

The Sussex Bird Report

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Photographic acknowledgements: The Editor would like to thank those photographers who submitted photographs of Sussex birds, taken in 1998. As in the past, the quality of transparencies and prints received was outstanding.

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Peter Wilson

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

EDITORIAL

Although not a vintage year for birds in Sussex, thanks must again go to those members, including some from outside the county, who submitted a total of no less than 45,000 records, a figure comparable with the 42,100 records for 1997 entered into the Society's computer database. Without these records there would of course be no *Sussex Bird Report* and, more importantly, no baseline information to assist conservation in the county.

Once again, the species accounts have been written by a large team of authors, namely JTA Bagley, J Beesley, Mrs VP Bentley, Dr C Brooks, CB Collins, DEG Copeland, DE Crawley, J Curson, M Denny, RJ Fairbank, BR Gilmore, JL Herring, JA Hobson, LG Holloway, A House, Dr JK Irons, P James, Dr ME Kalaher, R Knight, P Luffingham, L Manns, MJ Mason, Dr JA Newnham, JL Nobbs, Mrs SJ Patton, RT Pepper, R Prior (RPr), R Pulley (RPu), Dr AB Watson, B Williams and TJ Wilson. The initials at the end of the species' texts identify all the writers to whom sincere thanks are due. This year, a special effort has been made to ensure that the *Report* is as accurate as possible and that important records have not somehow been omitted from the text. In this respect, I would particularly like to thank Richard Fairbank, John Newnham, Robin Pepper and Barry Yates who worked extensively on the Systematic List and suggested a number of improvements. It is my view that records submitted to the SOS should be readily accessible in the future. Given my involvement with *Birds of Sussex*, I know only too well the frustrations involved in searching through dusty files in search of records that were omitted from past *Sussex Bird Reports*! With this in mind, a number of species accounts have been altered and edited to ensure a reasonable degree of uniformity and to summarise the records in a more accessible form. It is my sincere hope that this action will not have offended anyone but if that is the case, I can only apologise. Special thanks must go to Tony Cocks who undertook the onerous task of editing the scientific papers (as well as writing one himself) and to Lawrence Holloway who helped in many ways, not least with the photographs that appear in this *Report*. John Hobson again wrote the *Review of the Year*. Special mention must be made of John Newnham who again gave freely of his time in organising the computerisation of records and spent many hours analysing records for this *Report*.

Regrettably, there are a number of active birdwatchers in Sussex who still choose for a variety of reasons not to submit their records. I would like to finish this Editorial by encouraging those concerned to examine their conscience so that in future years we are able to present a still more comprehensive summary of the birds in Sussex.

Paul James, September 1999

REVIEW OF 1998

by John Hobson

The highlights of 1998 were the county's 2nd **Semipalmated Sandpiper**, **Thrush Nightingale** and **Siberian Stonechat**, 3rd **Lesser Crested Tern**, 4th **Great White Egret**, **Ring-necked Duck** and **Surf Scoter**, 7th **Black Stork**, and 9th **Lesser Yellowlegs**. Although an impressive list of rare birds, only the Sandpiper, Yellowlegs and Surf Scoter were seen by more than a handful of observers. The total of 257 species recorded during the year compares unfavourably with the 265 in both 1997 and 1996.

The weather in **January** was dominated, in the first half, by a series of westerly depressions, much as in December. A succession of southwesterly storms, accompanied by heavy rain and winds gusting at over 100mph, peaked on 6th when heavy damage was caused along the coast. Temperatures continued to be exceptionally mild and often 10°C above normal. From 19th the winds moderated to light, variable and northerly and pressures rose; more settled conditions and more normal temperatures prevailed.

The stormy conditions early in the month produced an interesting selection of sea birds. At least 3 **Arctic Skuas** were recorded during the month, including an inland bird at Arlington Res on 8th, and also 6 **Great Skuas**. A **Sandwich Tern** was seen at Brighton Marina on 6-7th but more notable was a **Common Tern** in the vicinity of Shoreham Hbr from 8th to 19th, the first county record for the month. Other sea birds included a total of 29 **Little Gulls**, and 7 inland **Kittiwakes** at Weir Wood Res from 8th to 10th. A **Grey Phalarope** was found on the sea at the end of the Palace Pier at Brighton on 5th while others were seen at Shoreham, Worthing and Chichester GP on 10th, the latter staying until 25th. A 1st-winter **Iceland Gull** was at Selsey Bill on 2nd while up to 3 **Glaucous Gulls** were in nearby Pagham Hbr throughout the month. Probably the same **Iceland Gull** appeared in Shoreham Hbr on 7th, apparently commuting between there and Brighton Marina up to 19 Apr. A **Great Northern Diver** sheltered in Southwick Canal from 15th to 26th and another inland at Bewl Water from 18th remained into April. A total of 5 **Snow Buntings** was recorded during the month and, more unusually, 4 **Lapland Buntings** at Rye Hbr on 30th.

Waders included up to 9 **Purple Sandpipers** at Brighton Marina, and totals of 5 **Whimbrel**, 5 **Spotted Redshanks**, and 14 **Greenshanks** in Chichester and Pagham Hbrs. There were 11 **Chiffchaffs** at Thorney SF on 21st but only 3 **Firecrests** in the whole county. Urban **Peregrines** were seen regularly at Brighton West Pier and roosting on Chichester Cathedral and the erstwhile Shoreham power station chimney. Two **Bitterns** were recorded at Pett Level Pools on 27th.

February was exceptionally mild, dry and settled with light winds. A southwesterly airstream from 9th caused temperatures to peak at 19°C on 14th.

Wildfowl provided much of the interest during the month. Up to 12 **Pink-footed Geese** joined the now regular flock of **White-fronted Geese** at Scotney Court GP, which reached a peak of 286 on 15th. A count of 350 **Greylag Geese** at the same site on 16th was also notable. The regular herd of **Bewick's Swans** in the Arun Valley reached a peak of 95 at Pulborough Brooks on 2nd. Small numbers of **Smew** were recorded at several sites with 9 at Northpoint Pit on 5th. A similar scattering of **Goosanders** included 3 at Burton MP on 4-5th. An exceptional count of 80 **Avocets** was reported from Pagham Hbr on 10th. The unseasonably mild weather produced a very early **Swallow** at Brighton Marina on 15th with 3 more at Pett Level on 26th and Rye Hbr on 28th. A **Marsh Harrier** at Pett Level on 15th and 22nd was the first of 54 seen during the year - a county record.

Weather conditions in **March** continued to be mild, although initially somewhat unsettled due to a series of small westerly depressions. Rainfall was moderate. Light southerlies towards the end produced record night-time temperatures as high as 14°C in some areas.

The eagerly awaited summer visitors arrived on cue with, for example, **Wheatear** on 8th, **Willow Warbler** on 13th, **Garganey** on 15th, **Sand Martin** on 21st, **Little Ringed Plover** on 22nd, and a very early **Whitethroat** at Sidlesham on 27th. Lingering winter visitors included an unusually high count of 29 **Jack Snipe** at Thorney Deepes on 5th, a **Great Grey Shrike** at Cissbury from 13th into April, and a **Shore Lark** at Rye Hbr from 22nd to 24th. By far the rarest bird recorded during the month was a **Great White Egret** first seen flying past Hastings on 16th and again at Beachy Head the following day. Classic fall conditions of light SE winds and drizzle on 28th produced a wide variety of migrants including a total of 12 **Black-necked Grebes**, an **Osprey** at Bewl Water (the first of a record 63 seen during the year), a **Kentish Plover** at Pilsey Island, a **Bluethroat** of the white-spotted form *cyanecula* at Bexhill, **Ring Ouzels** at Pulborough Brooks and Seaford Head, and about 100 **Wheatears**. A **Stone Curlew** was recorded at Pulborough Brooks on 30th.

April started mild, but was affected mid-month by low pressure over eastern Britain and a northerly airflow. Temperatures plummeted and it became the wettest April for over 100 years. Rainfall peaked over the Easter weekend of 10th-13th with flooding in places. Winds turned southerly from 19th and, although milder, it continued very wet and unsettled to the end.

A number of unusual species were recorded including the first of 3 **Hoopoes** during the month at Plaistow on 7th, a **Wryneck** at Arundel on 13th, up to 3 **Kentish Plovers** from 15th, **Purple Herons** at Paghham Hbr on 17th, Bewl Water on 24th and at Rye Hbr from 26th to 28th, and a female **Ring-necked Duck** picked up dead in the lower Cuckmere Valley on 28th. The first of several **Dotterel** recorded in the Balsdean area during the spring was recorded on 21st. Possibly up to 3 **Great Grey Shrikes** were present on Ashdown Forest from 15th, one remaining until 5 May, the latest county record, as was a **Smew** that remained at Chichester GPs to 24 April.

Sea-watching proved interesting with totals of 10 **Pomarine**, 201 **Arctic** and 32 **Great Skuas**, 116 **Little Gulls** and 10 **Black Terns** reported for the month. A total of 892 **Whimbrel** passed Brighton Marina during the spring while other notable counts of this species were of 290 in Paghham Hbr on 28th and 375 at the nocturnal roost at Rye Hbr on 4 May. **Iceland Gulls** were recorded at Selsey Bill on 5th and Splash Point, Seaford on 19th and 23rd. A pair of **Red-necked Grebes** was seen displaying at Brighton Marina on 19th while a late **Goldeneye** was at Scotney Court GP on 23rd.

The county's earliest ever **Reed Warbler** was at Icklesham on 8th while also of note was an early **Hobby** at Wick on 20th (the first of a record 400 reports submitted), 4-5 **Wood Warblers** at Church Norton between 22nd and 30th and a total of 7 **Pied Flycatchers**, including at least 3 at Beachy Head on 25th. Just 4 **Grasshopper Warblers** were reported during the month and there were only 5 spring records of **Tree Pipit** away from breeding areas.

May, in contrast, was generally settled. Overall it was the driest since 1991 and the warmest since 1992, despite occasional northerly airstreams and light easterly breezes.

Seawatching continued to be productive with 52 **Manx Shearwaters** at Selsey Bill on 6th, 2 **Puffins** off Birling Gap on 9th (with another at Brighton Marina on 28th), and 5 **Roseate Terns** from 7th. The peak day for **Black Terns** was 8th, with 35 past Worthing, while **Pomarine Skuas** peaked on 12th with 31 at both Brighton Marina and Seaford.

Two **Black-necked Grebes** were off Seaford on 8th. The county's 3rd **Lesser Crested Tern** put in a brief appearance at Ternery Pool, Rye Hbr on 4th followed 4 days later by a **Great Reed Warbler** at Castle Water. A number of other unusual species were recorded including a **Spoonbill** at Shinewater Marsh, Eastbourne on 3rd, the first of 3 **White Storks** during the month at Greatham on 4-5th, a **Black Stork** over Pulborough Brooks on 8th, 3 **Black Kites** on 11th, **Serins** at Church Norton and Birling Gap on 2nd and 9th respectively, male **Red-backed Shrikes** at Church Norton on 11th and Pulborough Brooks on 17th, and a **Golden Oriole** at Beachy Head on 25th. Passage waders included a peak of 5 **Dotterel** at Balsdean on 9th, a **Temminck's Stint** at Pagham Hbr on 19th (with the only **Little Stint** of the spring there the following day), and totals of 7 **Wood** and 3 **Curlew Sandpipers**. The last **Jack Snipe** was recorded on 1st at Thorney Deepes and the last **Purple Sandpiper** on 18th at Brighton Marina. In what turned out to be quite a good month for raptors, totals of 10 **Marsh Harriers** and 14 **Ospreys** were reported. A **Red Kite** was seen over Hooe Level on 23rd. Parties of 6 **Hobbies** were noted at 3 localities during the month. A **Quail**, usually so elusive, was actually seen near Hangleton on 16th with others heard calling elsewhere into July.

June, unlike May, was generally unsettled throughout; it was one of the wettest on record with rain on 23 days. It started rather cool, due to a mainly light northerly airstream that turned southerly around mid-month. Temperatures remained generally below average.

The most notable description species seen during the month were single **Marsh Warblers** at 2 sites, and a male and female **Goshawk** at a downland locality. Interesting breeding records included a pair of **Honey Buzzards** for the second year running, a pair of **Peregrines** in Brighton in a nest box supplied by the SOS; a pair of inland **Oystercatchers** at Arundel; the first nesting by **Little Ringed Plovers** at Rye Hbr; a pair of **Long-eared Owls** with 3 young; 5 pairs of **Wheatears** away from Rye Hbr; and an increase from 6 pairs last year to at least 43 pairs of **Cormorants** breeding at Rye Hbr. **Dartford Warblers** enjoyed another 'bumper' breeding season but on the debit side, a total of only 19 pairs of **Tree Sparrows** was reported while **Rock Pipits** and **Yellow Wagtails** continued to decline.

Sea-watching was generally unproductive although there were 20 **Manx Shearwaters** off Selsey Bill on 9th and a **Pomarine Skua** on 18th, the latest spring record for the county. Small numbers of **Brent Geese**, **Eiders**, and **Red-breasted Mergansers** summered in Chichester and Pagham Hbrs. Interesting waders during the month included the first returning **Green Sandpiper** at Coldwaltham Brooks on 7th and 3 out of season **Greenshanks** at Thorney Deepes on 12th.

July's weather continued in the much same vein, unsettled throughout. But it was less wet and, although slightly warmer, temperatures only exceeded 20°C on 19-20th, when a high of 28°C was recorded in the southeast.

There were 2 summer plumaged **Black-necked Grebes** at Rye Hbr from 2nd to 14th, one remaining into August. Sea-watching at this time of the year again proved interesting with up to 9 **Storm Petrels** and 25-27 **Mediterranean Shearwaters** recorded, the latter all off Brighton Marina between 21 July and 10 Sept. A total of 475 **Gannets** passed Selsey Bill on 23rd. Returning migrants included 3 **Wood Sandpipers** at Sidlesham Ferry on 1st, 6 **Curlew Sandpipers** at Pett Level Pools on 16th, a **Whinchat** at Church Norton on 8th and a **Pied Flycatcher** at Cissbury on 25th. Numbers of **Little Egrets** at the roost at Thorney Deepes increased from 5 in June to 85 in July and 222 in August. A **Purple Sandpiper** at Brighton Marina on 10th was the earliest ever record for the county.

August was dominated by a succession of fast moving depressions with strong westerly winds and belts of heavy rain. However, a blocking cyclone developed towards the month's end that brought more settled conditions with light southeasterlies.

At Selsey Bill, 19 **Manx Shearwaters** flew west and 18 east on 2nd. A **Pomarine Skua** was seen off Brighton Marina on 3rd and 2 **Roseate Terns** at Pilsley Island on 28th. Raptors included **Red Kites** (possibly the same) over Brighton and Friston Forest on 9th, a **Montagu's Harrier** at Burpham on 18th and the first of 3 **Honey Buzzards** during the month at Wakehurst Place on 19th. An early **Short-eared Owl** was at Icklesham on 6th. A **Kentish Plover** appeared at Pilsley Island on 11th. A **Hoopoe** was at Bewl Water on 6th while a **Wryneck** at Hastings on 29th was the first of 15 recorded during the autumn. Only one **Aquatic Warbler** was trapped at Icklesham (on 13th) following last year's bumper catch.

September brought the return of a series of depressions with strong westerlies and belts of heavy rain. Around mid-month higher pressures brought more settled conditions with light southeasterly breezes and temperatures above 25°C. By the end of the month a Scandinavian anticyclone induced lower pressures, predominantly easterly winds, and more frequent rain.

The county's 2nd **Thrush Nightingale** (and also a **Bluethroat**) were trapped at Icklesham on 11th. A feature of the month nationally was the arrival of good numbers of Nearctic waders. Three species were recorded in Sussex: the county's 2nd **Semipalmated Sandpiper** at Chichester GP from 13th-21st, a **Lesser Yellowlegs** in the lower Cuckmere Valley from 25th into October, and **Pectoral Sandpipers** at Arlington Res from 23rd and at Pagham Hbr on 4 Oct. It was also an excellent autumn for **Spotted Crakes**. The first was trapped at Icklesham on 3rd, but by the end of October no fewer than 13 had been ringed, compared with a cumulative county total of 34 for these months for the period 1962-97. A single bird was also seen at Pagham Hbr on 6th. An unprecedented 9 **Marsh Harriers** were recorded at Icklesham on 11th with at least 2 **Honey Buzzards** there the following day. A **Montagu's Harrier** was seen at Balsdean on 14th and a **Goshawk** at Barcombe Res the same day. A **White-winged Black Tern** entertained many birders at a Chichester GP from 15th-19th with a **Red-necked Phalarope** near Sidlesham Ferry on the last date. Other unusual species during the month included 4 **Dotterel** on Steyning Round Hill on 5-6th, a **Temminck's Stint** at Pagham Hbr on 7th, a **White Stork** over Plumpton Plain on 11th, a **Red-backed Shrike** at Church Norton on 12-13th, and a **Stone Curlew** over the Cuckmere Valley on 19th. A **Barred Warbler** was trapped at Beachy Head on 12th and a **Little Bunting** was seen at nearby Birling Gap on 20th. A juvenile **Long-tailed Skua** was in the entrance to Chichester Hbr, also on 20th.

