that they breed in the other substantial heathland area in Sussex on Ashdown Forest. It is perhaps even more extraordinary that not a single **Common Starling** was recorded throughout the course of this study. In 2000 a lot of conversation and correspondence was generated by the visit of a splendid but unrecognisable pheasant. The closest match was the Kalij Pheasant. In the end it was concluded that it was probably a hybrid from the Silver Pheasants that were being released on the South Downs at that time.

Conclusions

Whilst the Common Birds Census has provided incredibly valuable data on breeding numbers and territories, it has its limitations. It is constrained by time and season and does not paint the wider picture, particularly here, where there are adjoining areas of prime heathland and woodland which may suit some species better for feeding and breeding. The study has nevertheless been a most rewarding exercise; its longevity has enabled the unexpectedly dramatic changes in the avifauna that have occurred on this rich and diverse nature reserve to be measured, and has enabled the author to go some way in explaining why these changes have happened. The study has demonstrated that there has been a great increase in the number of birds on Stedham Common between 1994 and 2012. For an explanation for these changes one needs to go no further than to observe the variety of habitats that have developed over this period.

The primary objective of the Sussex Wildlife Trust in acquiring Stedham Common was to restore wet and dry heathland. The considerable resources poured into the reserve between 1988 and 1990 led to large areas of open heathland being recreated, which initially benefited birds of heathland and open habitats, whose numbers have generally remained stable ever since, apart from the loss of the Dartford Warblers during the severe winter of 2009-10. The retention of areas of mature deciduous and pine woodland by the SWT also gave a firm foothold for woodland species. However, after its initial clearance, the heathland has suffered greatly from uncontrollable scrub succession, particularly birch. These natural processes, together with management by conservationists and the introduction of grazing, have led to the evolution of an extraordinary mix of habitats. In addition to the mix of woodlands, wet and dry heather species of varied ages and some occasional open water, there is now much woodland edge, scrub, some acid grassland and bare ground. The niches created by this rich cocktail of habitats have been gradually exploited by substantial numbers of generalist and woodland bird species.

Birds are not the only creatures to benefit from these changes. An invertebrate survey in 2012, which compares an area of Stedham Common with two sites on Iping Common, showed that Stedham Common had more species than the two sites on Iping Common (Lyons and Phillips 2012). There were 181 species from 14 invertebrate groups including 30% of the British spider fauna.

Acknowledgements

The author is extremely grateful to the late Leslie Osborne and to Dr Brian Rogers, who teamed up with him in this fascinating project. With their considerable skills they both made most valuable contributions to the scientific veracity of the subject. Thanks are also due to Dr Hugh Horne for standing in for the author in the last two years of recording, and to Dr Brian Rogers for providing helpful comments on the draft of this paper.

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Finally, tributes are due to the many staff and volunteers of the Sussex Wildlife Trust who have made Stedham Common what it is. Thanks are also due to the SWT ecologist Graeme Lyons, for his analysis of the data, and the GIS officer for the SWT, Andrew Lawson, who created the maps.

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Appendix 1

Numbers of territories of each species identified on Stedham Common in each year 1993-2012 inclusive. P, species present but with insufficient evidence to confirm numbers of territories.

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Canada Goose														P	P		P			P
Grey Heron				P			P	P				P								
Mallard	P	P		P	P	P	1	P	P	1	1	1	P		P	P	P	P		1
Sparrowhawk	P	P	P	P	P		P			P	P	P	1	P		P	P	P	P	P
Common Buzzard												P	P	P		P	P	P	P	P
Common Kestrel		P	P			P	1	1		P	P	1			P	P	P		P	
Hobby																			P	
Common Pheasant							P	P					P	P	2	P	P	1	P	1
Woodcock		P		1	P	1	2	3	1	2	2	2	P	P						P
Common Redshank							P													
Common Gull																P	P			
Herring Gull														P	P					
Stock Dove				P	P		P	P										1	2	
Woodpigeon	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Turtle Dove						1														
Tawny Owl							1						P	P					P	1
Common Cuckoo	P	P	P	1			P	1				P	P	P	P	P			P	P
European Nightjar	P	P	1	1	2	2	2	2	P	P	P	2	1	3	2	3	2	2	1	2
Common Swift		P	P	P		P	P	P						P	P	P				P
G. Woodpecker	1	1	1	P	1	1	1	2	1	3	2	4	2	3	3	P	2	2	1	2
G.S. Woodpecker	1	1	2	1	2	2	1	2	1	2	3	3	4	3	2	5	5	6	7	7
Woodlark	3	2	1	2	2	2	2	2	P	2	1	2	3	3	2	1	1	1	2	4
Sand Martin						P		P			P	P		P	P	P	P	P	P	P
Barn Swallow			P	P			P	P			P			P	P	P				P
House Martin			P								P			P	P	P				P
Tree Pipit	1	1	1	1	1	1	4	2	P	1	P	2	2	3	2	2		1	4	3
Meadow Pipit																	P			
Wren	14	13	17	13	6	12	19	19	10	25	18	19	20	24	26	18	19	23	25	33
Dunnoek	P		P	P	P	1	2	4		P	6	P	P	4	P	2	1	P	2	3
Robin	12	18	18	26	16	19	26	28	11	36	32	28	32	31	28	30	36	37	43	43
European Stonechat	1	2	2	2	1	2	2	P	1	2	2	1	3	1	2	3	1	P		
Blackbird	3	2	3	5	4	3	7	7	4	8	9	6	11	13	11	10	9	8	7	13
Song Thrush	1		P	1	P	1	3	3	1	3	7	2	2	5	4	3	2	6	5	3
Redwing											P			P						
Mistle Thrush	2	1	1	P	2	P	1	P		1		P	P	P	P	1	1	P	1	1