Regular autumn migrants included flocks of 30 and 24 **Black Terns** at Weir Wood Res and Bewl Water respectively on 5th, and a **Ring Ouzel** at Beachy Head the same day. **Little Stints** were recorded in good numbers with up to 27 at Sidlesham Ferry and, unusually, 18 at Arlington Res, while **Curlew Sandpipers** reached a peak of 19 at Pagham Hbr on 17th. **Greenshank** numbers at Thorney Deeps peaked at 144 on 8th. The British record for **Little Egret** numbers was exceeded when no less than 235 were counted leaving the Thorney roost on 21st and 22nd. West Wittering was an unusual location for a **Nuthatch** on 12th.

October started under the continuing influence of the high pressure over Scandinavia, aggravated by low pressure and heavy cloud across the Channel and, consequently, an easterly airflow. From 9th, Atlantic weather influences returned with frequent gales and heavy rainfall that made it one of the wettest Octobers on record.

In a month normally noted for unusual birds, the only real rarity was the county's 2nd **Siberian Stonechat** at Rye Hbr on 29th. Also of note was a **Common Scoter** at Bewl Water on 2nd and an influx of **Great Grey Shrikes** from 10th onwards. Single birds were recorded at 3 coastal sites, a total of 4 on the western commons and probably 4 different birds on Ashdown Forest between 15 Oct and 18 Dec. A **Serin** was seen at Newhaven Tide Mills on 18th while notable seabirds included a total of 8 **Sooty Shearwaters** at Selsey Bill between 13th and 16th, a **Pomarine Skua** there on 13th, and a juvenile **Sabine's Gull** off Brighton on 29th. A total of 50 **Little Gulls** flew west at Brighton Marina on 13th and 510 **Gannets** at Selsey Bill on 16th. The only **Pale-bellied Brent Goose** of the year flew west at Brighton Marina on 26th.

Late migrants during the month included 2 different **Nightjars** on 2nd, a **Cuckoo** at Icklesham up to 10th, and a **Swift** at Littlehampton on 12th. **Ring Ouzels** were seen both widely and numerous, the highest count being of up to 140 at Beachy Head on 4th with an unprecedented 15-20 at Camp Hill, Ashdown Forest the following day. **Robins** also appeared in large numbers with 200 at Whitbread Hollow, Beachy Head on 9th. Other autumn migrants included **Woodlarks**, with 12 at Beachy Head on 9th; and a scattering of **Short-eared Owls**, with 3 in off the sea at Selsey Bill on 8th. Totals of 14 **Hen Harriers** and 16 **Merlins** were recorded during the month. The last **Osprey** of the year was at Arlington Res on 20th and the last **Hobby** at Maresfield on 29th. A **Black-necked Grebe** remained at Castle Water, Rye Hbr until 29th.

November's weather was also dominated by Atlantic systems with frequent depressions, strong westerlies and quite heavy rainfall. A brief spell of high pressure and light southeasterlies in the third week brought the first frosty nights.

Interesting sea birds included a number of **Little Auks**, with lingering birds at Brighton Marina and Southwick Canal, and a **Pomarine Skua** off Goring on 30th. Single **Great Northern Divers** lingered at 3 sites, with 3 off Church Norton on 23rd, while the only **Glaucous Gull** in the latter half of the year was recorded at Climping on 19th. A most unusual record was that of 3 **Shore Larks** inland at Arlington Res on 13th while 3 records of **Twite** included a maximum of 5 at Rye Hbr on 27th. An unseasonal **Hoopoe** was at Eastbourne on 14th with probably the same bird at Willingdon from 19th to 21st. Warblers included single **Chiffchaffs** of one of the eastern races *abietinus* or *tristis* at Brighton on 1st and West Wittering on 23rd, the only **Yellow-browed Warbler** of the year at Beachy Head on 17th, **Pallas's Leaf Warblers** at Beachy Head and Brighton Marina on 18-19th and very late **Lesser Whitethroats** at Church Norton on 17th and Burgess Hill on 18th. A **Red-breasted Flycatcher** at Beachy Head from 6th to 9th was the latest county record. Other late migrants included a **Whinchat** at Thorney Deepes on 4th, an **Arctic Tern** at Pett Level and a **House Martin** at Pulborough both on 20th, and 2 **Swallows** at Selsey Bill on 29th. In a good autumn for **Firecrests**, the largest count was of 7 at Church Norton on 1st and 25th.

December's weather was again dominated by Atlantic depressions with strong westerlies and quite heavy rainfall interspersed with short-lived high-pressure ridges resulting in occasional foggy and frosty nights.

As usual at this time of year, wildfowl provided much of the interest. The most unusual bird was the county's 4th **Surf Scoter** present off Splash Point, Seaford from 3rd to 28th. There was a small influx of apparently wild **Barnacle Geese** early in the month while several flocks of **White-fronted Geese** included 57 on Glynde Levels and up to 30 in the lower Cuckmere Valley. The latter site also played host to 7 **Bean Geese** of the tundra race on 19-20th. Two **Whooper Swans** were recorded at Pulborough Brooks on 31st. Totals of 5 **Long-tailed Ducks** and about 30 **Velvet Scoters** were reported, while

Goosanders included 6 at Pulborough Brooks and 7 at Rye Hbr. Up to 9 **Smew** were recorded at Rye Hbr and, more unusually, 3 at Southwater CP on 8th. Wintering grebes included a record count of 57 **Slavonians** at Church Norton on 3rd and one inland at Weir Wood Res on 13th. At Selsey Bill, 76 **Slavonian** and 5 **Red-necked Grebes** flew east on 29th. A total of 327 **Great Crested Grebes** was counted off Pett on 7th. A large movement of **auks** on 31st included 1535 at Brighton Marina in 6.5 hrs.

Other notable records during the month included 4 different **Bitterns** and at least 2 **Red Kites**. Up to 5 **Spotted Redshanks** were noted at Sidlesham Ferry, 17 **Greenshanks** at Thorney Deeps and 5 **Little Stints** at East Head. Wintering passerines included a scattering of **Black Redstarts** and **Firecrests**.

CLASSIFIED RECORDS FOR 1998

This list covers all species in Categories A and C of the *British Ornithologists Union*' check list in the usual systematic order.

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

	Breeding pairs	Winter / Passage
Very rare		1-10 records in totals
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+

During preparation of *Birds of Sussex*, a number of old records were reviewed. As a result, the following are being held in abeyance pending the location of the original documentation: Sabine's Gull, Selsey Bill, 26 Sept 1968 and Icterine Warbler, Church Norton, 7 May 1968.

Sea-watching records were received from several sites. The following table lists the hours watched in each month at five locations where logs were kept and details of times recorded:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Selsey Bill	27	13	64	99	169	70	102	28	46	92	55	40
Worthing	9	5	22	38	67	5	4	13	9	13	10	11
Brighton	34	21	71	127	202	34	54	26	21	21	14	36
Seaford	34	35	64	88	103	11	2	0	7	0	6	18
Bexhill & Hastings	29	21	65	39	23	9	8	9	24	44	11	26

Many tables which are included in the accounts for wetland bird species refer to the monthly *WeBS*' counts – the *Wetland Bird Survey*. These counts are undertaken on a fixed date each month during the winter, and sometimes during the summer months, as well. During 1998 the recommended dates were 18 Jan, 15 Feb, 15 Mar, 26 Apr, 17 May, 14 June, 17 July, 9 Aug, 6 Sept, 11 Oct, 8 Nov and 6 Dec. 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. In previous years, the sites displayed in these tables have been randomly selected, invariably choosing sites with the highest counts. The tables in this *Report*, however, show all sites where any of the monthly counts held 5% or more of the county total for that month.

The following abbreviations are used in the Systematic List as standard practice: N, S, E, W *etc.*, as cardinal compass points; CBC – Common Birds Census; CP – Country Park; Fm – Farm; GP – gravel pit; GC – golf course; Hbr – Harbour; MP – Mill Pond; SF – sewage farm or works; LNR – Local Nature Reserve; NR – Nature Reserve; NNR – National Nature Reserve; Res – Reservoir; RSPB – Royal Society for the Protection of Birds; SSSI – Site of Special Scientific Interest; WWT – Wildfowl and Wetlands Trust; ha

– hectares; hrs – hours; km – kilometres; km² – square kilometre; m – metres; nc – no count.

0002. RED-THROATED DIVER

Gavia stellata

Fairly common winter visitor and passage migrant.

For this species and the next, monthly estimates have again been made by combining records of birds seen inland with the totals from coastal sites, having made allowance for duplication. The larger of the counts of birds flying E and W at each site was added to the largest number of birds reported as ‘offshore’. It is probable that most of the birds recorded as ‘Diver *spp.*’ Are, in fact, Red-throated, and these accounts should be considered together.

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
368	281	144	36	23	-	-	-	-	10	87	725

Reports from principal sea-watching sites are also given, with the totals for *all* sites.

	Jan	Feb	Mar	Apr	May	-	Oct	Nov	Dec
Selsey Bill	80	3	21	25	14	-	7	37	270
Worthing Beach	6	28	3	5	4	-	-	4	20
Brighton Marina	10	85	56	10	12	-	1	12	344
Splash Point, Seaford	35	51	10	3	4	-	-	1	7
Bexhill & Hastings	265	186	95	10	1	-	5	11	387
Total (*)	345	250	121	33	22	-	10	45	617

(*) adjusted to compensate for duplication.

Numbers of all species of divers were much lower than in 1997, although in December 1998 more birds were on the sea or flew past than in the whole of the 1997/98 winter. Observations from coastal sites, other than those shown in the table above, do not always make it clear whether the birds were seen flying or were on the sea, but even allowing for this, it seems that more than usual were seen floating ‘offshore’. The few birds seen away from the open sea in the first half of the year included those at Bewl Water where 2, possibly 3, different birds were seen between 11 Jan and 17 Feb with another on 27th. Southwick Canal was home to one for 10 days in January, while single birds were at Camber Pit, Emsworth Channel and Scotney Court GP. The last spring record was one flying W at Brighton Marina on 19 May.

The first autumn bird also flew W, in Rye Bay on 3 Oct, but significant passage did not start until mid-November. The only bird well away from the sea was one at Arlington Res on 22 Dec, although a few others were found in Pagham Hbr and at Rye Hbr during the same month. [BRG]

0003. BLACK-THROATED DIVER

Gavia arctica

Scarce winter visitor and passage migrant.

The approximate monthly totals were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
10	9	21	37	34	1	-	-	-	2	16	41

The decline in numbers of this species over recent years was just about halted by the December records, but the annual total was still fewer than 180 birds. At the main sea-watching sites, the numbers seen were:

	Jan	Feb	Mar	Apr	May	June	Sept	Oct	Nov	Dec
Selsey Bill	2	-	3	14	9	1		2	7	17
Worthing Beach	-	-	-	1	3	-	-	-	3	-
Brighton Marina	3	8	15	28	22	-	-	-	-	11
Splash Point, Seaford	-	2	6	8	15	-	-	-	6	4
Bexhill & Hastings	4	-	5	8	5	-	-	-	3	12
<i>Total (*)</i>	<i>10</i>	<i>9</i>	<i>18</i>	<i>37</i>	<i>32</i>	<i>1</i>		<i>2</i>	<i>11</i>	<i>33</i>

(*) adjusted to compensate for duplication.

The last spring migrant flew E at Selsey Bill on 3 June, while the first of the autumn also flew E at Selsey on 8 Oct. [BRG]

0004. GREAT NORTHERN DIVER

Gavia immer

Very scarce winter visitor and spring passage migrant.

The 26 descriptions of this species accepted so far probably refer to about 19 separate individuals, twice as many as in 1997. One was seen in Chichester Hbr on 6 Jan and again on 22nd (CBC). Many observers had excellent views of two 1st-winter birds, one of which spent 11 days on Southwick Canal from 15 Jan (BFF, SJP, IJW *et al*), while the year's only inland bird stayed on Bewl Water from 18 Jan until 9 Apr (PCB *et al*). Another long staying individual spent the first 3 weeks of April off Selsey Bill (AH, BFF *et al*). Birds were seen flying E in April at Beachy Head on 18th (MST), and at Brighton Marina on 8th, 20th and finally 22nd (all IJW).

The first of the autumn was one flying W past Brighton on 28 Oct (IJW). Next were four more well-watched birds: one in first-winter plumage on the Crumbles GP from 6 to 20 Nov (PJ, STU *et al*), another in Southwick Canal on 8-9 Nov (BFF, IJW *et al*), and a third on Scotney Court GP for some weeks from 10 Nov (AJH, RGH *et al*), while an adult was on the sea off Pilsey on 3 days between 11 and 22 Nov (CBC). Apart from one passing Brighton on 21 Dec (IJW), the remaining 5 records came from the west of the county: 3 off Church Norton on 23 Nov, of which one stayed until 6 Dec (AH, BFF), and at least 2 off Selsey on 30 Dec (BJC). [BRG]

0005. WHITE-BILLED DIVER

Gavia adamsii

Very rare vagrant

1997: Several of the details in *SxBR* 50:18 were incorrect. The bird that passed Newhaven West Pier on 27 Apr flew E not W, but either it did not pass Splash Point, Seaford (3.5 km ESE), or passed there unnoticed, while the *SOS Newsletter* reference should have been to Spring 1998. [RJF]

DIVER Species

Gavia spp.

Although the specific identification of distant divers is rather difficult, observers at some sites claim a phenomenal 100% success rate. Those recorded as ‘*spp.*’ Normally form a significant proportion of the total number of divers seen. An estimate of number of divers passing the 5 main sea-watching sites in January to May and October to December has been made by adding the monthly totals of birds flying E to those flying W. All birds, whether identified or not, have been included. The following totals, which also include birds seen on the sea, are likely to be over estimates due to duplication of some records:

	Diver <i>spp.</i>		R-t Diver		B-t Diver		Total		No. per hr	
	J-M	O-D	J-M	O-D	J-M	O-D	J-M	O-D	J-M	O-D
Selsey Bill	51	78	144	317	29	28	225*	425*	0.61	2.27
Worthing	48	44	49	24	4	3	99	73	0.70	3.60
Brighton	336	104	177	360	76	12	592*	478*	1.30	9.49
Seaford	693	83	106	9	31	4	830	96	2.57	4.92
Bexhill	17	7	546	407	22	16	585	430	3.34	5.29

- Includes Great Northern Divers

No attempt should be made to add the columns, since many birds will have been seen at more than one site. The totals again reveal the differences between the two halves of the year and contrast strongly with those for the same periods last year, particularly for the two sites furthest east in the county. The effect of wind direction may be seen from some Splash Point data. For example, in January 1997, the wind was generally easterly (*i.e.* between NNE and SSE) for 43 of the 45 hours watched and 1216 divers were counted. Of 22.5 hrs watched in January 1998, the wind was in that favourable quarter for barely 6 hrs, and numbers were down to 159 divers, a reduction from 27 to 7 divers per hr, with an even more dramatic decrease in the numbers of auks recorded. The unfavourable winds also halved the number of hours watched! [BRG]

0007. LITTLE GREBE

Tachybaptus ruficollis

Scarce resident, passage migrant and winter visitor.

1997: The 40 birds at Piddinghoe on 6 Jan were on the R. Ouse between Asham and Piddinghoe.

1998: The monthly *WeBS*' counts at the principal sites were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	109	143	117	25	39	32	33	47	119	181	169	157
Chichester Hbr	36	43	42	10	10	11	17	11	10	22	50	40
Pagham Hbr	10	11	4	-	6	4	-	5	2	9	nc	16
Chichester GPs	14	10	10	-	2	1	1	3	10	15	13	8
Bury Brooks	4	1	-	nc	nc	nc	nc	nc	nc	-	9	3
Gravetye Lake	-	1	-	1	2	1	2	3	3	2	2	-
Newhaven	nc	-	-	nc	nc	nc	nc	nc	-	1	nc	8
Glynde Levels	3	2	1	1	1	1	6	2	3	1	1	-
Cuckmere Haven	18	19	8	nc	nc	nc	nc	nc	5	14	11	17
Langney	8	7	3	nc	nc	nc	nc	nc	nc	nc	nc	nc
Pevensy Levels	-	-	nc	nc	-	2	nc	nc	nc	1	-	-
Bowl Water	7	30	12	nc	nc	nc	nc	nc	37	43	28	22
Pett Level	0	0	2	2	5	4	2	0	0	0	6	0
Rye Hbr	6	11	19	4	6	4	3	15	36	33	19	14

Breeding behaviour was first recorded at Weir Wood Res where a pair displayed on 20 Feb. At Rye Hbr SSSI, 9 pairs nested, 5 pairs at Ternery Pool having more than 12 young, while pairs with young were also recorded at the Long Pit, the larger Camber Pit and both Northpoint Pits. Observers at Bewl Water reported 14 pairs and noted 12 young from 6 broods, and at Thorney Deeps 6 pairs raised 6 young in 3 broods. Other breeding records came from Aldsworth Pond; Chichester GPs; Pease Pottage; Wiston Pond, near Steyning; and at Ketley Fm Pond, near Bewl Water, while 2 young were still being fed at Brooklands, Worthing on 26 Sept.