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Dartford Warbler							1	P	1	2	5	6	5	4	4	4	P			
Common Whitethroat			P		P			1					P	P		P			P	1
Garden Warbler	1	P	1	1		P	2	2	P		1				P	1	1	1		P
Blackcap	P	P	1	P	P	2	3	4	P	3	1	3	6	7	6	5	4	5	7	16
Wood Warbler				P																
Common Chiffchaff		P	1	2	1	2	3	4	1	2	5	3	2	2	9	7	6	3	10	13
Willow Warbler	3	6	9	9	6	3	4	7	2	2	1	2	2	3	2	2	3	5	4	10
Goldcrest	P	2	2	2	P	1	2	4	1	2	2	5	3	6	3	5			4	4
Spotted Flycatcher											P	P	P	P						
Long-tailed Tit	P	P	2	P				3		1	1			1	2	2	2	1	1	2
Marsh Tit	P		P	P		P	1	1			1			P		1	1		P	
Coal Tit	1	1	2	1	1	2	1	6	1	7	4	4	10	13	9	6	8	8	12	7
Blue Tit	1	3	6	8	1	5	12	16	5	12	14	14	12	18	15	16	8	16	17	15
Great Tit	3	2	3	6	2	3	7	12	1	11	9	9	7	14	15	11	16	16	12	19
Nuthatch	P		P				P	1		P	1	1	P	P	P	1	P	P	1	4
Eurasian Treecreeper		1	1	P		P		2			2	2	3	2	2	P	P	4	P	2
Jay	P	1	P	1	1	P	1	1	P	1	1	1	1	1	1	P	2	2	1	P
Magpie	P	1	P	1	1	P	1	2	P	P	P	1	1			1	P	P	1	P
Jackdaw								P	P		P	P		P		P		P	1	2
Carion Crow	P	P	1	1	2	2	3	2	2	3	4	4	4	4	4	4	3	3	4	3
Rook																P	P	P	P	P
Chaffinch	7	8	9	11	8	12	12	18	9	22	22	19	29	27	27	17	26	30	31	26
Greenfinch			P	P						1		2	1	2	P	P	1	1	P	P
Goldfinch			P	P			P	P			P		P		P	P				
Siskin		P				P		P		P	P	P		P		P	P	P	P	P
Linnet	1	1	2	2	1	1	2	2	P	P	1	1	1	1	1	2	1	1	2	1
Common Redpoll		P																		
Common Crossbill		1				P					P		P			P		P	P	1
Bullfinch		P	1				P	2			P		P	1	P			P	P	P
Brambling		P																		P
Yellowhammer	2	2	2	1	2	2	3	3	1	1	1	1	1	P	2	3	5	5	4	3
Reed Bunting		1	1					P												
Total no. of territories	58	71	91	100	63	83	133	169	162	156	159	151	169	199	186	166	166	189	212	246
No. of morning visits	5	6	8	6	6	8	8	8	4	8	8	8	8	8	7	8	7	8	8	8
No. of evening visits	?	?	2	2	1	3	2	3	1	1	2	2	2	2	3	2	3	3	3	3

The BTO survey of breeding Nightingales in 2012 and 2013: numbers, distribution and habitat use in Sussex

Helen Crabtree and Colin Brooks

Introduction

In 2012 and 2013 the British Trust for Ornithology (BTO) conducted a national survey of Common Nightingales *Luscinia megarhynchos* (hereafter referred to as Nightingales). The main aims of the survey were to map all singing males and compare their numbers and distribution with those recorded in the previous national survey in 1999, and to gather new information on the distribution of the species across different habitats.

A secondary aim of the 2012–2013 survey was to assess whether individual Nightingales were paired. No previous survey of a breeding bird species in Britain had attempted to estimate the proportion of the territorial population that were paired, and most estimates of breeding populations have been based on singing or territory-holding birds, taking no account of how many of these birds may actually have been paired and therefore probably breeding. Research by Amrhein *et al.* (2007) in Europe suggested that only unpaired male Nightingales continue to sing later in the breeding season during the darkest hours of the night, whereas all territorial males (whether paired or not) sing in the daytime (especially at dawn and dusk). The survey method included both early-morning and nocturnal survey visits, in order to discover the proportion of singing males that continued to sing at night later in the spring. This element of the survey is beyond the scope of this article and is not discussed further here; the BTO analysis of the numbers of night-singing birds has not yet been completed and will be reported in due course. Consequently, the figures reported here are for the numbers of singing or territorial birds and not necessarily paired birds, although Nightingale territories located by nocturnal visits are included in the figures reported.

This article presents the results of the BTO survey in Sussex in 2012–2013, in relation to numbers, distribution and habitat use. These results are compared with those obtained from previous surveys in Sussex, particularly the results for Sussex obtained from the previous national survey conducted by the BTO in 1999 (Newnham and Sennitt 1999).

Survey methods

Visits to tetrads (2x2-km squares) known to have been recently occupied by singing Nightingales formed the main part of the survey. A list of such tetrads was compiled using mainly the 1999 survey results and subsequent records from the Bird Atlas 2007–11 project. Some additional tetrads were included to test the likelihood that the initial list was incomplete; these were potentially suitable sites within the range but where the species had not been recorded in 1999 or more recently. In Sussex, 363 tetrads were initially selected to be surveyed, with 196 of these tetrads designated as priority sites. The priority tetrads were selected as having a wide distribution across the county and as being likely to have differing levels of Nightingale abundance. The selected tetrads were allocated to volunteers where possible although some tetrads were not surveyed because volunteers were not available in those areas, and a small number of tetrads were allocated to paid fieldworkers; observers were also able to opt to conduct full tetrad surveys of tetrads not on the original list but where Nightingales were known to occur.

Volunteers were asked to visit each of their allocated tetrads at least twice during the early spring (21 Apr to 20 May). It was required that each visit should cover all suitable Nightingale habitat within the tetrad and should be made in the early morning (before 8.30 a.m.). Volunteers

were asked to map any singing Nightingales and any other Nightingale observations onto pre-printed survey forms using standard territory-mapping notation (Bibby *et al.* 1992). The use of playback of Nightingale song was strictly forbidden.

In tetrads where singing birds were found during the early-morning visits, observers were asked to make two subsequent nocturnal visits during the period 18 May to 4 Jun. The main aim of these visits was to discover whether singing birds already detected by the daytime surveys were in song during the hours between midnight and 3 a.m. Observers were asked to listen for at least 20 minutes to establish a negative record for any particular territory. The nocturnal visits were most important in priority tetrads, but were encouraged in any occupied tetrad. Nocturnal visits were not required in tetrads found to be unoccupied from daytime surveys.

After completing all of the required visits, volunteers were asked to estimate the numbers of Nightingale territories in each of their allocated tetrads, with each territory including at least one record of a singing male (a singing male recorded on just one date during the survey period 21 Apr to 4 Jun was considered sufficient evidence to identify a territory). Basic habitat information for each identified Nightingale territory was also requested: volunteers were asked to select for each territory a habitat code from a list of those codes which were used in the 1999 survey, to represent the habitat from which the bird most frequently sang, and then to select up to six codes from a longer list to complete a description of the habitat within each territory, including information on wet habitats (ponds, streams, ditches etc) within 50 m of the territory. Information about visit dates, times and weather conditions was required for all tetrads surveyed, including those where no territories were identified, and it was essential that all zero counts were reported.

To reduce the chances of singing birds being missed by the tetrad surveys, wide publicity was given to the survey and the submission of casual records of singing Nightingales was encouraged; it was essential that each record included the time of day and a six-figure grid reference.

Survey results

Tetrads surveyed: Full tetrad surveys were conducted in a total of 293 tetrads in Sussex in 2012; these included 180 tetrads designated as priority sites and one tetrad selected by an observer. Unfortunately the weather in the UK during April and the early part of May was persistently cool and wet, making it difficult for many volunteers to complete their survey visits. The time period for the early-morning tetrad visits had initially been planned to end on 14 May but this was extended until 20 May to allow surveys to be completed.

Although tetrad coverage in Sussex was excellent despite the difficult weather conditions, coverage in some parts of the UK was insufficient to generate meaningful results and further surveys were conducted in 2013. In Sussex a further 14 tetrads were surveyed in 2013, including five of the initially-selected priority sites, resulting in full tetrad surveys having been conducted in a total of 307 tetrads in 2012 or 2013. The locations of these tetrads are shown in Figure 1.