There were a few higher counts than shown in the above *WeBS* table; examples included 40 at Ternery Pool, Rye Hbr on 16 Aug and, at Cuckmere Haven, there were 20 on 25 Oct, 39 on 29 Nov and 45 on 24 Dec. The only other notable count was of 12 at Newhaven Tide Mills on 10 Dec. [JKI]

0009. GREAT CRESTED GREBE

Podiceps cristatus

Fairly common resident, passage migrant and winter visitor.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	196	221	305	117	79	90	96	154	405	438	272	417
Chichester Hbr	27	8	33	7	2	-	2	3	1	3	13	15
Pagham Hbr	14	8	6	3	3	1	2	3	10	8	nc	15
Chichester GPs	35	37	38	7	1	7	5	11	26	37	40	36
Shillinglee Lake	12	6	nc	9	2	3	nc	3	3	8	4	9
Burton MP	-	-	3	2	4	4	3	2	2	2	2	-
Goring Gap	-	-	-	nc	nc	nc	nc	nc	-	nc	-	45
Kneppmill Pond	2	8	5	7	6	6	9	4	10	7	2	-
Ardingly Res	11	14	16	nc	nc	nc	nc	nc	nc	12	nc	9
Weir Wood Res	12	24	27	40	22	52	62	46	31	74	25	64
Barcombe Res	-	-	-	1	-	-	-	6	9	9	14	22
Arlington Res	8	20	14	4	4	6	8	25	34	30	30	32
Bewl Water	48	50	60	nc	nc	nc	nc	nc	136	126	70	50
Darwell Res	19	23	33	19	25	nc	nc	44	64	52	23	18
Pett Level	0	0	16	3	2	2	0	1	0	1	0	66
Rye Hbr	3	5	27	5	4	2	5	2	2	5	5	2

The above table gives a good impression of the numbers found at the main locations in the county. However, additional and higher counts were received from several sites. Noteworthy were records from Weir Wood Res of 47 on 11 Jan, 94 on 19 July and 97 on 25 Oct, 114 at Bewl Water on 16 Aug, 47 at Ivy Lake, Chichester GPs on 15 Sept and counts of up to 37 at Barcombe Res in Nov and Dec; a high count for that location.

The table, however, only gives an impression of the concentrations of this species which can be found offshore. During the early part of the year most were seen from the extreme east of the county with only small numbers recorded off the West Sussex coast. At Bexhill, sea-watchers recorded 59E in less than 2 hrs on 26 Jan, there were 119 off Pett on 10 Feb and 21 in Rye Bay on 18 Mar. In December too there were flocks at these sites; off Pett there were 66 on 6 Dec, rising to 327 on 7 Dec and 43 on 9th whilst 60 were in Rye Bay on 21 Dec. Apart from the large count at Pett, the numbers in West Sussex were comparable with several parties of up to 15 recorded and larger counts of 49 and 61 offshore at Church Norton on 1 and 17 Dec respectively. At Goring, 20 and 45 were seen on 1 and 6 Dec respectively.

Although display was recorded from mid-February, the first nest was reported at Bewl Water on 24 Feb and the first young seen, again at Bewl Water, on 22 Apr. Breeding was reported from 22 sites with the larger reservoirs and gravel pit complexes recording most. At Bewl Water, 47 pairs were noted with 26 broods containing 68 young and, at Darwell Res, there were at least 13 pairs in April but only a few young were later reported. Records from Weir Wood Res are unclear as to how many pairs nested but the late May count of 55 included 7 young birds. At Rye Hbr, 2 pairs nested at Castle Water, but failed to raise any young, 4 pairs produced 2 young at the Narrow Pits and there were failed pairs at both Long Pit and Saunders Pit while at Chichester GPs there were nesting records from 7 different pits. [JKI]

0010. RED-NECKED GREBE

Podiceps grisegena

Scarce winter visitor and passage migrant.

The approximate monthly totals were:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
8	2	10	6	4	-	-	2	1	4	4	10

One remained at Bewl Water between 13 Jan and 10 Apr and was briefly joined by another on 18 Jan. Apart from one at Ivy Lake, Chichester GPs between 17 and 21 Mar, the remaining records during the year were from coastal locations. Although most of these sightings involved single birds there were 2W at Selsey Bill on 27 Jan, 2 displaying at Brighton Marina on 19 Apr and 2, the last of the spring, at the same site on 19 May.

A juvenile was at Cuckmere Haven between 18 and 23 Aug, one offshore at Brighton Marina on 20 Aug and 1W at Selsey Bill on 6 Sept. Many of the records later in the year were from Selsey Bill where a confusing picture of movements may have involved just a few birds, particularly in late December, when there were 2E on 28th, 5E on 29th, 4E and 3W on 30th and, finally, 2W on 31st. [JKI]

0011. SLAVONIAN GREBE

Podiceps auritus

Scarce winter visitor and passage migrant.

The approximate monthly totals were:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
36	35	32	8	1	-	-	-	1	10	37	184

In keeping with the usual pattern of occurrence, most of the winter records were from the vicinity of Pagham and Chichester Hbrs. During January, up to 8 were regularly seen in Chichester Hbr and a flock of 23 was off Selsey Bill on 22nd. A maximum of 11 was recorded at the usual location off Church Norton in January but the numbers reached a peak of 32 at this site on 3 Feb, with 16 still there on 15 Mar. After this date, more were seen further east, notably 8 off Worthing beach on 28 Mar, 6 at Bexhill on 19 Apr and the last offshore at Splash Point, Seaford on 8 May.

The first autumn bird was seen at Brighton Marina on 3 Sept but no more were recorded until one was seen at Climping on 4 Oct. Thereafter there was a steady increase in numbers off Church Norton with monthly maxima of 6 on 19 Oct, 32 on 19 Nov and 57 on 3 Dec. The last figure is the highest ever recorded at this site. Numbers at Church

Norton declined towards the end of the year but presumably these birds dispersed locally as there were 30 offshore at Selsey Bill on 31 Dec and unprecedented movements of 25E and 76E at Selsey on 28 and 29 Dec respectively, the latter a county record.

As usual most were recorded near the coast but inland records were of singles at Vinnetrow Lake, Chichester GPs on 18 Jan, Shinewater Lake, Eastbourne on 15 Feb, Ivy Lake, Chichester GPs on 12 Oct and at Weir Wood Res on 13 Dec. [JKI]

0012. BLACK-NECKED GREBE

Podiceps nigricollis

Very scarce winter visitor and passage migrant.

The first record of the year came from Galley Hill, Bexhill, where there were 2 birds on the sea on 28 Jan (IS). A bird in winter plumage at Scotney Court GP on 7 Mar (CEM *et al*) had reportedly been seen a week or so previously and was probably the same recorded on 18 Mar (AJH, BJH) and on 8 Apr (JSSB, MS-H), by then in full summer plumage. On 28 Mar, there were records of 2 in summer plumage and one moulting bird on the sea at Belle Tout, Beachy Head (MST), a group of 5 off Worthing Beach (PMB, RJS), and 4 birds displaying at Weir Wood Res (NAD). Two were again seen at Galley Hill, Bexhill on 19 Apr (IS) and on 22nd a single flew E close in at Brighton Marina, before landing on the sea (IJW). On 8 May, 2 summer plumaged birds were on the sea off Splash Point, Seaford (BRG, GG, SL).

In the second half of the year, there were 2 summer plumaged birds at Ternery Pool, Rye Hbr from 2-14 July, one remaining until 8 Aug (PMT, BJY *et al*). A probable juvenile was at Barcombe Res on 3 Sept (RDME) and a single at Castle Water, Rye Hbr, on 2 and 29 Oct (PMT, BJY). With at least 24 birds seen, 1998 was better than most recent years and emphasises the trend of most being recorded in the spring. [JKI]

0022. FULMAR

Fulmarus glacialis

Fairly common breeding species and passage migrant, resident on coastal cliffs from November to September.

Movements at the main sea-watching points were as follows:

Direction	Jan-Feb		Mar-May		June-July		Aug-Oct		Nov-Dec	
	E	W	E	W	E	W	E	W	E	W
Selsey Bill	-	4	46	232	10	111	3	54	-	2
Worthing	-	1	22	45	-	5	2	3	-	-
Brighton Marina	139	16	2037	413	215	109	78	91	72	7
Seaford	333	32	nc	nc	nc	nc	16	3	72	14
Bexhill	95	41	472	243	11	18	3	10	15	135

nc = not counted

The species was typically scarce in the west of the county at the start of the year, although a strong easterly passage was noted in the east from Brighton Marina and particularly Splash Point, Seaford. Being locations with cliffs, this suggests that at least some of the birds were local as opposed to long distance migrants. As usual, birds occupied their breeding sites early, but the only co-ordinated count received was of 18 pairs between Brighton Marina and Saltdean on 6 Feb.

Counts during the spring at Brighton Marina included peaks of 86E and 30W on 30 Apr, 73E on 3 May and 99E on 31 May. Larger numbers were recorded at Bexhill with 109W on 7 Mar, and 156E and 20W on 3 May. Away from the immediate coast, birds were seen at Icklesham on 8 May and at the Long Pits, Rye Hbr on 20 May.

No significant counts were received for the summer or autumn, with 5E and 42W at Brighton Marina on 3 Aug being the peak. A single bird was seen prospecting over central Brighton on 2 dates in August. At the end of the year, 100W and 8E in 4 hrs watching at Bexhill on 29 Dec was by far the largest count received. [TJW]

0043. SOOTY SHEARWATER

Puffinus griseus

Very scarce autumn visitor

Nine were recorded, all during strong (Force 6 or higher) SW winds in October. Five W off Selsey Bill on 13th (TJE, MJ, OM *et al*) were followed by 1W there on 14th (TJE, CRJ, OM *et al*), 2W there on 16th (TJE, CRJ, OM *et al*) and 1E off Goring Beach on 24th (DIS). This represents the best showing since 1987 and almost doubles the total recorded during the 1990s. All recent records have been between late August and 24 Dec, and most have been seen at Selsey Bill. [RJF]

0046. MANX SHEARWATER

Puffinus puffinus

A scarce spring to autumn passage migrant.

1997: There were 9W at Brighton on 4 May not 9E and 2W as stated.

1998: The first recorded were 3W at Selsey Bill on 15 Apr. A minimum total of 179 was reported up to 13 Sept as follows:

	Apr		May		June		July		Aug		Sept	
	E	W	E	W	E	W	E	W	E	W	E	W
Selsey Bill	-	3	3	51	5	29	-	3	22	21	1	-
Worthing	-	-	-	7	-	-	1	-	-	-	-	-
Brighton Marina	-	1	7	59	1	13	2	17	1	-	-	-
Splash Point, Seaford	2	-	7	1	-	-	-	-	-	-	-	3
Beachy Head	-	-	1	-	-	-	-	-	-	-	-	-
Bexhill	-	-	-	-	2	2	-	7	-	-	1	-
Monthly total	6		70		48		26		24		5	

The monthly totals are based on minimum daily figures from along the coast and take the larger count (*either* E or W) when birds were recorded flying in both directions.

The largest movements were on 6 May (3E and 49W in 8 hrs at Selsey Bill and 48W in 9.5 hrs at Brighton Marina), 9 June (20W in 10 hrs at Selsey Bill), 26 June (13W in 2 hrs at Brighton Marina) and 2 Aug (19E and 18W in 2 hrs at Selsey Bill). [PJ]

0046.01 MEDITERRANEAN SHEARWATER

Puffinus yelkouan

Very scarce spring to autumn visitor.

An unprecedented series of sightings involving up to 25-27 birds. Records at Brighton Marina were of 2 lingering offshore and 2 W on 21 July; 2 drifting W on 22nd; 3 E on 23rd; 1 lingering offshore and 1 W on 26th; 1 on the sea close to the west arm on 28th; different birds E and W on 30th; 4 W on 3 Aug; 1 W on 4th; 2 E on 5th; 1 lingering offshore before departing W on 8th; 1 W on 23rd; 2 W on 8 Sep; and 1 W on 10th (IJW *et al*).

A single bird, first seen being mobbed by Herring Gulls to the east of the Palace Pier, Brighton on 24 July, then landed on the water underneath the pier where, amazingly, it showed down to 15m, feeding on bread (KBG, IJW). To put these sightings into context, 72 had been recorded in the county prior to 1998. The most in any year was 12 in 1970. [PJ]

0052. STORM PETREL

Hydrobates pelagicus

Rare vagrant, mainly in autumn after severe gales or, recently, in mid-summer

Up to 9 were recorded in mid-July: 1W off Selsey Bill on 10th (BJC), 1W off Brighton Marina on 11th (IJW), 4 off Selsey Bill on 12th (OM, RP) and 3W there on 13th (AH). This species has been recorded off the coast in July in 4 of the last 5 years, following 5 years with just 1 record. Most records have been from Selsey Bill, that off Brighton Marina being only the 2nd recorded at that site (the 1st being in October 1983). [RJF]

0071. GANNET

Sula bassana

Fairly common passage migrant and non-breeding summer visitor; once scarce but now increasingly numerous in winter.

Large numbers were recorded during the year, reflecting a general increase. Movements at the main sea-watching localities were as follows:

Direction	Jan-Feb		Mar-May		June-July		Aug-Oct		Nov-Dec	
	E	W	E	W	E	W	E	W	E	W
Selsey Bill	1	16	201	474	447	2697	629	2568	8	188
Worthing	3	5	98	130	13	124	126	512	11	91
Brighton Marina	68	35	1157	294	802	799	689	1200	106	59
Seaford	178	24	924	182	183	37	141	66	207	36
Bexhill	229	31	294	337	162	270	773	259	26	170

In addition to small numbers passing along the coast in January, one sheltered from a storm in Brighton Marina on 5th and 3 were found dead: one at Newhaven on 7th and 2 at Southwick on 19th. Other notable counts prior to spring passage were of 127E at Bexhill on 27 Feb and 233W there on 1 Mar.

Spring passage peaked around the middle of April, somewhat earlier than usual, with the best day being 23rd when there were 146E at Brighton Marina and 172E at Splash Point, Seaford.

The species remained quite numerous during the summer, particularly between 21 and 30 July when a minimum of 1833 passed W along the coast including high counts at Selsey Bill of 475W on 23rd and 351W on 28th.

Large numbers continued to be recorded during August and September, particularly from Selsey Bill where 264 flew W on 31 Aug. Elsewhere, the highest count was of 435W at Brighton Marina on 30 Sept. An unusual record concerned an individual attempting to land on the Brighton Centre on 14 Aug. A further large movement took place between 11 and 22 Oct, with a minimum of 1912W along the coast, seen mostly from Selsey Bill where a peak of 510 was noted on 16th. Numbers were then much lower for the rest of the year, with 88E at Splash Point, Seaford, on 31 Dec being the only notable count. [TJW]

0072. CORMORANT

Phalacrocorax carbo

Very scarce breeding species and common winter visitor.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	506	404	446	182	158	159	159	326	553	525	460	618
Chichester Hbr	23	23	17	13	5	13	20	22	44	62	45	27
Pagham Hbr	52	56	79	47	37	46	47	58	96	48	nc	177
Chichester GPs	124	83	93	-	-	-	2	12	49	29	75	66
Forest Mere	30	5	11	2	1	-	1	nc	1	1	20	1
Climping	6	31	15	nc	nc	nc	nc	nc	7	30	27	14
Arundel WWT	5	-	-	-	-	-	-	-	-	-	-	54
Adur (Steyning-Henfield)	30	2	5	nc	nc	nc	nc	nc	28	3	17	1
Weir Wood Res	18	37	54	3	2	9	16	32	32	28	34	31
Barcombe Res	13	-	-	1	-	1	4	3	9	24	25	92
Pevensy Levels	20	7	15	4	-	1	5	5	12	2	37	13
Bewl Water	27	14	12	nc	nc	nc	nc	nc	41	80	30	60
Darwell Res	6	6	14	1	1	nc	nc	4	29	35	20	3
Rye Hbr	32	47	62	82	110	78	61	187	123	66	20	5

The simultaneous counts at the two nocturnal roosts which serve the birds that frequent the coast from Littlehampton westwards were as follows:

	Jan	Feb	Mar	Sept	Oct	Nov	Dec
Chichester GPs	192	155	122	215	246	152	252
South Stoke	98	109	60	63	98	98	136
Total	290	264	182	278	344	250	388

The nocturnal roost at Wyckham Fm on the Adur Levels held 113 on 5 Feb, 88 on 29 Aug, 123 on 28 Nov, and 112 on 24 Dec. These sets of figures, taken with others from around the county, suggest that winter numbers may have declined slightly after many years of increase and expansion.

The pier at Bognor Regis was again the most frequented daytime loafing roost, with a maximum of 110 on 21 Dec. There were 83 at Pagham Hbr on 1 Mar, and 65 at Brooklands, Worthing on 26 Nov.

There were no breeding reports from the traditional cliff site at Fairlight CP. There was, however, an explosion of breeding activity at Castle Water, Rye Hbr LNR. By 22 Mar, 10 pairs were nest building in the willows, and by the end of the season 43-50 pairs had nested with good fledging success. At Bewl Water, 3 pairs were seen displaying and twig holding during April.

There were many reports away from the well known feeding and roosting sites. There were, for example, 26 at Wadhurst Park Estate on 21 Mar, 13 at Warnham LNR on 9 Jan,

12 at Pulborough Brooks on 29 Oct, 11 at Kneppmill Pond on 12 Oct, 9 at Burton MP on 18 Jan, and 8 at Folly Pond, Liphook, on 28 Dec. A total of 14 birds was seen at a nocturnal roost on cliffs at Saltdean on 29 Dec. Finally, from Emsworth on 16 Nov, came an interesting observation of 7 Cormorants indulging in a feeding frenzy together with gulls.

A licensed cull was carried out at Bewl Water on 26 Jan. The maximum count for the year of 80 on 11 Oct was exactly the same as the previous year's maximum in September.

It has long been suspected that some birds of the continental race *sinensis* occur in Sussex. Evidence of this was provided by a single bird at Weir Wood Res on 29 Aug and 2 at Bewl Water on 25 Oct, all of which had been ringed in The Netherlands. Given that *sinensis* nests in trees by lakes or coasts and at times in reedbeds or on the ground, it seems very likely that the breeding birds at Bewl Water and Rye Hbr are of this race. [RK]

0080. **SHAG**

Phalacrocorax aristotelis

Scarce winter visitor and passage migrant.

The approximate monthly totals, which are slightly lower than in recent years, were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
10	3	5	5	6	-	-	-	3	6	9	8

As in most recent years, the majority of records were from Brighton Marina and the adjacent coastline. The peak counts were 4 at the Marina on 11 Jan and 6 on the Southwick Canal on 15 Jan, with 1-3 birds reported on many dates up to the end of March. Elsewhere, 1 flew W past Splash Point, Seaford on 6 Jan, a 1st-winter bird was in Pagham Hbr on 9 Jan and there were 3 records of individuals passing Bexhill. Spring passage was very light, barely 20 reports, the only multiple records being of 2E and 2W past Splash Point, Seaford on 27 April, 2E past Worthing Beach on 28 Mar, and a further 3 seen passing E there on 8 May.

The first returning bird was reported from Brighton Marina on 11 Sept, and thereafter 1-3 birds were seen regularly, with a peak count of 5 at nearby Southwick Canal on 8 Nov. A first-year bird was reported roosting on Pilsey Island, Chichester Hbr on 13 and 16 Sept, and it or another was seen in Pagham Hbr on 17th. Thereafter, a number of records were received from nearby Selsey Bill of 1-2 birds up until the end of the year. A 1st-year bird was also reported from Sovereign Hbr Marina, Eastbourne on 7 Nov and 13 Dec, one was in Shoreham Hbr on 9 and 11 Nov, and other records related to single birds at Newhaven Tide Mills on 16 Nov, Bexhill on 8 Dec and Splash Point, Seaford on 20 Dec. [AH]

0095. **BITTERN**

Botaurus stellaris

Very scarce winter visitor. Species of Conservation Concern in Sussex.

Records for this elusive visitor to the county originated from two principal sites, with additional birds seen at five other localities.

There were a number of records of single birds at Rye Hbr and Icklesham between 3 Jan and 26 June. As one would expect, most of these sightings occurred in the January-March period, birds which were presumably wintering from elsewhere. Those records for May and June may, however, refer to birds with other intentions. The presence of 2 birds

at nearby Pett Level Pools on 27 Jan indicates that more than one individual was involved in these sightings.

The first bird of the autumn was at Icklesham on 25 Sept. Birds were more widely scattered during the autumn and early winter, with singles recorded at Icklesham from 13-18 Oct, Thorney Deeps on 6 Nov, Rye Hbr from 7 Nov until the end of the year, Combe Haven on 29 Nov, Weir Wood Res from 5-20 Dec and at Wallhurst Manor, Cowfold on 14 Dec. A second bird was seen at Rye Hbr on 6 Dec. [LGH]

0119. LITTLE EGRET

Egretta garzetta

Formerly rare, but now a fairly common passage migrant and winter visitor.

The approximate minimum monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	85	81	88	35	9	16	105	300	300	245	197	137
Thorney Deeps	67	69	76	31	2	5	85	222	235	200	152	105
Pagham Hbr	12	8	9	1	2	6	12	39	41	31	30	19
Cuckmere	3	2	1	1	1	-	2	6	10	9	8	6
Rye Hbr	2	2	2	-	-	2	8	9	4	4	4	4

After 3 years of similar peak numbers, the floodgates opened, with a minimum of 388 birds recorded in the county, compared to 235 in 1997. Once again the largest counts were at the Thorney Deeps' roost where there were 67 on 15 Jan, 69 on 17 Feb, 76 on 16 Mar, 31 on 1 Apr and 5 on 21 Apr. Other records for the first half of the year, not shown in the table, were of singles at Combe Haven on 24 Apr, Pulborough Brooks on 10-11 May and Chichester GPs on 22 May. Singles flew NE over Galley Hill, Bexhill on 27 Jan, E at Brighton Marina on 29 Apr and N over Marline Wood, Hastings on 2 May.

There were no records for the period 23 May-1 June, after which presumed returning birds were observed, with one at Pagham Hbr and 3 at Snowhill Marsh, Chichester Hbr on 2 and 3 June respectively. Counts at the Thorney Deeps' roost built up rapidly in July, with 31 on 15th and 85 on 28th, increasing to 126 on 6 Aug and 222 at dusk on 30 Aug. The maximum counts this year occurred in September, with 233 at dusk on 10th and 235 at dawn on 21st and 22nd (CBC, RJF), a new British record. There were 200 on 7 Oct, 152 on 4 Nov, and 105 on 1 Dec. Counts at Pagham Hbr included 12 on 22 July, 39 on 24 Aug, a maximum of 41 on 6 Sept, 31 on 7 Oct, 30 on 19 Nov and 19 on 22 Dec. Other noteworthy counts were of 12 flying into Old Park Wood, Bosham, at dusk, on 7 Aug, 13 at Chichester GPs on 20 Aug, and 8 at a Rye Hbr' roost on 21 Aug and 5 Sept. Ten were at West Wittering on 29 Aug. A high tide count at Thorney Deeps produced 70 on 6 Sept, and 17 were counted regularly at Pilsey Island at high tide between 3 Sept and 4 Oct. Ten were at Cuckmere Haven on 27 Sept.

Five were observed flying NW high over Pilsey Island on 8 July and 4 flew W at Angmering on 19 July. Eight flew E at Hastings on 16 Oct.

A number of inland records for the second half of the year included 2 at Arlington Res on 30 July, 3 at Pulborough Brooks on 3 Aug, 2 at Darwell Res on 16 Aug, and 3 at Weir Wood Res from 23 Aug until 6 Sept. [CBC]

0121. **GREAT WHITE EGRET**

Egretta alba

Very rare vagrant

One flew W past Hastings Pier at 07:30 GMT on 16 Mar (APP). What was presumably the same bird then flew E along the cliff edge at Shooter's Bottom, Beachy Head at 08:00 GMT on 17 Mar (JFC) and was seen at Pegwell Bay, Kent at noon before flying high to N. Both Sussex sightings have been accepted by *British Birds* and represent the 4th to be recorded in the county, following records in June 1985, Aug 1990 and Jan-Apr 1996. [RJF]

0122 **GREY HERON**

Ardea cineria

Fairly common resident.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	107	119	122	81	50	67	76	114	166	161	102	103
Chichester Hbr	18	44	10	15	11	16	25	23	37	30	15	13
Pagham Hbr	6	8	7	8	9	15	12	20	17	14	nc	8
Chichester GPs	9	6	4	1	-	1	8	5	2	8	9	6
Amberley Wild Brooks	3	5	3	7	1	-	-	nc	-	7	2	2
Pulborough Brooks	1	2	9	2	3	4	7	18	6	4	3	-
Kneppmill Pond	3	2	16	22	-	-	-	1	1	-	3	-
Lower Adur Estuary	4	-	-	nc	nc	nc	nc	nc	3	9	1	2
Ardingly Res	-	4	15	nc	nc	nc	nc	nc	nc	2	nc	8
Weir Wood Res	2	4	8	6	7	6	8	22	11	5	3	4
Newhaven	nc	1	1	nc	nc	nc	nc	nc	2	5	nc	7
Glynde Levels	7	13	3	1	4	4	2	2	4	2	3	5
Arlington Res	-	1	2	1	-	5	2	3	7	4	6	-
Cuckmere Haven	11	6	12	nc	nc	nc	nc	nc	13	19	6	8
Pevensey Levels	2	3	8	8	-	6	2	6	10	1	7	3
Bewl Water	1	2	2	nc	nc	nc	nc	nc	22	20	7	5
Rye Hbr	20	2	4	5	6	3	0	9	4	7	11	11

In the breeding season, all known heronries except Leasam Wood, near Rye, were counted, and the total of occupied nests came to 227. Leasam usually has about 30 nests. The 1997 total for all sites was 225, so the species is clearly benefiting from a run of mild winters, and this follows the national trend. Counts for individual heronries, listed from west to east, were as follows:

Westbourne 1; Fishbourne 13; Gilham's Moor 0; Pagham 8; Flansham 17; Warningcamp 8; Parham 22; Knepp 12; Warnham 5; Henfield 24; Ardingly 10; Weir Wood Res 5; Iford 1; Firle 22; Charleston 18; Hadlow Down 9; Eridge 10; Glynleigh 10; Wartling, Horsebridge Road 17; Burwash 12; Chingley Wood 0; Moat farm, Iden 1; Winchelsea 2; Leasam no count;

The new site at Warningcamp near Arundel came to our notice this year but held 7-8 nests in 1997 and has probably existed for several years. The Weir Wood heronry is also new. The pair at Chingley Wood in 1997 did not nest this year but a single nest was found at Iden.

During the rest of the year, single Herons were seen in suitable habitat throughout the county, with loafing groups at the more favoured sites. Counts at *WeBS*' sites include

feeding and loafing birds, and the table shows a selection of these but is not a comprehensive list of sites where Herons have been seen. As is usual, there were also occasional birds seen moving on the coast. [ABW]

0124. **PURPLE HERON**

Ardea purpurea

Rare vagrant

An adult in ditches on the W side of Pagham Hbr on 17 Apr (BFF, CW) was seen to fly off W at 12:40 BST. Another adult at Ketley Ponds, Bewl Water on 24 Apr (AJH, BJH, PCB *et al*) flew off S or SE at 19:30 BST. The latter was presumably the bird seen at Rye Hbr during 26-28 Apr and again on 4 May (AJH, BJH *et al*). These are only the 5th and 6th to be recorded during the 1990s. [RJF]

0131. **BLACK STORK**

Ciconia nigra

Very rare vagrant

One flew over Pulborough Brooks at 14:00 BST on 8 May (TJM, JP, CR). This record has been accepted by *British Birds* and is only the 7th to be recorded in the county. Those not having seen this species in the county can take some consolation in the fact that records are increasing, the previous ones being in August-September 1958, May 1989, August 1991, September 1993, September 1994 and August 1995. [RJF]

0134. **WHITE STORK**

Ciconia ciconia

A rare vagrant, mainly in spring

1997: One flew NW over Woodingdean at 11:00 BST on 1 May (HP).

1998: An adult at Quell Farm, near Greatham on 4-5 May (APC *et al*) was followed by 1 E over Littlehampton at 18:45 BST on 12 May (RJLK) and an adult in fields at Pett Level on 16 May (JG, JR, EDU *et al*). One in a ploughed field at Plumpton Plain on 11 Sept was seen following a tractor before flying SE at 15:15 BST (AB, RJL, Isw). The individual over Littlehampton provided a very welcome, but almost plate-shattering, distraction from drying up duties. In addition 1 was seen over Bexhill on 16 Nov (IS) but this was likely to have been an escape as there are very few records in the county after mid-Sept. Four, excluding the Nov record, is the best showing since 1986 (when 6 were recorded in May) and doubles the total for the 1990s (records not shown above being in May 1993, Aug-Sept 1994 and Aug 1995). [RJF]

0144. **SPOONBILL**

Platalea leucorodia

Very scarce visitor, most frequent in spring and autumn

Only one was recorded, a 1st-summer bird at Shinewater Marsh, Eastbourne on 3 May (JC, IJW *et al*). Records have averaged a little over 4 a year during the 1990s, although this year's poor showing matches that for 1994. Records in recent years are fairly well

scattered between mid-March and early November, with most in May (9) and October (5). [RJF]

0152. MUTE SWAN

Cygnus olor

Fairly common resident.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	456	440	582	290	343	303	255	288	652	794	752	719
Chichester Hbr	86	44	101	65	72	83	105	121	132	95	111	84
Pagham Hbr	6	6	7	12	9	16	19	8	12	9	nc	23
Chichester GPs	56	46	51	6	5	18	24	24	52	68	61	61
Arundel WWT	13	16	15	15	23	18	17	33	19	25	25	26
Offham to Houghton	22	17	20	35	4	22	2	1	11	13	16	33
Amberley Brooks	24	16	8	46	1	8	12	nc	4	26	28	10
Pulborough Brooks	40	33	69	17	42	45	17	16	8	13	20	12
Brooklands Worthing	nc	nc	nc	nc	nc	nc	nc	nc	6	64	25	17
Adur (Steyning-Henfield)	42	28	20	nc	nc	nc	nc	nc	31	12	20	30
Henfield Brooks	31	20	18	nc	nc	nc	nc	nc	-	12	-	57
Lower Ouse	14	nc	46	nc	nc	nc	nc	nc	6	42	70	nc
Lewes Brooks	15	36	63	8	nc	nc	nc	nc	1	35	20	107
Glynde Levels	6	10	15	20	20	15	14	23	34	49	34	13
Eastbourne Lakes	10	9	21	nc	nc	nc	nc	nc	132	61	43	39
Pevensey Levels	22	61	37	42	11	9	17	3	18	58	77	38
Rye Hbr	4	16	15	11	110	48	2	33	33	26	7	19

The large herds in January included 75 on the Upper Adur Levels on 1st; 50 on Lewes Brooks on 3rd; 70 in the Brede Valley on 8th; 45 on Chichester GPs on 12th; 41 at Ford on 17th; 60 grazing on cereals at Greatham Fm on 22nd and 32 at Brooklands, Worthing on 25th. By 7 Feb, the last herd had grown to 42 in number; 52 were at Amberley Wild Brooks below the Castle on the following day, when 31 were also grazing on Burpham Levels. Fifty-four were counted on Lewes Brooks on 28 Feb. The largest herds reported in March were 51 at Ford on 8th; and 45 at Shermanbury on 15th but 135 were counted on the eastern River Rother on 18 Apr and 110 at Rye Hbr on 17 May.

Breeding records were received from at least 30 sites but results were mixed: 6 pairs at Rye Hbr had low to moderate success; pairs at Thorney Deeps and Kneppmill Pond failed, while at Southwater CP the only cygnet from 5 eggs survived just 16 days. At Warnham LNR, 8 cygnets were counted on 8 May, but by June the maximum count was down to 6 and in July and August just a single bird of the year was present. Other sites were more successful.

A herd of 84 was in the Fishbourne Channel on 17 June; 55 were recorded at Castle Water, Rye Hbr, during the July *WeBS*' count; 46 were on the River Arun at Littlehampton on 23 Aug and a sudden influx brought 59 to Brooklands, Worthing, by 26 Sept, with 50 still present on 22 Oct. Fifty-seven birds, including 25 immatures, were counted at Chichester GPs on 21 Oct.

Notable larger numbers recorded in the last months of the year included 93 at Scotney Court GP on 7 Nov; 53 near Winchelsea Station on 26 Nov; 250 in one herd on the Pevensey Levels on 3 Dec; 64 at Steyning on 5th and 98 throughout the month feeding on autumn-sown cereals at Ford. [MJM]

0153. **BEWICK'S SWAN***Cygnus columbianus***Scarce winter visitor and passage migrant.**

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

	Jan	Feb	Mar	Oct	Nov	Dec
County totals	86	99	-	-	-	6
Offham-Houghton	-	92	-	-	-	-
Bury Brooks	8	6	-	-	-	-
Amberley Brooks	41	-	-	-	-	-
Pulborough Brooks	37	-	-	-	-	-
Kneppmill Pond	-	-	-	-	-	6

In the first winter period, birds were seen in the Adur and Arun river valleys in average numbers, but from the east of the county, the only 2 records were of 150 at Scotney Court GP on 10 Jan and a singleton at Rodmell on 31st.

During January, the birds in the Adur Valley totalled about 24, of which only 2 were immatures. No February records were received for this area, while the final was of an adult and 2 juveniles at Partridge Green on 2 Mar. Within the Arun Valley, birds moved about from site to site and it is difficult to assess total numbers without co-ordinated counts at all possible locations. The *WeBS*' figures above do not take into account all possible sites in the Valley and hence numbers included in the table above may, by themselves, be misleading. In January, the highest counts were 63 at Greatham Bridge on 5th and 61 on Amberley Wild Brooks on 17th. Twenty-seven adults grazing on cereal at Greatham Fm on 21 Jan were accompanied by 8 immatures. A flock of 95 birds roosting on Pulborough Brooks on 2 Feb was the highest count of the month, whilst 84 birds on Burpham Levels on 11th included 7 immatures. One collared individual was present at the latter site on 8 Feb. All birds had left this site by 4 Mar.

The last record for the first winter period was of 5 roosting on Longmere Saltings, Thorney Island on 12 Mar, one of which had a white ring with black inscription on its left leg.