In all of the 307 tetrads surveyed, at least one early-morning tetrad search was conducted during the period 21 Apr to 20 May, and in the vast majority of tetrads at least two early-morning surveys were conducted. The exact number of tetrads in which nocturnal surveys were conducted is not available, and the implications of the numbers of birds detected in song during the nocturnal surveys are beyond the scope of this article, but those Nightingale territories that were identified during nocturnal surveys are included in the results presented here.

In addition to the Nightingale territories identified by the tetrad surveys in 2012 and 2013, further territories were identified through casual records submitted in 2012, both in tetrads where full tetrad searches were not conducted and also in some tetrads where full tetrad searches had failed to locate singing birds. Casual records of birds singing at any time during April, May and

June were used to identify territories, although it is likely that some records related to passage birds. Casual records submitted in 2013 were not used because the main focus nationally in 2013 was to obtain improved coverage of priority survey squares, and also because these casual records tended to give undue emphasis to passage birds in coastal locations (see discussion below).

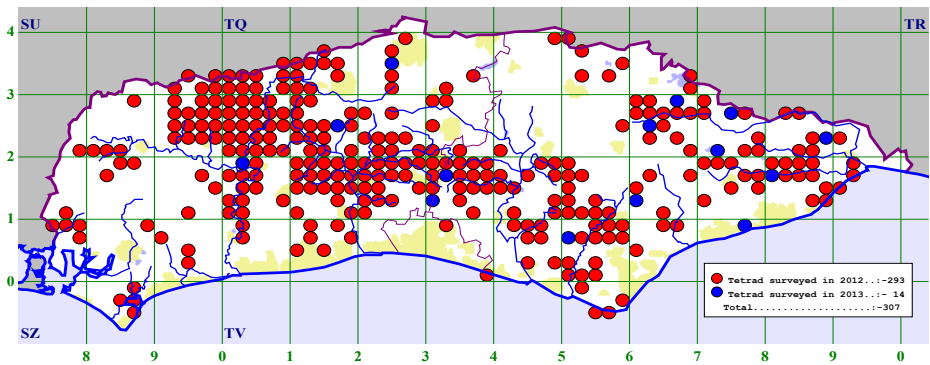


Figure 1. Tetrads in which full tetrad surveys were conducted in 2012 (red circles) or 2013 (blue circles).

Distribution of territories: As shown in Figure 2, territories were identified in 168 of the 307 tetrads where full tetrad surveys were conducted and in a further 34 tetrads where full tetrad surveys were not conducted. Full tetrad surveys in 139 tetrads failed to locate any Nightingale territories.

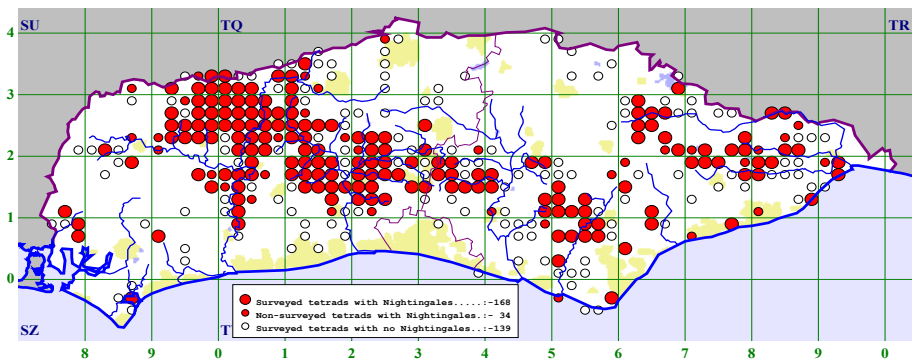


Figure 2. Tetrads where Nightingale territories were located through tetrad surveys in 2012 or 2013 (large red circles) or casual records in 2012 (small red circles), and tetrads where surveys were conducted in 2012 or 2013 but no singing birds were located (small empty circles).

Numbers of territories: The total number of Nightingale territories identified in Sussex was 852; these include 710 territories identified through tetrad surveys (including nocturnal surveys) in 2012, 139 territories identified through casual records in 2012, and three territories identified through tetrad surveys in 2013. Figure 3 gives some indication of the numbers of territories identified in each tetrad.

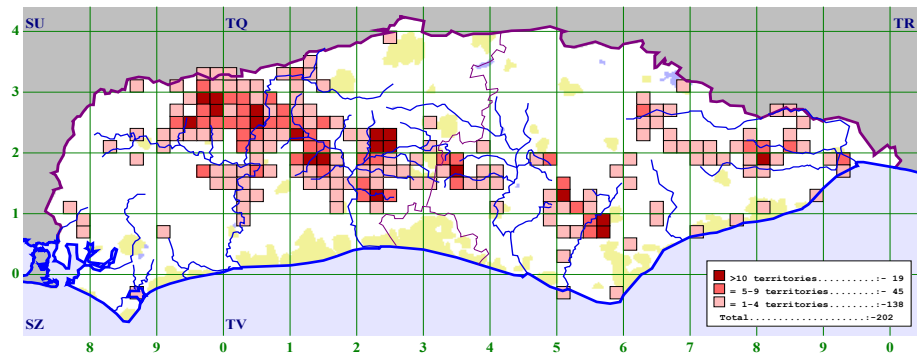


Figure 3. Numbers of Nightingale territories identified in Sussex through the 2012-2013 survey.

The actual Nightingale population of Sussex will be significantly greater than the 852 territories identified by this survey. A county population estimate of the actual number of territorial birds will be calculated by the BTO, taking into account the tetrads within the likely range in Sussex that were not surveyed, and the probable numbers of Nightingales that were present but not detected during survey visits (see discussion below). This estimate will be reported in due course, along with an estimate of the proportion of singing males that were unpaired.

Habitat information: Habitat information was provided by survey volunteers for 637 of the 713 territories identified through tetrad surveys (habitat information was not collected in a standard manner for casual records). Volunteers conducting tetrad surveys were asked to select for each territory a habitat code from a list of those codes which were used in the 1999 survey, to represent the habitat from which the bird most frequently sang. The numbers of territories for which each of these habitat types was selected are given in Table 1.

Table 1. Main habitat types selected by volunteers in 2012-2013 to describe habitats within identified territories from which male Nightingales most frequently sang (information available for 637 territories).

	Number of territories	Percentage
Broad-leaved woodland	172	27
Broad-leaved woodland: active coppice	22	3
Coniferous woodland	2	0
Mixed woodland (10% of each)	4	1
Carr (broad-leaved, waterlogged)	41	6
Scrub (any type)	318	50
New plantation (<5m tall)	13	2
Farmland hedgerow	56	9
Gardens	3	1
Other (disused orchard)	4	1
Other (not specified)	2	0

Volunteers were also able to select further habitat codes to complete a description of each territory. Broad-leaved woodland was selected as a secondary habitat type in 45 territories, meaning that this habitat type was identified by volunteers in a total of 217 territories. Scrub of any type was selected as a secondary habitat type in 89 territories, meaning that this habitat type was identified by volunteers in a total of 407 territories. In addition, habitat codes identifying wet habitats (ponds, streams, ditches etc) within 50 m of a territory were selected for 356 territories.

Discussion

Population estimates: The number of territories identified in this survey (852) is considerably greater than the 692 territories recorded in Sussex in 1999 (Newnham and Sennitt 1999), and it is possible that the final BTO population estimate for 2012-2013 will be similar to or even higher than the tentative estimate of around 1000 territories in 1999 (Newnham and Sennitt 1999).