The first returning birds appeared on 8 Nov, when a pair with a juvenile were on the Adur Levels, near Bramber. Numbers were small up to the end of the year, with maxima of 7 reported from Ashurst on 22 Nov, Pulborough Brooks on 27 Nov and Kneppmill Pond on 18 Dec. No records were received from the east of the county. [MJM]

0154. **WHOOPEE SWAN***Cygnus cygnus***Very scarce winter visitor and passage migrant.**

Two adult birds were seen to fly over, calling, at Pulborough Brooks on the morning of 31 Dec (AC *et al*). They landed among a flock of Mute Swans and remained all day. [MJM]

0157. **BEAN GOOSE**

Anser fabalis

A very scarce winter visitor and passage migrant.

1997: The comment in the 1997 *Sussex Bird Report* that the two races of Bean Goose have now been separated into two newly defined species: Taiga Bean Goose and Tundra Bean Goose was misleading in that the proposed ‘split’ has not, at yet, been recognised by the *British Ornithologists’ Union Records Committee (BOURC)*. [PJ]

1998: Five were recorded in the Cuckmere Valley just north of Exceat Bridge on 19 Dec (JdeK, NG, NJT) with 7 there and at nearby Chyngton Farm the following day (PJ, PJL). Close views on 20th confirmed that these birds were of the Tundra race *rossicus*. It would appear that almost all the Sussex records have been of this form rather than the Taiga race *fabilis*, which winters almost exclusively in Norfolk and the Central Region of Scotland. An identification paper covering the Bean Goose complex is to be found in *Birding World 10 (11): 421-426*. [LGH]

0158. **PINK-FOOTED GOOSE**

Anser brachyrhynchus

Scarce winter visitor and passage migrant.

From 10 Feb until 16 Mar, up to *ca.* 12 were recorded regularly at Scotney Court GP, in the company of other geese (AJH, CEM, TJW *et al*). [LGH]

0159. **WHITE-FRONTED GOOSE**

Anser albifrons

Scarce winter visitor and passage migrant.

Another good year. The approximate monthly totals (allowing for likely duplication) were as follows:

Jan	Feb	Mar	Apr	Sep	Oct	Nov	Dec
81	351	162	1	1	2	20	240

As in other recent winters, the largest flock recorded was on the Kent/Sussex border at Scotney Court GP where there were 11 on 1 Jan, 52 on 10 Jan, 286 on 15 Feb, 156 on 1 Mar and 94 on 12 Mar. In the Arun Valley, there were 13 at Amberley Wild Brooks on 3 Jan and 6 at Pulborough Brooks on 9th. It appears that these two flocks then joined together as there were 19 at Amberley on 11th. Subsequent records for this area included 18 at Amberley and 4 at Offham on 19th, 20 at Amberley on 25th and 18 at Pulborough Brooks on 1 Feb, 13 of which remained until 16th. The only other large flock during the early months was one of 43 that flew S over Hastings on 25 Feb. The sole April record was of 1E at Splash Point, Seaford on 11th.

The dates of single birds at Rye Hbr on 12 Sept, Weir Wood Res on 24 Oct and Scotney Court GP on 30 Oct suggest that they were of feral origin. The only record for November was of 20 at Barcombe Res on 29th and again on 6 Dec. A large number of other records for December included flocks of 27E at Brighton Marina and 15W at Thorney Deeps on 3rd, up to 30 in the lower Cuckmere Valley between 5th and 10th (possibly the Brighton Marina birds?), 39 over Rye Bay and 57 on Glynde Levels on 13th, 20 at Bewl Water on 28th and 36 over Rye Hbr on 29th. [PJ]

0161. GREYLAG GOOSE

Anser anser

Fairly common introduced resident and winter visitor, scarce passage migrant.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	99	147	71	61	86	19	9	311	539	346	5	178
Amberley Wild Brooks	92	-	2	17	1	-	6	nc	-	40	-	-
Pulborough Brooks	-	75	24	5	9	8	2	38	113	72	2	32
Kneppmill Pond	-	-	-	-	-	-	-	-	4	-	-	125
Ardingly Res	-	57	12	nc	nc	nc	nc	nc	nc	52	nc	-
Weir Wood Res	-	-	-	1	-	-	-	106	244	112	-	1
Glynde Levels	-	3	15	13	51	6	-	155	158	19	2	20
Bewl Water	-	-	4	nc	nc	nc	nc	nc	1	1	-	-
Darwell Res	1	-	2	1	nc	nc	nc	1	1	1	1	-
Pett Level	-	2	4	8	15	2	0	0	-	-	-	-
Rye Hbr	-	2	4	9	4	3	0	9	18	43	-	-

The largest counts of the year all came from Scotney Court GPs. Peaks in excess of 300, recorded on a number of dates in late January and early February, were the highest of the year, with a maximum of 350 on 16 Feb. However, numbers tailed off to 132 by 1 Mar. Away from the sites covered by the *WeBS*' counts, no large concentrations were recorded, although small groups were reported from a number of areas in central and East Sussex. Two at Thorney Deeps on 1 Jan was the only record from the far west of the county.

The only reports of possible passage birds were of 1E at Splash Point, Seaford on 30 Apr, one seen at both Littlehampton and Worthing on 10 May, and half a dozen reports of mostly single birds flying E and W past Brighton Marina in April and early May.

Four reports of breeding were received, the first being a pair with 3 goslings at Horsted Keynes on the early date of 21 Apr. Subsequently, a pair and 6 young were noted at Piddinghoe on 30 Apr, 2 broods were reared at Castle Water, Rye Hbr, and finally 3 pairs with large broods were seen at Glynde Reach on 18 July.

The regular late summer flock began to assemble at Weir Wood Res where 30 on 26 July had risen to 139 by 9 Aug and peaked at 252 on 16 Sept, though it had decreased to 112 by 11 Oct. At Rye Hbr, the flock increased from 55 on 12 Sept to a peak of 198 on 28th. Elsewhere, the only other 3-figure counts were at Bewl Water, with a peak of 130 on 23 Aug, and Pulborough Brooks, with 107 on 3 Sept. The total of 270 at Scotney Court GP on 16 Oct was the highest for the second winter period, although other totals in excess of 200 were regularly recorded there. Apart from Weir Wood Res, which regularly held in excess of 100 birds, the count of 116 on Amberley Wild Brooks on 1 Nov was the only one to exceed 3-figures. As in the first winter period, only one record was received for the far west of the county, that of 7 birds seen at West Wittering on 7 Oct. [AH]

GREY GOOSE species

Anser spp.

A number of grey geese which could not be ascribed to any specific species were seen from time to time throughout the year, mainly in the January-April period, and again in October. The most interesting were 14E off Brighton Marina on 8 Jan and 100 at Icklesham on 2 Oct. [LGH]

0166. CANADA GOOSE

Branta canadensis

Fairly common introduced resident and partial migrant.

The *WeBS*' counts, which again show the expected build up in numbers during the autumn, were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	1914	983	797	292	399	240	265	1194	2591	2444	2605	2422
Chichester Hbr	53	3	14	4	5	2	5	36	155	75	47	100
Forest Mere	6	2	18	21	11	15	15	nc	1	-	-	-
Shillinglee Lake	-	54	nc	2	12	6	2	nc	6	-	-	1
Petworth Park	39	73	29	nc	nc	nc	nc	nc	3	3	17	26
Swanbourne Lake	60	90	80	nc	nc	nc	nc	nc	12	32	32	120
Arundel WWT	134	78	55	49	39	32	30	71	8	416	20	162
Amberley Wild Brooks	236	14	19	8	36	-	36	nc	14	62	900	-
Waltham Brooks	-	-	16	-	11	4	-	-	-	200	-	-
Pulborough Brooks	259	28	16	26	24	34	18	69	405	234	264	260
Henfield Brooks	40	-	3	nc	nc	nc	nc	nc	-	136	160	-
Weir Wood Res	-	10	5	10	-	43	77	42	28	-	-	-
Barcombe Res	1	-	44	-	-	-	-	-	6	23	2	85
Glynde Levels	-	49	59	70	86	2	-	3	67	35	36	95
Arlington Res	7	6	2	-	-	-	6	690	80	-	8	24
Cuckmere Haven	313	76	53	nc	nc	nc	nc	nc	487	139	169	196
Eastbourne Lakes	59	36	27	nc	nc	nc	nc	nc	40	54	170	166
Pevensey Levels	24	16	10	10	4	nc	8	nc	6	45	110	201
Bewl Water	393	150	94	nc	nc	nc	nc	nc	534	500	410	592
Darwell Res	6	12	11	4	21	nc	nc	89	157	43	-	119
Pett Level	83	68	71	24	74	39	58	8	29	3	101	42
Rye Hbr	64	42	33	45	53	41	4	165	263	135	110	82

Significant counts for the first winter period, not shown in the table, included 223 at Barcombe Res on 6 Jan and 400 in the lower Cuckmere Valley on 11 Jan.

Little breeding data were received. At Bewl Water, however, there were 12 pairs; 4 broods totalling 17 young were seen.

The usual post-breeding flocks were recorded including 643 at Bewl Water on 24 Jun, 245 at Ternery Pool, Rye Hbr, on 3 Aug, 755 at Arlington Res on 18 Aug and 560 in the lower Cuckmere Valley on 6 Sept. At Barcombe Res there were 274 on 22 Nov and 325 on 11 Dec.

A few birds were again recorded at the main sea-watching localities in spring as follows:

	Mar		Apr		May	
	E	W	E	W	E	W
Selsey Bill	-	3	-	6	-	-
Worthing	-	-	1	-	-	-
Brighton Marina	-	6	9	9	1	3
Splash Point, Seaford	17	-	1	3	4	3
Bexhill	-	-	13	-	-	-

Unusually, there was one on the sea off Brighton Marina on 2 May. A bird in the Cuckmere Valley on 5 Sept was described as having all white primaries on both wings. [PJ]

0167. **BARNACLE GOOSE**

Branta leucopsis

Very scarce winter visitor, usually in severe weather, and increasing feral resident.

There was a small influx of apparently wild birds in December, comprising 7 at Middle Bridge, Pevensey Levels, on 3rd (MJH, JR), 11 in flight over Rye Hbr on 5th (PT) and then at Pett Level on 5-6th (PT, BJY), and 5 at Thorney Deeps on 22nd (CBC).

Records of feral birds were remarkably similar to those for 1997. The largest flock was at Barcombe Res where there were up to 41 in January and up to 35 in the October-December period. At Arundel, there were 33 on 8 Feb and 28 on 4 Apr but, elsewhere, no more than 6 were reported. Of uncertain origin were 4E at Brighton Marina on 15 May. The late date, however, suggests that these too were feral, although 80,000 were recorded migrating in the Gulf of Finland 4 days later. [PJ]

0168. **BRENT GOOSE**

Branta bernicla

Very common winter visitor and passage migrant.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	8310	9498	5215	19	14	6	16	15	15	3909	6625	8215
Chichester Hbr	7332	8427	4521	10	11	6	16	15	15	3610	6611	7312
Pagham Hbr	957	1071	676	9	3	-	-	-	-	286	nc	900

Away from these traditional sites, records were scarce and involved small numbers with 10 at Newhaven Tide Mills on 11 Jan being the largest group. The only inland records were of singles at Greatham Bridge on 1 Jan and at Barcombe Res on 10-11 Jan.

The totals recorded at the main sea-watching localities were as follows:

	Jan		Feb		Mar		Apr		May		Sept		Oct		Nov		Dec	
	E	W	E	W	E	W	E	W	E	W	E	W	E	W	E	W	E	W
Selsey Bill	6	5	-	-	1571	1	878	-	109	-	-	11	3	221	43	242	34	11
Worthing	14	13	100	-	1229	8	204	13	21	1	-	26	13	184	26	77	2	5
Brighton	47	3	596	1	6934	46	1359	10	263	5	1	1	7	165	-	119	61	10
Seaford	68	22	106	-	3482	50	1590	-	116	1	-	-	-	-	-	3	10	-
Bexhill	5	1	63	2	4085	2	586	-	-	-	-	-	44	119	2	34	18	4

The main spring movement took place during the last week of March, when all the above sites recorded their best days and 4 counts topped four figures. On 28th, there were 1104E at Splash Point, Seaford and 1087E at Bexhill while, at Brighton Marina, there were 1011E on 26th and 1378E on 30th. Spring passage continued well into May, with 108E past Brighton Marina as late as 20th.

Up to 15 birds summered in Chichester Hbr and although 12 were seen regularly in the Pagham Hbr/Selsey area in June, they were not reported in July or August. There were also single birds reported at Weir Wood Res on 15 June and at Rye Hbr from 11-18 July.

The first report of returning birds was 78 flying NW over Chichester Hbr on 10 Sept. Thereafter, small flocks were reported daily flying W or gathering at regular wintering sites. There were again few records from the east of the county, though 2 were at Cuckmere Haven on 25 Sept, with 2-8 present there during November-December; 30 at Rye Hbr on 3 Oct; 1-2 on Pett Levels during October-November, and one at Newhaven Tide Mills on 27 Nov. Inland, there were just 3 autumn records: at Bawl Water parties of 16 and 30 flew over on 1 and 6 Oct respectively and one was at Pulborough Brooks on 12 Dec.

The solitary record of the Pale-bellied race *B. b. hrota* was of 1W at Brighton Marina on 26 Oct. [AH]

0171. **RUDDY SHELDUCK**

Tadorna ferruginea

Rare vagrant, all recent (post 1940) records most likely to be escapes from captivity.

One was seen at Scotney Court GP on 6 Apr, 3 flew W at Thorney Deeps on 19 Aug and one was in Chichester Hbr from 26 Oct into 1999. Toward the end of its stay, it was most often to be found at Snowhill Marsh, West Wittering. Vinicombe & Harrop (*British Birds* 92: 225-255) reach no firm conclusion as to the origin of birds in Britain. Most are presumed to be escapes from captivity, especially the long staying individuals, although small groups, typically arriving from July onwards, may be the result of overshooting moult migrations. A regular moulting flock, of up to 80 birds, is established in the Netherlands. Where they come from each year is unknown, although it is almost certainly not W Europe. [RJF]

0173. **SHELDUCK**

Tadorna tadorna

Fairly common breeder and common winter visitor.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
County total	1408	1239	1095	367	342	250	220	123	81	220	363	786
Chichester Hbr	1054	809	695	143	118	90	76	18	30	189	312	628
Pagham Hbr	195	276	266	144	79	65	92	59	27	11	nc	89
Arundel WWT	91	85	50	26	48	31	31	35	17	10	24	43
Pulborough Brooks	-	2	8	1	21	7	-	-	-	-	1	-
Rye Hbr	29	18	15	27	63	50	17	10	4	7	16	16

The *WeBS*' figures were remarkably low for the county as a whole. The numbers in the winter months throughout the year were consistently down by approximately 50% on the mean figures for the period 1974-94. Additional counts not shown in the table for the beginning of the year were 54 at Scotney Court GP on 4 Jan and 10 at Lewes Brooks on 6th.

Coastal spring movements were typically small with peaks of 29E and 22E respectively at Brighton Marina and Splash Point, Seaford on 19 Apr. The monthly totals for the main sea-watching sites were as follows:

	Mar		Apr		May	
	E	W	E	W	E	W
Selsey Bill	1	9	10	16	24	27

Worthing	4	11	29	10	16	9
Brighton Marina	25	16	66	25	58	14
Splash Point, Seaford	30	19	48	17	32	7
Bexhill	24	4	10	4	2	1

During the breeding season, 3 pairs were noted at Bewl Water on 10 Apr, with families of 11 and 9 seen there at the end of May. Between 8 and 10 pairs bred at Icklesham, with only one successful breeding attempt noted at Rye Hbr, where 5 young were raised. At Chichester GP, at least 3 pairs hatched broods of 1, 4 and 8 chicks. Fifteen adults and 23 ducklings were recorded at Pagham Hbr during June, while only 29 young were recorded in the Sussex part of Chichester Hbr, a very low figure. Breeding also took place at Burpham (2 pairs), Cuckmere Haven (17 juveniles on 17 June), and Pulborough Brooks (18 juveniles on 7 June), and possibly at Arundel, Manxey Level and Pett Level.

Up to 128 non-breeders were recorded at Sidlesham Ferry during April. Other non-breeding concentrations were 34 at the Union Canal, East Guldeford on 17 May and 86 at Thorney Deepes on 26th.

Return passage from the moulting grounds in late autumn/early winter was light, with totals of 32W at Selsey Bill during November and 24W at Brighton Marina during December.

Records of 1-3 birds from inland sites came from the Adur Levels, Arlington Res, Barcombe, Burton MP, and Weir Wood Res. One flew S over Hollingbury Camp on 8 Oct. [MD]

0178. MANDARIN

Aix galericulata

Scarce but increasing introduced resident.

1997: The 3 Mallard ducklings seen with a female Mandarin at Bewbush on 14 June are now considered to have been Mandarin ducklings.

1998: This attractive woodland duck was recorded at some 39 sites, scattered mainly across West Sussex, but with some records coming from localities in the east.

Main concentrations included 42 at Arundel WWT and 5 at Swanbourne Lake in January; 16 on the Lake at Parham House in February; 11 on Amberley Wild Brooks in March; no fewer than 32 at Arundel WWT in mid-June; and 8 in Rackham Woods in December. It seems more than likely that such a concentration as that at the WWT contributes in no small way to the spread of the species along the Arun Valley and, no doubt, to other localities as well.

Although seen relatively easily in likely localities outside the breeding season, ducks with young tend to be secretive, especially along wooded Wealden streams and around ponds with overhanging bushes and the like. Thus, breeding was proved or considered proven at only three sites: near Heathfield (a duck with 8 ducklings on 2 July); at Glasshouse Copse, Kirdford (a duck with 6 large young on 7 July); and at Darwell Res where 17 Mandarins were counted on 19 May, 13 of these juveniles. Confirmed breeding was also recorded on the High Chimneys Estate at Battle, but no extra details were given.

Coastal records may indicate a general dispersal of potential breeders from the main areas. Three were seen at Birdham Pool on 8 Apr, and singles at Selsey Bill on 2 May and at 3 localities in and around Pagham Harbour from August through until late September. [LGH]

0179. **WIGEON***Anas penelope***Common winter visitor and passage migrant.**

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	9344	6982	7683	23	2	2	2	7	756	2737	3596	6951
Chichester Hbr	1446	1585	932	3	1	1	1	1	105	926	1057	1321
Pagham Hbr	1158	774	966	7	-	-	-	-	527	527	nc	1177
Chingford Pond	-	-	-	-	-	-	-	6	8	-	-	-
Amberley Wild Brooks	1528	-	-	-	-	-	-	nc	-	3	843	765
Pulborough Brooks	3585	2005	3571	2	1	1	1	-	54	653	723	1485
Kneppmill Pond	8	4	5	2	-	-	-	-	-	-	6	-
Glynde Levels	3	4	29	8	-	-	-	-	-	3	2	215
Cuckmere Haven	536	1350	870	nc	nc	nc	nc	nc	23	121	437	870
Pevensey Levels	233	323	372	nc	-	nc	nc	nc	nc	283	171	196
Bewl Water	347	368	360	nc	nc	nc	nc	nc	30	85	181	358

At the beginning of the year, numbers were high and notably so into March, especially at Pulborough Brooks. Other significant flocks during the first winter period, not included in the *WeBS*' table, were 1000 on the Parham Estate on 16 Jan, 1100 at Scotney Court GP on 1 Feb and 1 Mar, and 1200 in the lower Cuckmere Valley on 2 Feb. There were also 300 at Partridge Green on 1 Jan, 600 at Castle Water, Rye Hbr on 2 Feb and 368 at Bewl Water on 15th.

Movements along the coast in spring were typically in an easterly direction and very light, as shown by the monthly totals for the main sea-watching sites:

	Mar		Apr		May	
	E	W	E	W	E	W
Selsey Bill	13	-	4	-	-	-
Worthing	6	-	-	-	-	-
Brighton Marina	72	-	45	-	-	-
Splash Point, Seaford	64	2	-	-	-	-
Bexhill	28	-	-	-	-	-

At both Brighton Marina and Splash Point, Seaford there were 30E on 16 Mar and 45 passed E at Brighton in 3.5 hrs on 3 Apr. Single pairs were present in April and May at Kneppmill Pond and North Wall, Pagham Hbr; and 2 pairs at Pulborough Brooks; breeding was not, however, recorded at any of these sites. Five were seen at Castle Water, Rye Hbr on 30 June.

Return passage began with 6W at Worthing Beach on 20 Aug, and inland the first of the autumn arrived at Bewl Water on 1 Sept. Numbers were slow to build during the autumn, possibly due to mild conditions on the continent of Europe, holding birds farther up the flyway. Large concentrations additional to those recorded during the *WeBS*' counts included 1500 on floodwater at Amberley Wild Brooks on 10 Nov; 204 at Arlington Res on 11 Dec; 450 at Rackham on 18th; and 400 at Bewl Water on 29th. [MD]

0182. **GADWALL***Anas strepera***Very scarce breeder and fairly common winter visitor; passage migrant.**

The monthly *WeBS*' counts, which were broadly similar to those in the previous 2 years, were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	373	318	115	31	40	38	13	15	121	294	338	511
Chichester Hbr	21	20	20	-	-	-	-	-	2	2	4	25
Pagham Hbr	-	4	2	2	2	-	-	-	-	-	Nc	9
Chichester GPs	141	132	30	-	-	-	-	-	14	41	61	62
Chingford Pond	-	2	4	-	2	-	-	-	2	30	-	-
Burton MP	-	4	-	-	-	2	-	-	12	-	2	-
Swanbourne Lake	2	4	2	nc	nc	nc	nc	nc	4	18	16	16
Arundel WWT	39	32	32	10	16	30	9	2	57	24	31	29
Waltham Brooks	27	4	2	-	1	-	-	-	-	-	17	-
Pulborough Brooks	27	8	2	-	-	-	-	-	-	2	8	-
Glynde Levels	-	7	2	2	1	-	3	-	-	2	8	4
Eastbourne Lakes	29	39	1	nc	nc	nc	nc	nc	6	12	13	39
Bewl Water	30	20	2	nc	nc	nc	nc	nc	12	74	74	100
Darwell Res	3	14	-	-	-	nc	nc	-	-	-	46	86
Pett Level	27	20	10	14	15	6	1	-	4	62	-	10
Rye Hbr	21	-	-	2	2	-	-	13	8	20	46	98

Other counts received for the first winter period included 38 at Thorney Deepes on 27 Jan and 40 at Icklesham on 31 Jan.

There was a light spring passage at coastal sites including a party of 5 that flew E at Worthing, Brighton Marina and Seaford on 28 Mar.

During the breeding season, reported from 4 sites in the Arun Valley and from Hooe Level, Icklesham, Pagham Hbr and Weir Wood Res, a distribution which corresponds closely with the Atlas map in *Birds of Sussex*. There was, however, no confirmation of breeding.

In the latter part of the year, there were 135 at Bewl Water on 29 Dec. Counts at Chichester GPs included 85 on 30 Oct, 91 on 8 Nov, 86 on 30 Nov and 80 on 20 Dec. [PJ]

0184. **TEAL***Anas crecca***Scarce resident and common winter visitor and passage migrant.**

The monthly *WeBS*' counts, which show above average numbers at both ends of the year, were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	2598	2536	1951	102	11	22	23	192	1417	2620	3289	5910
Chichester Hbr	808	896	544	10	3	-	-	21	287	790	778	2141
Pagham Hbr	805	406	159	6	-	2	1	-	696	581	nc	1716
Forest Mere	29	2	3	2	-	3	-	nc	4	9	12	14
Chingford Pond	-	2	10	-	-	-	4	2	52	97	3	14
Arundel WWT	52	62	42	-	1	1	1	-	12	94	63	26
Amberley Wild Brooks	58	5	12	-	-	-	2	nc	11	51	351	283

Waltham Brooks	42	63	182	1	-	-	-	3	34	24	100	6
Pulborough Brooks	456	291	576	48	5	14	7	24	180	392	1808	765
Lewes Brooks	-	3	15	9	nc	nc	nc	nc	-	8	37	15
Glynde Levels	80	262	142	10	-	2	-	130	3	4	9	260
Pevensey Levels	20	187	95	4	-	nc	2	nc	nc	162	45	110
Pett Level	103	188	60	10	1	-	5	6	44	112	6	128
Rye Hbr	52	50	26	2	1	-	1	1	35	172	46	94

The only other significant count for the first winter period was of 150 at Waltham Brooks on 21 Jan.

Spring passage was typically light as shown by the monthly totals for the main sea-watching sites:

	Mar		Apr		May	
	E	W	E	W	E	W
Selsey Bill	10	-	-	-	-	-
Worthing	15	-	-	-	-	-
Brighton Marina	40	-	2	-	7	-
Splash Point, Seaford	60	-	16	2	3	-
Bexhill	59	-	-	-	-	-

The largest movements were 30E at Bexhill on 29 Mar and 31E at Seaford and 26E at Brighton Marina the following day.

During the breeding season, there were reports of single birds or pairs at Amberley Wild Brooks, Folly Pond near Liphook, Icklesham, Pulborough Brooks, Rye Hbr, Sidlesham Ferry and Thorney Deeps. There was, however, no confirmation of breeding at any of these sites.

At Rye Hbr, where returning birds were noted from mid-July onwards, numbers built up from 3 on 25 July to 14 on 13 Aug, 22 on 6 Sep and 159 on 11 Oct. At Thorney Deeps, there were 3 on 21 July, 17 on 10 Aug, 60 on 21 Aug and 200 on 8 Sep. Other counts for the latter part of the year included 74 at Kneppmill Pond on 21 Nov. [PJ]

0186. MALLARD

Anas platyrhynchos

Common resident and winter visitor.

The monthly *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	2677	2376	2496	910	930	1122	1862	1759	4172	4446	3659	4583
Chichester Hbr	229	183	178	35	46	65	71	103	191	175	151	160
Pagham Hbr	206	194	105	108	102	104	96	116	236	212	nc	346
Swanbourne Lake	100	100	180	nc	nc	nc	nc	nc	120	200	150	56
Arundel WWT	332	485	661	399	306	562	929	251	619	727	428	623
Pulborough Brooks	38	52	175	22	78	65	204	231	304	201	234	54
Glynde Levels	115	153	122	42	82	71	135	140	175	250	345	340
Arlington Res	86	65	20	16	19	18	24	31	65	78	127	243
Bewl Water	543	220	260	nc	nc	nc	nc	nc	845	882	440	643
Alexandra Park	162	133	112	nc	nc	nc	nc	nc	144	147	177	193
Rye Hbr	135	39	58	22	57	44	137	318	255	164	218	187

Other counts received for the first winter period included 129 at Barcombe Res on 27 Jan and 380 at Bewl Water on 15 Feb.

Counts of breeding pairs in defined areas are shown on page XX. Elsewhere, there were 100 pairs at Bewl Water; 33 broods were seen, totalling 136 young. At Thorney Deepes there were 74 young in 11 broods.

The usual post-breeding flocks were recorded, including 200 at Oldhouse Warren on 25 July and 626 at Bewl Water on 16 Aug. At Rye Hbr there were 327 on 27 July and 550 on 5 Sep. Counts for the latter part of the year, not shown in the table, included 258 at Arlington Res on 22 Nov and 546 at Pagham Hbr on 6 Dec. [PJ]

0189. PINTAIL

Anas acuta

Fairly common winter visitor and passage migrant, occasionally summers and has bred.

The monthly *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	683	549	1083	3	1	3	-	9	11	699	408	827
Chichester Hbr	75	134	190	-	-	-	-	-	2	8	41	153
Pagham Hbr	231	304	789	2	-	2	-	-	9	683	nc	673
Chingford Pond	-	-	-	-	-	-	-	8	-	-	-	-
Amberley Brooks	82	-	-	-	-	-	-	nc	-	1	275	-
Pulborough Brooks	277	78	80	1	-	1	-	1	-	6	52	-
Henfield Brooks	7	-	-	nc	nc	nc	nc	nc	-	-	40	-
Pett Level	-	14	8	-	-	-	-	-	-	-	-	-
Rye Hbr	4	-	-	-	1	-	-	-	-	-	-	1

The total for March was a county record, but was not altogether surprising because December 1997 had seen a record 1389. As the table shows, fewer birds returned in the second winter period. The western Harbours and the Arun Valley continued their dominance, but many birds dispersed to areas of floodwater when they occurred and this probably accounted for low *WeBS*' counts in January and February. For instance, 100 were on floodwaters at Brightams Fm, Partridge Green on 1 Jan, 100 on the Parham Estate on 16 Jan and 65 at Henfield Levels on 8 Mar.

The only movements up-Channel were in the last few days of March, with 16 passing Hastings on 28th and 25 passing Brighton on 29th. The poor passage is demonstrated by the monthly totals for the main sea-watching localities:

	Mar		Apr		May	
	E	W	E	W	E	W
Selsey Bill	-	-	3	-	-	-
Worthing	6	-	1	-	-	-
Brighton Marina	25	-	1	-	-	-
Splash Point, Seaford	33	-	2	-	-	-
Bexhill	24	-	-	-	-	-

There was only a handful of birds left in the county from April through to June, including a pair at Sidlesham Ferry and, at Pulborough Brooks, 2 on 2 May and a male on 26 May and 8 June. During July, a single bird was present at Rye Hbr from 8-20th, and 2 at Pett Level Pools on 18th.

The *WeBS*' count in August revealed 8 birds inland at Chingford Pond, but the first record for the western Harbours was of 7 at Pagham on 1 Sept. Floods were again a

feature in latter part of the year, with many reports for Amberley Wild Brooks and Pulborough Brooks, including a maximum of 150 at the latter on 18 Dec. [RK]

0191. **GARGANEY**

Anas querquedula

Scarce passage migrant and rare summer visitor.

1997: A pair flew NE past Pilsey Island on 8 Apr.

1998: This was another disappointing year with no proven breeding. Numbers were low as shown by the approximate monthly totals:

Mar	Apr	May	June	July	Aug	Sept	Oct
15	8	12	2	9	11	2	2

The first record of the year was of 1E at Bexhill on 15 Mar, two days later than the 32-year average quoted in *Birds of Sussex*. Most of the March birds were seen passing offshore with 5 sea-watching sites recording birds on 28 Mar, the largest count being 8E at Bexhill. Additionally, there was a pair at The Severals, Church Norton on 21st, a male flew into Arlington Res with a pair of Teal on 29th, and a drake was at Thorney Deepes on 31st. Two males were at Sidlesham Ferry from 3-6 Apr and a pair there on 21 and 23 Apr. The only other April records were of single drakes at Glynde Levels on 8th, Pulborough Brooks on 13th and 25th, and at Combe Haven, also on 25th.

A number of records during May suggestive of breeding included a male present throughout the month at Icklesham, with a female there on 12th, a male at Pulborough Brooks from 10th to 23rd, 2 males at Middle Bridge, Pevensey on 18th, and a pair on nearby Pevensey Bridge Level on 31st. At the North Wall, Pagham Hbr, there was a male on 13th, with 2 males there the following day.

Most of the early autumn records were from Pagham Hbr and Pett Level Pools where up to 4 were recorded. At Weir Wood Res there were sightings between 21 and 25 July (maximum 3 on 24th) and on 13 Aug, while at Pebsham a single bird was on the marsh on 2 Aug. From the last day of August through September until the last report on 13 Oct, the only records were from Ternery Pool, Rye Hbr, with the exception of 1W off Bexhill on 18 Sept. [JKI]

0194. **SHOVELER**

Anas clypeata

Very scarce resident and fairly common winter visitor and passage migrant.

The monthly *WeBS*' counts, which show above average numbers in the latter part of the year and the expected peak in December, were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	296	304	349	39	22	13	7	13	66	256	348	378
Pagham Hbr	10	32	82	-	-	-	-	-	8	12	nc	2
Chichester GPs	28	3	2	-	-	-	-	-	1	3	13	15
Chingford Pond	-	-	-	-	-	-	1	-	1	7	-	-
Petworth Park	-	-	-	nc	nc	nc	nc	nc	-	-	-	23
Arundel WWT	14	7	13	-	-	-	-	1	8	22	6	34
Amberley Wild Brooks	5	-	-	2	-	-	-	nc	-	-	8	-
Waltham Brooks	7	11	-	2	-	-	-	-	-	4	23	-
Pulborough Brooks	123	137	125	7	1	1	1	-	17	62	166	29

Lewes Brooks	15	2	6	-	nc	nc	nc	nc	-	2	1	3
Glynde Levels	11	31	22	13	7	-	-	-	5	20	4	8
Arlington Res	14	7	-	-	-	-	-	-	-	-	24	15
Eastbourne Lakes	15	7	32	nc	nc	nc	nc	nc	2	6	52	86
Bewl Water	-	-	-	nc	nc	nc	nc	nc	9	2	-	-
Pett Level	26	45	43	10	12	10	5	2	6	20	15	26
Rye Hbr	21	15	13	5	1	2	-	10	9	96	17	90

Other counts for the first winter period not shown in the table included 38 and 54 at Elms Fm, Icklesham on 15 Jan and 1 Mar respectively, and 100 in Pagham Hbr on 1 Feb.

A small spring passage was noted at coastal sites as follows:

	Feb		Mar		Apr		May	
	E	W	E	W	E	W	E	W
Selsey Bill	-	-	9	-	4	-	-	-
Worthing	-	-	9	-	3	2	-	-
Brighton Marina	2	-	54	1	19	3	2	-
Splash Point, Seaford	2	-	41	3	32	-	2	-
Bexhill	3	-	35	-	-	-	-	-

The largest movement was on 29 Mar (*cf.* Teal) when there were 14E at Brighton, 22E at Seaford and 20E at Bexhill.

Records for the breeding season were far from complete. At Castle Water, Rye Hbr, a clutch was incubated for 14 days but no young were seen. At least 3 drakes and a duck were present at this site in mid-May so it is possible that other pairs bred. Elsewhere, there were 2 pairs on Sidlesham Ferry on 19 Apr and a pair behind the North Wall, Pagham Hbr, on 25 May. Single drakes were recorded on Hooe Level on 3 May and at Thorney Deepes on 9 May and a duck at Pond Lye on 24 June.

Returning birds were noted from mid-July, with 12 at Rye Hbr on 17th and 4 at Weir Wood Res on 21st. A flock of 10 flew E at Worthing on 31 Aug.