The numbers of territories identified in the two surveys are difficult to compare directly, and even if a population estimate for 2012-2013 was currently available it would be difficult to reach definite conclusions about actual population changes in Sussex since the 1999 survey. There were differences in coverage between the two surveys, with more emphasis having been given in 1999 to the surveying of sites known to hold Nightingales. Some randomly-selected tetrads were surveyed in 1999 by paid fieldworkers to establish the proportion of the population that was missed by the surveying of known sites. Nationally, 33% of territories were estimated to have been missed by the surveying only of known sites in 1999 (Wilson *et al.* 2002), and it was this figure that was used to arrive at the population estimate of around 1000 territories in Sussex in 1999. However, it is difficult to assess whether this figure for the percentage of birds missed is at all accurate for Sussex, especially as only nine randomly-selected tetrads were surveyed in Sussex in 1999 and no singing birds were found in any of these tetrads (Newnham and Sennitt 1999). In the current survey there was a far greater emphasis on the surveying of randomly-selected tetrads within the likely range, and also a greater emphasis on the reporting of zero counts, so that the estimated percentage of birds missed through coverage deficiencies is likely to be more accurate.

In addition to coverage differences between the two surveys, there were significant differences in the methods used. The full tetrad surveys in 2012-2013 were all carried out in the early mornings (between sunrise and 8.30 a.m.), with some additional nocturnal visits (between midnight and 3 a.m.). In 1999 much greater emphasis was given to nocturnal visits, with volunteers instructed to conduct surveys between dusk and 8.00 a.m. In Sussex, a high proportion of survey visits were made before midnight (Newnham and Sennitt 1999), although there were conflicting views amongst observers at the time as to the best times of the day for conducting surveys in order to maximize the numbers of birds detected. The proportion of birds missed during survey visits will obviously depend on the times of day at which the survey visits are made, as the proportion of territorial birds present in a tetrad that are singing at any given time will vary depending on the time of day. However, this proportion of birds missed is also likely to depend on the density of territories within a tetrad (because singing frequency for any individual bird will depend on the number of other singing males in adjacent territories), as well as on the habitats within the tetrad, the weather during surveys, and observer skill levels. The relationship between survey timings and the proportion of birds missed is therefore a very complex one.

In addition, considering the more recent suggestion (Amrhein *et al.* 2007) that only unpaired male Nightingales continue to sing later in the breeding season during the darkest hours of the night, it now seems likely that the 1999 survey underestimated the population by a higher percentage than was thought at the time because many paired males would not have been detected by nocturnal surveys.

Even with early-morning surveys, the probability of detecting all the territorial birds that are actually present in a tetrad during two visits is considerably less than 100%. For this reason some intensive surveying of densely-populated sites was carried out in 2012 by paid fieldworkers and some volunteers. These fieldworkers made many frequent visits to the study sites with the intention of assessing how the numbers of singing birds detected varied with the numbers of visits made. The results of these surveys are being used by the BTO to estimate the probable numbers of birds missed at other sites where fewer visits were made by volunteers, thus increasing the accuracy of the population estimate that will be derived from the 2012-2013 survey.

An earlier national survey conducted by the BTO in 1980 identified 858 territories in Sussex (Newnham 1980). These 858 territories represented a 29% increase compared with the 661 territories identified by a similar survey in 1976 (Merritt 1978, Hudson 1979). However, the method used for these surveys in 1976 and 1980 was simply the checking of likely sites and the recording of the presence or absence of Nightingales (Davis 1982), and no information is now available on the times of day that survey visits were made. In addition, Merritt (1978) reported that a territory was only identified in 1974-1977 studies in Sussex where a bird was heard singing at the same location on two dates more than one week apart, meaning that fewer territories would have been identified than if a bird heard singing on a single date had been considered sufficient, as in more recent surveys. For these reasons it is difficult to compare the numbers of territories identified in 1976 and 1980 with the results of more recent surveys.

In conclusion, the greater number of territories identified in the 2012-2013 survey than in the 1999 survey can not be interpreted as a population increase, but neither is there any evidence for a population decline in Sussex since 1999.

Distribution: Many of the territories identified by the current survey are within the Low Weald, a geologically-defined area which stretches from Fernhurst and Northchapel in the north-west of the county, through Billingshurst, Henfield and Hassocks, to Hailsham in the south-east of the county. This is an area of small woodlands, fields and hedgerows, generally with clay soils and with an abundance of ponds and small stream valleys. With the exception of the river valleys, in particular the valleys of the Arun, the Brede and the Eastern Rother where there are significant numbers of territories, Nightingales are generally absent from the coastal plain, the South Downs (the geologically-defined area rather than the South Downs National Park) and large parts of the High Weald including the Ashdown Forest area.

Within this broadly-defined range, areas with particularly high densities of Nightingale territories are: the area to the south and east of Northchapel, including Ebernoe Common and the surrounding farmland; the area west of Billingshurst including the areas surrounding Kirdford and Wisborough Green; parts of the Knepp Estate and the nearby area around Coolham and Coneyhurst; the area between Cowfold and Bolney and the area south of here around Twineham and Shermanbury; the area between Henfield and Edburton, including the Woods Mill reserve; the area to the east and south-east of Burgess Hill, including Ditchling Common and the area around Streat; the area between Loughton and Hailsham; Abbot's Wood and the area around Arlington; and Brede High Woods.

As can be seen in Figures 2 and 3, a small number of the identified territories are located at seemingly unsuitable areas on the coast and are likely to relate to birds singing on passage rather than actually holding territory. Birds recorded at Pagham Harbour, Cuckmere Haven and Beachy Head were almost certainly passage birds, and in fact these so-called territories were not identified by tetrad surveys but by casual records. Other birds recorded elsewhere in the county may well have been on passage, especially as Nightingales can arrive in the county as late as mid-May, but these birds are impossible to distinguish from territorial birds.

Direct comparison of the distribution map resulting from the current survey (Figure 2) with that resulting from the Bird Atlas 2007-11 fieldwork in Sussex (Newnham and Crabtree 2012, Thomas 2014) is difficult because the atlas distribution map was plotted using records gathered during four breeding seasons (2008-2011 inclusive) and will therefore tend to show a wider distribution (248 tetrads) than the current map (202 tetrads) plotted using records gathered mainly in a single year. In particular, the atlas distribution map will include many more records of birds seen on passage, and indeed in 39 of the 248 tetrads in which Nightingales were noted in 2008-2011, birds were recorded as “present only” and not as singing and/or holding territories. Furthermore, the recording period for the atlas breeding season fieldwork began in early April when some birds recorded as singing in suitable habitat would in fact still have been on passage or prospecting for nesting sites, although this could equally apply to some of the casual records used in the current survey. Another factor which makes it difficult to compare the current distribution map with the atlas distribution map is that, although all tetrads in Sussex were surveyed at least once in the years 2008-2011 inclusive, atlas volunteers were not asked to make nocturnal or early-morning visits, and therefore a higher proportion of Nightingales will have been missed than in the current survey, especially considering that atlas tetrad surveys may have been conducted outside the main song period for Nightingales.

There have been no significant changes since 1999 (Newnham and Sennitt 1999) in the general areas in Sussex in which Nightingales are found, as demonstrated in Figure 4. There have, however, been some changes at a more local level and the number of tetrads in which Nightingales were recorded fell slightly from 213 in 1999 to 202 in 2012-2013. Nightingales were located in a wider area of the Arun valley in 2012 than in 1999, and also significant numbers of territories were identified in 2012 in the area between Cowfold and Bolney where very few territories were recorded in 1999. It is difficult to be certain how intensively these areas were surveyed in 1999, or indeed whether they were surveyed at all, so it is not possible to conclude that these are new areas for Nightingale territories in 2012. However, there are some areas that were fully surveyed in 2012-2013 where no territories were identified but where birds had been recorded in 1999; these areas include parts of the lower Cuckmere valley and Friston Forest, and parts of the upper Eastern Rother valley in the Robertsbridge and Bodiam area. There were also some areas where territories were identified in 1999 but which were not surveyed in 2012-2013.

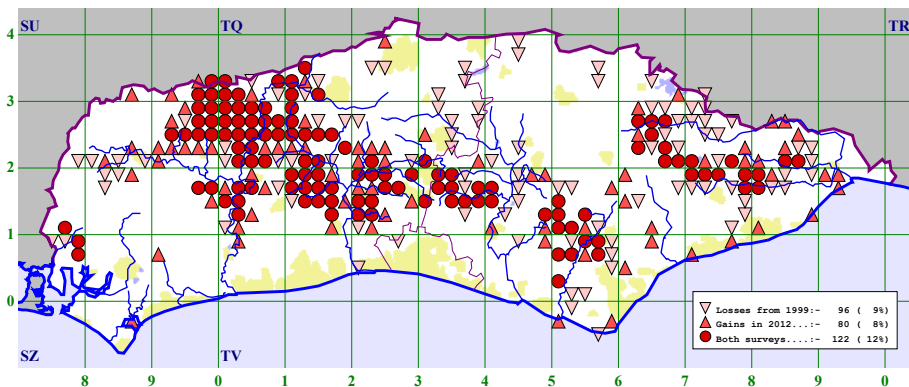


Figure 4. Changes in the tetrad distribution of Nightingale territories in Sussex between the 1999 and 2012-2013 surveys.

These apparent changes in distribution at a local level between 1999 and 2012-2013 are difficult to explain but are likely to be due to changes in habitats at a local level as well as slight differences in coverage. Similar changes in distribution at a local level were observed in Kent between 1999 and 2012 (Henderson and Orton 2014), with the most important factor considered to have been vegetation succession including woodland maturation and scrub development.

Comparison of the current distribution map with that resulting from the Sussex Tetrad Atlas fieldwork (Newnham 1996) is again difficult because this earlier Sussex atlas distribution map was plotted using records gathered during five breeding seasons (1988-1992 inclusive). It does appear, however, that Nightingales were considered breeding in 1988-1992 in some areas of the South Downs and some areas of the High Weald where they were not recorded at all in later surveys including the current survey.

Distribution maps resulting from the 1976 and 1980 surveys (Merritt 1978, Newnham 1980) were plotted at a 10x10-km square scale, so are difficult to compare with the more recent tetrad-scale maps. The distribution map resulting from the 1980 survey suggests that Nightingales occurred widely across the coastal plain, the South Downs and the High Weald areas, although tabulated data suggests that the numbers of Nightingales found in some of these areas were very small (Newnham 1980).

In summary, it would appear from the information available that Nightingales were present in relatively small numbers in the higher and drier areas of the South Downs and the High Weald in 1980 and in 1988-1992, but that the distribution in the county has become more restricted to the lower and damper areas of the Low Weald and the river valleys in more recent years.

Habitat selection: Figure 5 compares the main habitat types selected by volunteers in 2012-2013 with similar data collected in the 1980 and 1999 surveys (Newnham and Sennitt 1999).

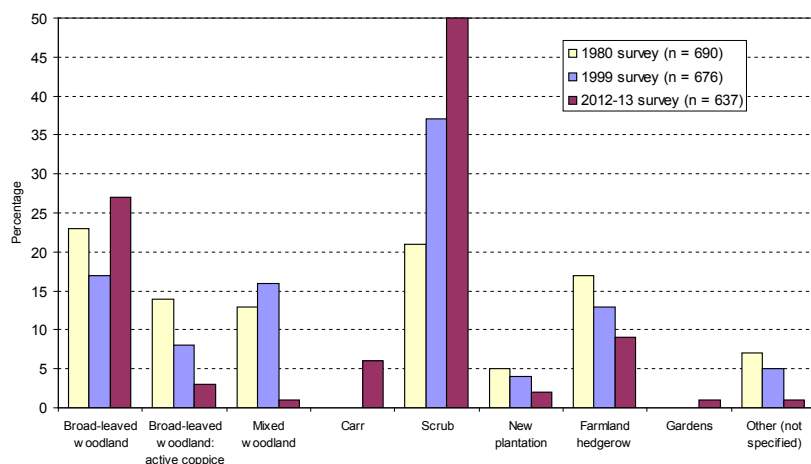


Figure 5. The main habitat types selected by volunteers to describe the habitats from which territorial Nightingales most frequently sang. Data from the 2012-2013 survey are compared with similar data collected during the two previous national surveys in 1980 and 1999. The sample sizes are the numbers of territories for which habitat data was provided by the volunteers.

These results need to be considered with caution, because subjective assessments of habitat types by volunteers will differ between volunteers, and not all habitats can be described easily by selecting from a limited list of habitat types. However, the variation in habitat assessments between volunteers is likely to have been similar for each of the different surveys, so a comparison of the results from the different surveys seems to be reasonable. Habitat data collected for the 1976 survey is not included here because the habitat types from which volunteers were asked to select were slightly different, and also because the sample size was much smaller.

It is clear from this data that although broad-leaved woodland remains an important habitat for Nightingales in Sussex, there has been a continuing shift since the 1980 survey towards scrub as being the most important habitat type, with a corresponding decrease in the importance of actively-coppiced woodland, mixed woodland and farmland hedgerows. If territories are included for which scrub of any type was selected as a secondary habitat type, then 64% of all territories contained scrub habitat. Similar results were obtained in Kent, where scrub was the main habitat type selected by volunteers for 50% of all territories identified in the 2012-2013 survey (Henderson and Orton 2014). A similar shift from woodland to scrub habitats since previous surveys was noted nationally in 1999 (Wilson *et al.* 2002).

Scrub habitats used by Nightingales include blackthorn scrub, bramble scrub, overgrown coppiced woodland and regenerating woodland. Volunteers participating in the current survey commented on the particular importance of blackthorn scrub along streambeds, bramble scrub in overgrown and abandoned industrial sites and gardens, dense vegetation along railway embankments, similar dense vegetation along the routes of power lines, and dense bramble scrub in abandoned apple orchards. Research by Wilson *et al.* (2005) suggested that Nightingales have specific requirements in scrub habitats and that birds tend to use areas where there is bare ground shaded by dense vegetation. This type of vegetation structure presumably provides suitable sheltered foraging conditions on the bare ground combined with protection from predators and grazing animals, although this is a very specific stage in vegetation succession, meaning that the areas of most ideal suitability would change from year to year. Observations on the Knepp Estate (P. James *pers. comm.*) have suggested that the relatively high numbers of Nightingales there are using areas of blackthorn scrub with precisely this preferred vegetation structure.