Significant counts for the remainder of the year not shown in the table included 76 at Ternery Pool, Rye Hbr, on 13 Sept and 50 and 48 at Chichester GPs on 27 Sep and 26 Dec respectively. [PJ]

0196. RED-CRESTED POCHARD

Netta rufina

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

Females were seen at Kneppmill Pond on 1 Jan, 25 Aug and 18 Oct and at Swanbourne Lake, Arundel on 25 May. A leucistic female or immature was at Rye Hbr from 28 Mar until 3 Apr while a female at Icklesham during May and June was joined by a male on 25 May. Perhaps the same leucistic bird was at Barcombe Res on 9 and 19 Aug. [SJP]

0198. POCHARD

Aythya ferina

Rare breeder and fairly common winter visitor and passage migrant.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
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<i>County totals</i>	1474	948	439	13	6	4	20	16	75	291	645	1019
Chichester Hbr	4	-	-	2	3	-	-	-	-	2	8	6
Chichester GPs	371	406	111	1	-	2	10	11	34	79	167	178
Swanbourne Lake	100	60	90	nc	nc	nc	nc	nc	10	8	-	22
Arundel WWT	307	177	126	9	3	1	10	3	22	29	88	225
Kneppmill Pond	105	80	24	-	-	-	-	-	-	17	48	-
Barcombe Res	92	1	-	-	-	-	-	-	-	6	95	175
Eastbourne Lakes	17	16	4	nc	nc	nc	nc	nc	-	7	37	56
Bewl Water	111	50	32	nc	nc	nc	nc	nc	5	18	15	47
Rye Hbr	16	38	12	1	-	1	-	1	4	103	30	34

Apart from slightly fewer in late spring and early summer, the monthly totals were remarkably similar to those of 1997. Although the table shows that high numbers were recorded at the traditional wintering sites within the county, a number of significant counts are not shown. These include counts from Scotney Court GP of 715 on 1 Jan, 403 on 3 Jan, 282 on 11 Jan and 252 on 1 Feb; the New Year's Day count is the largest recorded at a single site in the county and demonstrates the importance of this area. Additional high counts were of 175 at Northpoint Pit, also on 1 Jan, and 189 at Barcombe Res on 17 Jan.

It is pleasing to report that breeding was confirmed at Thorney Deeps for the first time and also at Ivy Lake and Portfield, Chichester GPs, where 4 and 3 young were seen. The latter had fledged by early September.

Numbers built up in autumn in line with previous years although an early large count of 150 at Scotney Court GP on 19 Sept was noteworthy. Barcombe Res held good numbers, with 154 being recorded there at the end of November, increasing to 208 by mid-December. [RPu]

0200. RING-NECKED DUCK

Aythya collaris

Very rare vagrant

A female found dead in the Seven Sisters CP on 28 Apr is now in the Booth Museum (per IJW). It is the 4th to be recorded in the county, but the first female. The previous records were in December 1982, March 1996 and May-June 1997. [RJF]

0203. TUFTED DUCK

Aythya fuligula

Scarce breeding species and fairly common winter visitor.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	1223	1197	855	203	177	136	152	154	433	718	783	1053
Chichester Hbr	2	2	-	4	6	4	8	4	6	13	23	20
Pagham Hbr	-	2	2	-	6	2	22	9	-	-	nc	3
Chichester GPs	652	583	228	19	-	18	1	9	88	176	257	284
Chingford Pond	6	7	11	9	23	14	10	10	2	5	12	15
Petworth Park	18	27	19	nc	nc	nc	nc	nc	31	18	10	4
Swanbourne Lake	40	90	150	nc	nc	nc	nc	nc	2	6	-	25
Arundel WWT	172	69	56	48	46	37	60	12	36	97	132	167
Barcombe Res	32	3	1	-	11	2	14	11	5	15	17	24

Glynde Levels	2	33	47	23	27	17	21	15	9	6	8	12
Eastbourne Lakes	28	50	32	nc	nc	nc	nc	nc	17	35	67	87
Bewl Water	30	50	42	nc	nc	nc	nc	nc	147	187	71	90
Darwell Res	15	36	19	13	-	nc	nc	5	8	2	1	16
Powdermill Res	80	30	23	-	nc	nc	nc	34	21	27	20	41
Rye Hbr	98	136	124	48	25	24	10	26	31	50	78	122

Overall counts were very much as expected, with the highest in the early part of the year, especially at Chichester GPs. Typically, numbers rose from September onwards with all the monthly totals in the second winter period being close to the means shown in *Birds of Sussex*. An additional count, not shown in the table, was of 140 at Scotney Court GP on 11 Jan.

Breeding was recorded at least 17 sites but success was variable. At least 5 broods were noted at both Rye Hbr and Bewl Water, 4 adults and 16 young were at Sidlesham Ferry Long Pool in early July, and records of young were received from several of the lakes at Chichester GPs. However, at Weir Wood Res, all 6 young were lost by 3 Aug. [RPu]

0204. SCAUP

Aythya marila

Scarce winter visitor and passage migrant; rare in summer.

The minimum monthly totals and counts at the main sites were as follows:

	Jan	Feb	Mar	Apr	Aug	Sept	Oct	Nov	Dec
Chichester Hbr	-	4	-	-	-	-	2	-	-
Pagham Hbr	-	-	-	-	2	4	-	1	-
Chichester GPs	1	2	1	1	-	-	-	2	1
Rye Hbr	-	2	1	-	-	-	1	3	8
Scotney Court GP	2	-	-	-	-	-	-	-	-
Monthly total	4	11	3	1	2	4	3	8	12

At Bexhill, there was 1E on 1 Jan and 3E on 20 Feb, and at Splash Point, Seaford, 1E on 28 Mar and 2E on 1 Nov.

The last record in spring was a female at Chichester GPs on 5 Apr. It had been present since the beginning of the year. In autumn, 2 were reported at Pagham Lagoon on 30 Aug and 4 (2 males) on the sea off Church Norton on 14 Sept. The only other record away from the main sites, in a very poor year, was of a 1st-winter drake at Shinewater Marsh, Eastbourne on 28 Dec. [PJ]

0206. EIDER

Somateria mollissima

Scarce winter visitor and passage migrant, non-breeding birds summer annually.

The *WeBS*¹ counts, which again show below average numbers wintering in the county, were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	8	5	5	3	2	2	9	2	3	2	8	4
Chichester Hbr	7	4	5	2	2	2	2	2	2	-	8	-
Pagham Hbr	-	-	-	-	-	-	7	-	1	1	nc	4

Langney Point	1	1	-	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Rye Hbr	-	-	-	1	-	-	-	-	-	-	1	-	-

Significant flocks not shown in the table included 55 at Jury's Gap on 21 Jan, 18 off Pilsey Island on 6 Jan and 13 there on 14 Nov. In Rye Bay, numbers built up from 11 on 9 Oct to 25 on 12 Oct, 40 on 11 Nov, 50 on 25 Nov and 55 on 26 Dec.

Spring passage was light as shown by the monthly totals for the main sea-watching localities:

	Jan		Feb		Mar		Apr		May		Oct		Nov		Dec		
	E	W	E	W	E	W	E	W	E	W	E	W	E	W	E	W	
Selsey Bill	8	-	8	-	42	-	16	1	4	-	2	18	18	22	3		
Brighton Marina	2	-	2	-	24	1	57	-	13	-	8	7	2	3	11		
Seaford	3	-	16	1	40	-	42	-	8	-	-	-	-	3	-		
Bexhill	6	36	38	-	70	-	54	-	24	-	-	-	4	3	13		

No large movements were recorded, the highest day total being just 34E at Bexhill on 26 Apr.

There were the usual records of non-breeding birds during the summer months: up to 8 off Selsey Bill between 2 and 15 June, 7 in Pagham Hbr from 24 June to 14 July, 2 in Chichester Hbr from 22 June to 10 Oct and 1 at Cuckmere Haven on 17 June.

There were no inland records. [PJ]

0212. LONG-TAILED DUCK

Clangula hyemalis

Scarce passage migrant and winter visitor.

The first winter period was remarkable for the almost complete absence of this sea-duck off the coast. The bird seen with a flock of Eiders on 3 Dec 1997 off Church Norton failed to remain into 1998. Otherwise, there were just 3 records for the first winter period, involving 4 birds. One flew W at Bexhill on 1 Jan, 2W at the same site on 17 Jan and there was one in Emsworth Channel, Chichester Hbr on 25 Feb.

There were no spring records and the species was absent until late October, after which there were multiple records from the sheltered waters of Pagham Hbr. Most sightings were of a long-staying female which arrived on 29 Oct and was still present at the end of the year, though 2 were seen together on the sea off Church Norton on 3 Nov. In addition, singles was recorded at Newhaven Tide Mills between 27 Nov and 31 Dec and at Rye Hbr on 13 Dec whilst 2 were in Thorney Channel, Chichester Hbr on 4 Dec. [LGH]

0213. COMMON SCOTER

Melanitta nigra

Common spring passage migrant and fairly common winter visitor; scarcer in summer and autumn.

The *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
County totals	20	-	185	-	-	-	-	-	-	-	2	2
Chichester Hbr	-	-	-	-	-	-	-	-	-	-	1	-
Langney Point	20	-	-	nc	nc	nc	nc	nc	nc	nc	nc	nc

Bewl Water	-	-	-	nc	nc	nc	nc	nc	-	-	1	2
Pett Level	-	-	90	-	-	-	-	-	-	-	-	-
Rye Hbr	-	-	95	-	-	-	-	-	-	-	-	-

The usual small numbers were recorded in the Channel in January and February, the highest day totals being of 20W at Brighton Marina on 25 Jan and 19E at Splash Point, Seaford on 20 Feb.

Spring passage up-Channel was mediocre, the peak day being 28 Mar in a SSE wind. Totals at the main sea-watching localities were as follows:

	Mar	Apr	May	Total	No. per hr	Peak day
Selsey Bill	347	642	161	1224	3.7	28 Mar (214 in 6hrs)
Worthing	92	235	161	488	3.8	8 May (107 in 15hrs)
Brighton Marina	977	2468	599	4044	10.1	28 Mar (580 in 4hrs)
Splash Point, Seaford	2095	2083	421	4599	18.1	28 Mar (1106 in 5hrs)
Glyne Gap, Bexhill	588	1333	96	2027	16.0	20 Apr (724 in 4hrs)

Although sightings in June and July were above average, the numbers involved were small, with most recorded at Selsey Bill where the month totals were 37E and 72W in June with 85E and 105W in July. Likewise, in the August-December period, sea-watchers recorded the usual lower numbers, though up on 1997, including peaks of 131E and 42W past Selsey Bill on 5 Nov and 59E and 98W past Glyne Gap, Bexhill on 16 Nov. At Rye Bay, a traditional wintering site, there were 200 on 11 Nov and 130 on 4 Dec.

The only inland record was of 1 at Bewl Water on 2 Oct. [RPr]

0214. SURF SCOTER

Melanitta perspicillata

Very rare vagrant

A first-winter female off Splash Point, Seaford from 3-28 Dec (MA, BRG *et al*) was only the 4th county record. It was the 1st since April 1991 (also off Splash Point) while the previous two were in November-December 1977 (off Pett Level) and in December 1966 (at Rye Hbr). [RJF]

0215. VELVET SCOTER

Melanitta fusca

Scarce passage migrant and winter visitor along the coast; rare inland.

The approximate monthly totals were as follows:

Jan	Feb	Mar	Apr	May	Oct	Nov	Dec
13	3	21	136	9	3	28	30

In January and February, the only multiple sightings were of 3, then 2, at Bexhill on 1 and 4 Jan, and 2 off Seaford on 5th. There were counts of 8 and 4 in Rye Bay on 13 and 23 Mar respectively.

The totals at the main sea-watching localities in spring were as follows:

	Mar	Apr	May	Total
Selsey Bill	1	26	3	30
Worthing	-	12	-	12
Brighton Marina	1	70	3	74

Splash Point, Seaford	4	22	1	27
Glyne Gap, Bexhill	2	6	5	13

Day totals in April included 14 off Pett Level on 7th, 11 past Brighton Marina on 19th, and 14 there on both 25th and 26th.

Sightings in the second winter period were well up on recent years, particularly in Rye Bay, where up to 4 were seen on several dates in November and December. Elsewhere, ones and twos were seen all along the Sussex coast, possibly involving up to 20 individuals which were wintering in the Channel. A flock of 6 off Whitbread Hollow, Beachy Head on New Year's Eve brought a good year to an appropriate end. [RPr]

0218. GOLDENEYE

Bucephala clangula

Fairly common winter visitor; very rare in summer.

The *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	51	66	20	-	-	-	-	-	-	-	16	63
Chichester Hbr	41	47	14	-	-	-	-	-	-	-	9	46
Pagham Hbr	5	9	-	-	-	-	-	-	-	-	nc	2
Chichester GPs	2	1	-	-	-	-	-	-	-	-	2	2
Glynde Levels	-	-	-	-	-	-	-	-	-	-	1	1
Arlington Res	-	-	-	-	-	-	-	-	-	-	2	-
Rye Hbr	1	6	5	-	-	-	-	-	-	-	2	6

Additional to the *WeBS*' counts were 7 and 4 at Barcombe Res on 1 Jan and 2 Feb respectively, 63 in Chichester Hbr on 7 Jan and 10 at Rye Hbr on 25 Nov. At Pagham Hbr, there were up to 4 in both October and November and 10 in December.

All the April sightings were in the east of the county with up to 3 at Rye Hbr between 2 and 20 Apr, while the last spring record was at Scotney Court GP on the late date of 23 May.

Off-shore, there was one at Bexhill on 4 Jan, with 1W there on 16th, and 1E past Selsey Bill on 25th. Spring passage was negligible with just 3 individuals recorded: at Bexhill on 22 Mar and 19 Apr and at Splash Point, Seaford on 29 Mar.

In the second winter period, singles were recorded moving W past Worthing on 3 Oct, in Rye Bay on 2 Nov and 1 Dec, and off Bexhill on 27th. All other off-shore movements were observed at Selsey Bill where totals of 4E and 26W were recorded between 13 Oct and the end of the year. The peak movements were 8W on both 13 Oct and 5 Dec.

Inland records, not mentioned above, were of singles at Amberley Wild Brooks on 17 Jan, and a female at Weir Wood Res from 11 Jan to 20 Feb, with 2 there on 27 Jan. Late in the year, there were singles at Bewl Water on 8 Nov and Weir Wood Res on 6 Dec, with 2 at Bewl on the same date. [RPr]

0220. SMEW

Mergellus albellus

Very scarce winter visitor except in severe weather when larger numbers may occur.

A return to normal following the exceptional influx during the winter of 1996/97. Analysis of the records received for this species indicates a county total of about 18 for the

winter of 1997/98, based on the assumption that birds moved between sites in the far east of the county. The monthly totals were as follows:

	1997		1998		
	Dec	Jan	Feb	Mar	Apr
Chichester GP	3	3	2	1	1
Balcombe Lake	-	-	1	-	-
Weir Wood Res	2	-	-	-	-
Willingdon Level	2	1	1	-	-
Pett Level	-	1	1	1	-
Rye Hbr	4	6	9	5	-
Northpoint Pit	1	8	9	-	-
Monthly total	11	13	14	7	1

The largest flocks were of 9 (3 males) at Northpoint Pit on 5 Feb and 9 (2 males) at Rye Hbr on 8 Feb. A redhead at Chichester GPs until 24 Apr (TJE, BFF, AH) was the latest spring record for the county.

The first recorded in the latter part of the year were 2 redheads at Ternery Pool, Rye Hbr on 23 Nov. About 16 occurred during December, comprising 2 males and up to 7 redheads at Rye Hbr during the month, 6 redheads at Northpoint Pit on 6th, 3 redheads at Southwater CP on 8th, 2 redheads at Chichester GPs from 7th and single redheads on the sea at Galley Hill, Bexhill on 13th and at Weir Wood Res on 20th and 27th. [PJ]

0221. RED-BREASTED MERGANSER

Mergus serrator

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

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
County total	168	125	216	10	3	5	-	4	-	11	86	267
Chichester Hbr	138	83	184	6	3	2	-	3	-	11	86	103
Pagham Hbr	23	40	30	4	-	3	-	-	-	-	nc	24
Chichester GP	-	2	-	-	-	-	-	1	-	-	-	-
Goring Gap	5	-	1	nc	nc	nc	nc	nc	-	nc	-	139

The largest first period totals, other than *WeBS*' counts, were offshore at Worthing Beach where 65 were present on 19 Jan, rising to a peak of 98 on 15 Mar. Observers at Southwick Beach recorded a peak of 65 on 19 Jan, and at Ferring there were 100 present on 31 Jan. Both Pagham Hbr, with a maximum of 62 on 17 Feb, and Goring Beach, with 37 on 21 Mar, had peaks in excess of their best *WeBS*' counts. By contrast, records from East Sussex were scarce, the highest count being only 6 at Seaford Head on 11 Jan.