Despite anecdotal evidence for the removal of scrub in some areas, it is likely that in recent decades there has been a significant increase in the area of scrub habitats in Sussex, although there are insufficient recent data to support or quantify this suggestion. However, such is the importance in Sussex of scrub habitat for breeding Nightingales that there are serious concerns about future habitat change and loss. Existing areas of scrub will mature and become less suitable for Nightingales, and also increasing development and financial pressures will make it likely that many areas of existing or developing scrub on disused residential, industrial and agricultural land will be lost to housing or more intense agricultural use. There are currently some specific housing development proposals that would affect the important area between Henfield and Twineham where Nightingales are using farmland scrub habitats almost exclusively.

It has been suggested that across lowland England the habitat quality of regenerating woodland, including active coppice, for Nightingales may have declined in recent years due to increased browsing from rising deer populations (Holt *et al.* 2010). Although the evidence for this suggestion comes from research carried out in regenerating coppice, which may not be relevant in all broad-leaved woodland, and although there is no information available on deer numbers or population trends in Sussex, deer numbers have increased dramatically in England in recent decades (Battersby 2005), and increased browsing by deer may account to some extent for the decrease in importance of woodland habitats for Nightingales in Sussex.

There is a clear association of Nightingale territories with wet habitats; comparable figures for previous surveys are not available, but in the current survey the presence of wet habitats (ponds, streams, ditches etc) within 50 m of a territory was noted for 56% of the territories for which habitat data is available. A similar association was noted in Kent (Henderson and Orton 2014) where the presence of wet habitats nearby was noted for 47% of territories. This may simply be a reflection of the landscape features of the Low Weald, which holds such a high proportion of the Sussex population; this area generally includes an abundance of ponds and small stream valleys, often with wet woodlands. However, it could also be the case that Nightingales are utilizing these damper areas on generally clay soils because of more suitable vegetation densities, better food supplies, reduced disturbance from livestock or human activities, or a combination of these factors. Wilson *et al.* (2005) found that the highest Nightingale densities in a study area in East Anglia were found on humus-rich soils, suggesting that soil type, in addition to habitat availability, may have a strong influence on Nightingale distribution, with humus-rich soils perhaps being preferred because they support a particularly rich source of invertebrate food.

Conclusions

The survey conducted in 2012-2013 of breeding Nightingales in Sussex achieved excellent coverage and resulted in the identification of 852 territories or singing males. For reasons discussed above, the actual county population of territorial birds will be higher than this, and a population estimate calculated by the BTO based on intensive detectability studies and an analysis of nocturnal visit data will be published in due course. However, there is no evidence for a decline in numbers in Sussex since the previous national survey conducted by the BTO in 1999, and it is possible that numbers have remained stable, as there have been no significant changes in distribution in Sussex since 1999. There has been a continuing shift, also noted in the 1999 survey, towards scrub as being the most important habitat type for Nightingales in Sussex, with 64% of all territories in 2012-2013 containing scrub habitats of various kinds, and there is also a clear association with wet habitats such as ponds, streams and ditches.

There are many difficulties, discussed in detail above, with comparing the results of the 2012-2013 survey with those of previous surveys, particularly in relation to absolute numbers of territories and population estimates. This is an inevitable effect of the continuing development in understanding of the most effective methods for surveying Nightingale populations. However, comparisons are possible between the results of the 2012-2013 survey and those of previous surveys in relation to distribution and habitat use, and these have revealed some important results which have implications for future conservation measures.

The range of Nightingales in the UK is contracting towards the south-east and the continent, and it is interesting to note that this range contraction is occurring “despite a projected northward expansion in response to climate change” (Balmer *et al.* 2013). The impact, if any, of climate change on breeding numbers (and breeding success) in Sussex remains uncertain and probably impenetrable, although Wilson *et al.* (2002) discuss the issue of climate change in a national context. Nightingale numbers in the Picardy region of France appear to have remained stable in recent decades, but a decline has been noted in parts of the Pas de Calais, with the species having been lost in the last decade from a formerly well-populated area near St Omer (S. Larivière and F. Frénois *pers. comm.*). Similarly there has been a decline in recent decades of up to 20% in the number of breeding birds in some parts of Belgium. Considering these population declines in France and Belgium, and given that the range in the UK is contracting towards Sussex and Kent in particular (Balmer *et al.* 2013), in Sussex there is a particular responsibility to monitor Nightingales and to put into place suitable conservation measures.

In terms of monitoring, another survey with anything resembling the intensity and scale of the 2012–2013 survey is neither possible nor necessary for many years. However, with Nightingales too scarce in Sussex for population trends to be tracked reliably using the annual Breeding Bird Survey (BBS), individual observers can continue to play a valuable role by recording, in a consistent manner from year to year, numbers of Nightingales in defined areas. It will be important to maintain consistent records of Nightingales in sites known to support significant numbers, along with information about management and habitat changes, but equally it will be important for individual observers to record Nightingales (including habitat information) in newly-colonised areas or areas used less regularly, and in these areas it is particularly useful if repeated observations can be recorded during each breeding season to help to distinguish between breeding and passage birds. All of this information can then subsequently be used to help to provide advice on land management and planning issues.

There are many threats to Nightingale populations in the UK, particularly the continuing decline in the suitability of woodland habitats and also the removal or maturation of scrub habitats that are now so important for Nightingales. Other national and international issues are discussed in detail by Holt *et al.* (2012). In Sussex an increase in coppicing and other woodland management would be beneficial for Nightingales, but the removal and maturation of scrub habitats would appear to be particularly significant threats. Individuals and nature conservation organizations can help to conserve the current Nightingale population in the county by showing a greater willingness to allow scrub growth on disused residential, industrial and agricultural land, and by promoting amongst all landowners and land managers and the general public a better appreciation of the value of scrub habitats for Nightingales and other wildlife.

Acknowledgements

Many thanks are due to all of the 159 observers who conducted the tetrad surveys in Sussex, who are identified in the list of contributors, as well as to landowners and farmers who kindly allowed volunteers to carry out surveys on their land. Thanks are also due to all of the observers who submitted casual records. Sincere thanks are due to John Marchant and Greg Conway at the BTO for providing the grid references of the identified territories in Sussex, and to Dr John Newnham for providing the maps used in this article. Further thanks are due to Andrew Henderson, Chas Holt, Tim Thomas, David Howey and Dave Boddington for helpful comments.

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Wood Warbler Survey 2012-2013

Clare Buckle

Introduction

The decline of the Wood Warbler in Sussex has been well documented. James (1996) detailed the drastic reduction from an estimated county population of 150 pairs, taken from records obtained between 1965 and 1969 (Shrubb 1979), to the much lower numbers of eight in breeding habitat in 1992 and ten in 1993, from records submitted (see Figure 1). Shrubb (1979) noted that Wood Warbler numbers had not been very accurately assessed and the 1965-1969 figure should not be taken as a complete count.

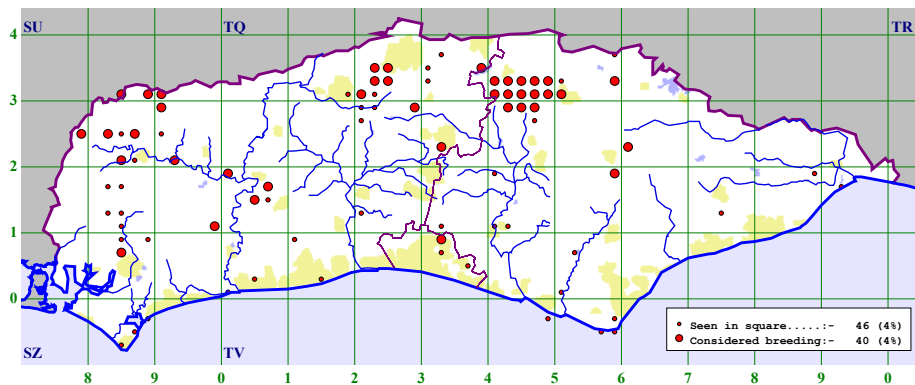


Figure 1. *Wood Warbler breeding distribution 1988–1992 (James 1996).*

Thomas (2014) noted a further decline to just 5-10 pairs by the early 2000s (James 2004) and then 2011 was the first year in which no confirmed breeding attempts were recorded (Parmenter 2012). During the Bird Atlas 2007-11 period there were only two tetrads, both in the north-west of the county, where breeding was confirmed (see Figure 2): in 2008 an adult was seen with two recently fledged young and breeding was also confirmed in 2010 (Parmenter 2009, 2011).

It was felt that targeted survey work was required in areas which Wood Warblers were known to frequent, in order to assess the remaining population.

Survey method

It was agreed to conduct a survey of Wood Warblers in 2012 by asking a number of locally-based surveyors to target known sites such as Ashdown Forest in East Sussex, and Stanley, Linchmere, Marling and Blackdown Commons in West Sussex. Another former stronghold to the west of the county, between Horsham and Worth Abbey, was not included as by 2012 the species was already believed to be lost from this area. The Bird Atlas 2007-11 fieldwork revealed a complete absence of Wood Warblers in this area.

In addition, submitted records and sightings from the Sussex Ornithological Society (SOS) website were monitored. This ensured that information about additional birds, such as migrants arriving from April onwards, was captured.

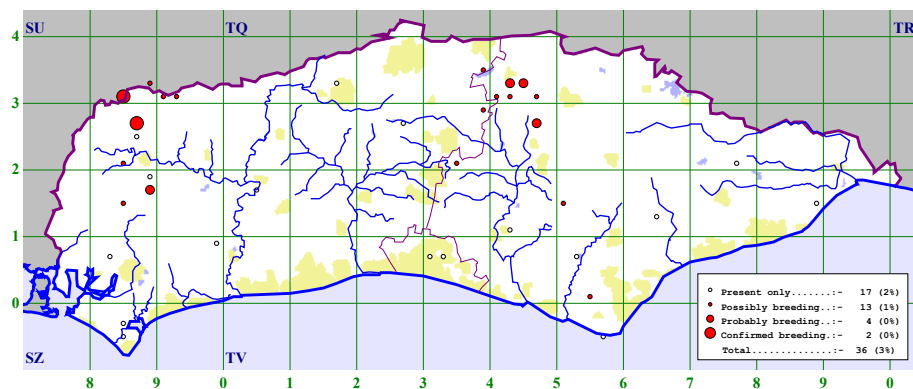


Figure 2. Wood Warbler breeding distribution 2007–2011 (Thomas 2014).

Originally it had been intended that the survey would take place during the breeding season of 2012. Although Wood Warblers are known to be associated with damp oak woodland (James 1996), June 2012 saw exceptionally wet weather and was later confirmed by the Meteorological Office to have been the wettest June in the UK since records began in 1910 (<http://www.metoffice.gov.uk/news/releases/archive/2012/wettest-June>). The weather conditions made it difficult for surveyors to visit their allocated locations. By the time the volunteers were able to survey again, Wood Warblers appeared to have stopped singing.

The promising records from May did not continue into June. As it was not known what impact the unusually wet weather may have had on nesting attempts, it was agreed that the survey should be repeated in 2013, when hopefully the weather would be more conducive to bird surveying.

Results

In 2012, the first Wood Warbler arrival in Sussex, reported on the SOS sightings page, was at Church Norton on 27 Apr. A number of further sightings were reported from coastal locations up to 4 May, but the first record from a breeding area was on the same day, near the Horder Centre on Ashdown Forest. Up to five Wood Warblers were then recorded from locations on Ashdown Forest throughout May and up to early June. At Buchan Country Park near Crawley there were another two, possibly three, males observed singing between 2 and 17 May.

The first arrival at one of the north-west Sussex heaths was at Blackdown on 6 May. Further searches of Blackdown on 7 and 14 May were fruitless, but on the 15th a bird was heard calling at Blackdown Common. The species was also reported from Stanley Common with at least one and possibly two singing males. Marley and Linchmere Commons were both searched but no Wood Warblers were found there.

The latest bird observed singing was on 12 Jun on Ashdown Forest. After this there were no further records until 11 Sep when a single bird was reported from Church Norton, presumably on autumn migration.

After the very wet June of 2012 it was decided to repeat the survey in 2013 using the same monitoring methods, to see whether further June records could be obtained.

The first report of a Wood Warbler in Sussex was on 16 Apr at Pulborough Brooks. This record was 11 days earlier than the first of 2012. The first bird at a traditional breeding location was on

6 May at Buchan Country Park and a Wood Warbler was observed here up to 3 Jun. In 2013 only one record suggested there may have been more than one bird singing, and this was unconfirmed so it has to be assumed that only one bird was present.

A singing male was again recorded at Blackdown Common, between 7 and 31 May. Despite searching, however, none were seen or heard at Stanley, Iping or Linchmere Commons. Perhaps most concerning is the fact that in 2013 there were no records from Ashdown Forest at all despite there having been up to five singing males in 2012.

Summary and discussion

In 2012 the number of singing males observed at traditional strongholds suggests between nine and 11 territories, with the majority on Ashdown Forest.

In 2013 the records from Blackdown Common were from two distinct locations so it is possible that more than one bird was singing there, although they were never heard at the same time. With the absence of any records from Ashdown Forest the number of singing males observed this year suggests a maximum of four, but more likely three territories. Records for 2012 and 2013 are summarised in Figure 3.

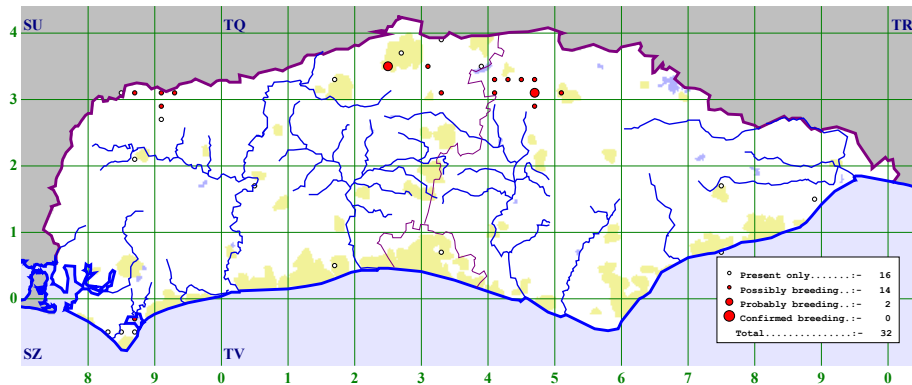


Figure 3. Combined 2012 and 2013 Wood Warbler records.

Wood Warblers are associated with damp oak woodland (James 1996) such as occurs in the west of the British Isles. In Sussex this habitat is found in locations on the sandstone ridges and in areas with birch, beech and oak woodland, as well as lowland heath where there are steep slopes with mature oaks, such as in ghylls (Thomas 2014). The ghyll woods of the High Weald consist of wooded steep-sided stream valleys, occasionally with sandstone outcrops. They provide a stable moist microclimate favouring the growth of various ferns, liverworts and mosses, some of which are more typical of the western seaboard of Britain (James 1996). Historically, the most important site in Sussex has been Ashdown Forest, which has a number of such ghylls, with the north-west Sussex heaths also providing suitable breeding habitat.

The Wood Warbler is a ground-nesting species which prefers shady yet open woodland with a sprinkling of younger trees and minimal undergrowth.

The reason for the decline in Wood Warbler numbers is not clear. It has been suggested that climate change may be a factor, with drier summers possibly contributing. This decline is not limited to Sussex. In the UK the population has declined by 69% since the mid-1990s and the

species has been lost from 50% of its former UK range but is also declining in many countries across its breeding range.

The RSPB Centre for Conservation Science is conducting research (with the Countryside Council for Wales, Natural England and Devon Birds) into the ecology of the Wood Warbler, and is examining a number of possible causes for the decline. Although the decline of Wood Warblers in the UK could be driven by factors across breeding grounds, wintering sites and migration routes, this research is looking at possible causes at UK breeding grounds in mid-Wales, Devon and the New Forest.



Wood Warbler; West Sussex, May 2013 (Marc Read)

Conservation scientists have been comparing nest mortality rates with those of the 1980s, to test whether nest predation is a factor (Mallord *et al.* 2012a). They have also been investigating whether invertebrate food sources have declined since the 1980s and whether climate-driven changes in caterpillar phenology have caused a mis-match in the timing of prey abundance and nest activity (Smith *et al.* 2011). Another area of research is looking at whether changes in woodland structure have contributed to the declines (Mallord *et al.* 2012b).

Although this research is ongoing, to date scientists have found very little evidence to suggest that factors in the UK breeding grounds of Wood Warblers are driving change. Nest mortality rates were not found to be significantly different to those recorded in the 1980s. Caterpillar abundance was found to be lower in some areas and there was an increased mismatch between the timing of prey availability and nesting activity, but Wood Warblers were able to successfully switch their diet to flying insects and spiders and this change had no impact on productivity.

A new study by the British Trust for Ornithology (BTO) and the University of Sheffield has been looking at climatic variation in passage regions as well as breeding and non-breeding grounds. This study is looking at three declining migratory species: Redstart, Wood Warbler and

Spotted Flycatcher, and is looking at long-term data from the Nest Record Scheme, which shows that the “strongest factor influencing timing of breeding was temperatures in the Mediterranean during spring migration with warmer conditions leading to earlier breeding”. It is thought that this might be due to enhanced food availability during stop-overs which increases migration speed and results in birds being in better condition on arrival. Redstarts and Wood Warblers, but not Spotted Flycatchers, bred earlier in years with warmer springs in the UK, and perhaps this increases the mismatch between food availability at breeding grounds and nest activity.

It will be interesting to see what further results come from these areas of research, as the causes of Wood Warbler decline, for the present at least, remain largely unknown.

Acknowledgements

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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 Sussex Bird Report have been fully authenticated.

Whooper Swan	Temminck's Stint	Greenish Warbler
Bean Goose (both races)	White-rumped Sandpiper	Pallas's Leaf Warbler
Pink-footed Goose	Pectoral Sandpiper	Yellow-browed Warbler
American Wigeon	Buff-breasted Sandpiper	Radde's Warbler
Green-winged Teal	Red-necked Phalarope	Dusky Warbler
Ring-necked Duck	Grey Phalarope	Barred Warbler
Ferruginous Duck	Pomarine Skua (except spring)	Subalpine Warbler
All pheasants (except Common)	Long-tailed Skua	Icterine Warbler
White-billed Diver	Sabine's Gull	Melodious Warbler
All shearwaters (except Manx)	Ring-billed Gull	Aquatic Warbler
All petrels (except Fulmar)	Caspian Gull	Marsh Warbler
Cattle Egret	Iceland Gull	Rose-coloured Starling
Great White Egret	Glaucous Gull	Dipper
Purple Heron	White-winged Black Tern	Bluthroat
White Stork	Roseate Tern	Red-breasted Flycatcher
Honey-buzzard	Black Guillemot	Richard's Pipit
Black Kite	Little Auk	Tawny Pipit
White-tailed Eagle	Puffin	Red-throated Pipit
Montagu's Harrier	Alpine Swift	Serin
Goshawk	European Bee-eater	Twite
Rough-legged Buzzard	Golden Oriole	Common (Mealy) Redpoll
Red-footed Falcon	Red-backed Shrike	Arctic Redpoll
Spotted Crake	Woodchat Shrike	Parrot Crossbill
Corn Crake	Chough	Common Rosefinch
Common Crane	Hooded Crow	Lapland Bunting
Stone-curlew	Willow Tit	Cirl Bunting
Kentish Plover	Short-toed Lark	Ortolan Bunting
Dotterel	Shore Lark	Rustic Bunting
American Golden Plover	Red-rumped Swallow	Little Bunting

In addition, descriptions are required for all races other than the normally occurring one including: Black Brant, 'Baltic' *fuscus* Lesser Black-backed Gull, 'Northern' *argentatus* Herring Gull (except Rye Bay), Kumlien's Gull, 'Scandinavian' *littoralis* Rock Pipit, Yellow Wagtail and 'Continental' *ater* Coal Tit. However, descriptions are not required for the following sub-species/races: Pale-bellied Brent Goose, *intermedius* Lesser Black-backed Gull, White Wagtail and Greenland Wheatear.

It should also be noted that descriptions may be required for any species seen in unusual circumstances or on an unusual date.

Records of unusual species should be submitted on, or in the same format as, the forms available from the Recorder or from the SOS website. Completed forms should be sent to the Recorder, preferably by email although postal submissions will also be accepted.

Where clear photographs are available for assessment by the Records Committee only the first page of the Scarce Records Form need be completed.

Reports of national rarities as defined by the *British Birds Rarities Committee* should be submitted to the Recorder either in the same format as above or on forms available from the secretary of the *BBRC*.

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Waxwing, Salvington, February 2013 (Leigh Prevost)

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