Monthly totals at the main sea-watching sites were:

	Jan		Feb		Mar		Apr		May		Oct		Nov		Dec	
	E	W	E	W	E	W	E	W	E	W	E	W	E	W	E	W
Selsey Bill	96	34	23	12	215	220	90	51	-	-	4	102	13	221	360	196
Worthing Beach	26	23	64	13	102	1	18	5	-	-	-	2	6	20	42	21
Brighton Marina	11	4	25	3	54	22	181	14	-	-	-	7	-	5	12	20
Seaford	18	9	46	2	98	12	202	6	-	-	-	-	-	6	9	1
Bexhill	-	-	7	5	54	-	44	-	-	-	-	-	-	-	-	9

The largest day movements in the spring were 106W past Selsey Bill in 3 hrs on 4 Mar, and 82E past Worthing Beach in nearly 7 hrs on 28 Mar. Autumn movements remained small until the very end of the year, when very high totals were recorded at Selsey Bill, notably 73E and 35W in 3.5 hrs on 30 Dec, and 169E and 53W in 5 hrs the following day.

During the summer, up to 2 birds were recorded on a number of dates in Pagham Hbr and up to 3 in Chichester Hbr.

The first returning migrant was 1E past Worthing Beach on 22 Sept. Thereafter, small but steadily increasing numbers were reported, particularly at Selsey Bill. Numbers recorded offshore were generally low, with a cold weather influx of 173 at Goring Gap on 1 Dec (with 149 still present on 6th) being the only notable gathering.

There were only 2 inland records, considerably fewer than in 1997. One was at Wyckham Wood, near Henfield on 7 Jan, and a female was on Aldingbourne Rife on 22 Jan. [AH]

0223. GOOSANDER

Mergus merganser

Scarce winter visitor and passage migrant.

After last year's record figures, numbers returned to slightly above the average for recent years. The minimum monthly totals and counts at the main sites were as follows:

	Jan	Feb	Oct	Nov	Dec
Pagham Hbr	1	1	-	-	-
Chichester GP	2	-	-	-	-
Burton MP	1	3	-	-	-
Arundel WWT	-	-	3	-	-
Pulborough Brooks	-	-	-	1	6
Ifield MP	1	2	-	-	-
Weir Wood Res	1	-	-	-	1
Newhaven Tide Mills	-	-	-	2	2
Barcombe Res	-	2	-	1	1
Arlington Res	-	-	-	2	1
Bewl Water	-	-	-	-	2
Rye Hbr	-	-	-	-	7
Monthly total	7	8	3	9	28

In the first winter period, the highest count was of 3 redheads at Burton MP on 4-5 Feb.

The first recorded in the latter part of the year were 3 redheads at Arundel WWT on 29 Oct while the largest flocks were of 6 at Pulborough Brooks on 11 Dec and 7 in flight at Rye Hbr on 16th.

Records of birds passing at sea were of 1W at Glyne Gap, Bexhill on 1 Jan, 2W at Splash Point, Seaford on 3 Dec and 1W at Hastings on 29 Dec. A party of 3 (2 males and a female) very close inshore at Selsey Bill on 6 Dec showed signs of oiling. [DEGC]

0225. *Cat. C* RUDDY DUCK

Oxyura jamaicensis

Very scarce resident and scarce winter visitor.

An average year, reflecting the lack of harsh weather. Birds were recorded at 11 localities outside the breeding season as follows:

	Jan	Feb	Mar	Sep	Oct	Nov	Dec
Chichester GP	2	5	3	-	2	6	4
Pagham Hbr	-	-	-	-	-	1	-
Arundel WWT	11	11	23	11	10	5	11
Kneppmill Pond	-	-	-	-	1	-	-
Barcombe Res	-	-	-	-	-	2	3
Glynde	-	-	-	-	-	1	-
Willingdon Level	-	-	1	-	-	-	1
Elms Fm, Icklesham	-	-	-	1	-	-	-
Pett Level Pools	-	-	4	-	-	-	-
Rye Hbr	1	3	3	5	2	-	-
Scotney Court GP	-	1	-	-	-	-	-

During the breeding season, there were 3 pairs at Swanbourne Lake, Arundel, on 22 Apr, up to 3 pairs at Ternery Pool, Rye Hbr, 2 pairs at Icklesham and single pairs at both Chichester GPs and Pett Level Pools. At least 2 broods were raised at Rye Hbr and 4 young at Pett. [PJ]

0231. HONEY BUZZARD

Pernis apivorus

Very scarce spring and autumn passage migrant; rare breeding summer visitor.

Last year's breeding pair was again successful but for obvious security reasons no further details should be made available.

In late summer, one lucky observer had close views of a bird, whilst taking a stroll in the grounds of Wakehurst Place on 19 Aug (SL). A total of 5-6 migrants were seen in autumn. A Swallow alarm call drew attention to a probable adult at Beachy Head on 29 Aug (MS) while a probable first year bird flew NE there the following day (RDME). One flew W at Cuckmere Haven on 6 Sept (SL) and 2, possibly 3, were recorded at Icklesham on 12 Sept (IH). [MEK]

0238. BLACK KITE

Milvus migrans

Very rare vagrant.

One came in off the sea at Thorney Island on the morning of 11 May. The observer was carrying out a routine wader count at the time and was lucky enough to have prolonged views of this bird before it eventually drifted off SW over Hayling Island, Hants (CBC). Remarkably, two more were seen later the same day, but in the far east of the county at Icklesham (IH, TS).

Both of these records have been accepted by *British Birds*. This brings the county's total to 17 individuals. There have been just 2 other records for the 1990s, the first on 7 July 1990 at Pett and Icklesham, and the second at East Dean (East Sussex) on 7 May 1995. The favoured time for this species tends to be late April and early May. [MEK]

0239. **RED KITE***Milvus milvus***Very scarce visitor, recorded in all months.**

1995: Close views were obtained of a single bird, which was not wing-tagged, at Udimore, near Rye, on 23 Feb (MJD).

1998: There were 8 fully substantiated records, involving a minimum of 5 birds, as follows: 1 at Hooe Level, Pevensey on 23 May (TJW); 1 at Mount Caburn, near Lewes, on 22 June (CD); singles (presumably the same) over Friston Hill (JMD) and Hollingdean, Brighton (IJW) on 9 Aug; 1 at Holland Wood, near Petworth from early Nov to late Dec (ACH); 1 at Cuckmere Haven on 1 Dec (JSB); 1 at Seaford Head on 20 Dec (NJT); and 1 at Tarring Neville, Newhaven on 25 Dec (LJW). The bird at Seaford Head alighted on a fence post, began eating what appeared to be a small bird, and allowed the observer to approach within 40m typifying the species' tolerance towards man. [MEK]

0260. **MARSH HARRIER***Circus aeruginosus***Scarce spring and autumn passage migrant and very scarce winter visitor.**

A large number of records were received and allowing for duplication it is probable that 54 individuals were involved. This is a county' record, exceeding last year's total of 52 birds. It is interesting to note the number of immatures that were identified and the very early autumn dates on which some of them were seen. Juvenile dispersal would appear to be very early for this species.

The probable monthly minima were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
-	1	1	2	10	3	3	17	18	7	1	3

The usual sites were visited and the records can be summarised as follows:

Chichester and Pagham Hbrs: Of a likely total of 14 birds recorded during the year, 5 were in spring as follows: a male at Sidlesham on 27 Mar; a female flying N at Selsey West Fields on 8 May; an immature male at Church Norton on 12 May; a male flying NE in off the sea at Pilsley Island on 15 May; and another single at Church Norton the following day.

In the autumn, there were records for 27 dates from 12 Aug until 20 Dec. An immature was seen at Thorney Deepes on 4 dates between 14 and 23 Aug while on 15 Aug, 3 at Pagham Hbr, included a male. Another immature was seen at Pagham Hbr on 5 Sept. There were several more reports for this month, but just occasional sightings thereafter. Records for Pagham Hbr on 26 Oct, 18 Nov and 2 and 20 Dec may conceivably relate to the same bird.

Arundel to Lewes Downland: There were records for 13 dates, relating to a minimum of 8 different birds. Singles were recorded at Woodingdean on 1 May and at Rodmell on 7 June. At Harrow Hill, Patching there was an adult female on 25 July and immatures (possibly the same) on 28 July and 18 Aug. At Balsdean, near Rottingdean there were 3 on 18-19 Aug, followed by singles there on 23 and 31 Aug, and on 2, 4 and 12 Sept. An immature was seen hunting over a field of flax at Castle Hill, near Falmer on 16 Aug and there was a single at Lewes Brooks on 25 Aug.

Beachy Head: Single birds were recorded on 24 July, 19 Aug, 1, 6 and 27 Sept, and 5 Oct.

Rye area: A likely minimum of 15 different birds was recorded during the year up until 18 Oct. Sightings of single birds at Pett Level on 15 and 22 Feb and at nearby Icklesham on the latter date probably relate to the same individual. The next was a single in the Brede Valley on 28 Apr while several sightings in May at Icklesham and Rye Hbr included an immature male on 12th. The only record for June was at Northpoint Pit on 13th. An immature was present at Icklesham on 1 Aug and on a further 7 dates during the month. Other Aug records included 2 immatures at Rye Hbr on 27th. There were many sightings in September and early October, most notably an unprecedented 9 different birds, including 2 adult males and 2 adult females, at Icklesham on the evening of 11 Sept.

Elsewhere, an immature flew in off the sea at Seaford and then up the Ouse Valley on 10 Apr. Three different migrants were recorded on 16 May: a female flying E offshore at Worthing, an immature male initially flying E and then inland at Brighton Marina, and an unspecified individual at Newhaven, which came in off the sea. An adult female flew E at Galley Hill, Bexhill on 30 June and immature flew W there on 2 Oct. There were 2 at Manxey Level, Pevensey on 12 Aug and a single at Fairlight CP on 26 Sept.

Well away from the coast, at Weir Wood Res, there were females on 10 May and 20 Dec and an immature on 29 Aug. [MEK]

0261. HEN HARRIER

Circus cyaneus

Scarce, but regular, winter visitor and passage migrant.

It is likely that there was a minimum of 22 birds in the first half of the year and 18 birds in the second half of the year. It is difficult, however, to be too precise with this species, as birds tend to hunt over very large areas and doubtless move from one roost to another. The probable monthly minima were as follows:

	Jan	Feb	Mar	Apr	May	Sept	Oct	Nov	Dec
Adult males	2	4	2	1	-	-	1	2	4
Ringtails	18	9	6	1	2	3	13	14	10

As usual, most of the records were for just a few traditional localities as follows:

Chichester and Pagham Hbrs: Single ringtails were recorded at Pagham Hbr and Selsey West Fields on 5 and 10 Jan respectively. A ringtail was seen at both these sites on 18 Sept with it or another on 7-8 Oct.

NW Sussex downs and commons: A total of 27 records was submitted for the first half of the year. A winter roost held 1-2 ringtails, but none were seen after 13 Feb, while a second roost held 1-2 roosting birds until 28 Mar. There were several records for West Dean Woods between 11 Jan and 15 Mar, with a maximum of 3 ringtails on 20 Jan.

In the second half of the year, there were singles at Ambersham Common on 23 Nov, 25, 28 and 31 Dec while at West Dean Woods, there were 2 ringtails hunting together on 26 Nov.

Downland between Madehurst and Shoreham: The only record for the early part of the year was of a ringtail at Houghton on 24 Jan.

In the autumn, there were 2 ringtails at Chantry Hill on 14 Oct and a ringtail at Steep Down, Lancing from 9 Oct to 1 Nov. Probably the same bird was seen at Cissbury on 18 Oct. Single ringtails were recorded at Amberley Mount on 1 Nov and 21 Dec and a juvenile male at New Erringham Fm, Shoreham on 15 and 21 Nov and at Steyning on 29 Nov. A ringtail at Madehurst on 28 Dec attempted, but failed, to take a Meadow Pipit.

Arun Valley: A ringtail at Amberley on 25 Feb. Somewhat surprisingly, no more were seen until the late autumn when a wing-tagged ringtail was seen at Pulborough Brooks on 14 Nov. It had a green tag on the left wing. A ringtail was seen at Amberley Wild Brooks on 29 Dec and presumably the same bird at Pulborough Brooks on 30 and 31 Dec.

Downland east of Brighton: A large number of records were submitted. A ringtail was seen at Balsdean on 3 dates between 24 Jan and 15 Feb and at Iford Hill on 29 Jan. A male at Balsdean on 3 Feb was presumably the same male recorded at Offham on 15 Feb and Newmarket Bottom on 21 Feb.

In the autumn, a male was seen at Balsdean on 13 and 17 Oct, with a ringtail there on 14th and at Newmarket Hill on 17th and 24th. There were 2 ringtails and the male at Newmarket Hill on 7 Nov. Several further sightings followed with a ringtail last seen on 5 Dec and the male on 28 Dec.

Ouse Valley: There were 2 ringtails on Lewes Brooks on 18 and 25 Oct, with single birds there on 7 Nov and 20 Dec. A ringtail at Barcombe on 29 Dec.

Ashdown Forest: A ringtail was present on 3 Jan and was joined by an adult male on 12 Jan. This male was recorded on numerous occasions and was last seen on 8 Apr. The ringtail was reported rather less often and was last sighted on 11 Apr.

In the autumn, there was a ringtail on 15 Oct. A male, first seen on 5 Nov, was recorded on several occasions until the end of the year while a ringtail, first sighted on 23 Nov, was recorded on a further 4 dates until 28 and 31 Dec when 2 ringtails roosted.

Rye area: There were 3 birds present in the early part of the year, with up to 2 ringtails in Jan-Feb, mainly at Icklesham/Pett Level, one remaining until 15 Mar. A male at Rye Hbr on 20 Jan ranged widely thereafter and was sighted at several localities including Scotney Court GP on 7 Mar and Icklesham on 14 Mar; it was last seen on 23 Mar at Rye Hbr.

Single ringtails at Rye Hbr on 17 May and 6 June (PMT) were unusually late, the latter only the 4-5th county record for the month.

In the autumn, there were ringtails at Rye Hbr on 13 Sept and 26 Oct. Single ringtails were then seen regularly until the end of the year, with 2 at Icklesham on 17 Dec. A wing-tagged first-winter male at Icklesham on 6 Dec had a white tag on the right wing and a yellow tag on the left. It had been marked at a nest at Langholm, Dumfriesshire as part of a long-term study into birds of prey and Red Grouse on the Langholm Estate and was seen again, at Rye Hbr, in Feb 1999. The movement (530km SE) is one of the longest reported for this population. There were also several records of an adult male at Rye Hbr from 7 Dec onwards, with an apparently different male there on 25 Dec.

Elsewhere, there were 4 in Friston Forest on 17 Jan, singles at Denton on 18 Mar and at Newick on 3 May and a male at Alfriston on 6 Dec.

A total of 5 migrants was recorded as follows: singles at Beachy Head on 27 Sept and 18 Oct, the latter flying E; a ringtail W at Galley Hill, Bexhill on 18 Oct; a ringtail W at Cuckmere Haven on 17 Nov; and a male NE at Hailsham on 29 Nov.

Observers are requested to report the age and sex of birds, where possible. [MEK]

0263. MONTAGU'S HARRIER

Circus pygargus

Very scarce spring and autumn visitor; formerly bred in small numbers.

1997: A ringtail at Birling Gap on 9 Aug was accepted as either *pygargus* or *cyaneus*, although on date alone the former would seem more likely.

1998: A poor year, with only 2 authenticated records: a female seen briefly at Barpham Hill, Burpham on 18 Aug (DIS) and a juvenile at Harveys Cross, Balsdean on 14 Sept (GAS). The latter bird was initially seen at very close quarters and later watched hunting over a stubble field.

A ringtail at Offham Hill, Lewes on 20 Aug was submitted as either *pygargus* or *cyaneus* and was accepted as such. [MEK]

0267. GOSHAWK

Accipiter gentilis

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

At a downland locality in the west of the county, first a male, then a female mobbed a Buzzard on 19 June (BFF, DIS, CW). This spectacle continued for approximately 5 minutes. At one point, the Buzzard was forced to talon-grapple with the female in order to protect itself. A very close view was obtained of a juvenile female at Barcombe Res on 14 Sept (RTP). [MEK]

0269. SPARROWHAWK

Accipiter nisus

Common resident and passage migrant.

Several hundred records were submitted for numerous localities throughout the county. Breeding, however, was confirmed for just 12 pairs, a situation that obviously does not reflect the species' true status in the county. Minimal data on breeding success were received

Prey species reported included Woodpigeon, Collared Dove, Blackbird, Magpie, Starling, and an adult Lapwing. Perhaps a little surprisingly, the Lapwing 'kill' was then stolen by a female Kestrel in an aerial tussle. Having been dispossessed, no serious attempt was made at a recovery.

A total of 18 birds considered to be passage migrants was reported from the coast as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
-	-	5	2	1	-	-	-	1	8	1	-

At Galley Hill, Bexhill there were 3 on 12 Mar, 5 on 18 Oct and 3 on 30 Oct.

An interesting observation at Thorney Deeps on 17 Sept involved teamwork between an adult male and an immature female, as together they attacked the local Starling roost. [MEK]

0287. BUZZARD

Buteo buteo

A scarce resident and passage migrant and possible winter visitor.

There has been a further extraordinary increase in the county' population. In the west, there were 32-34 pairs and in the east 12-13 pairs. These figures are based on observations in late winter and early spring. At least 9 pairs were reported as breeding

successfully. The true figure is likely to be very much higher as it appears that few observers attempted to confirm breeding.

In the west of the county, there were 22 pairs present in the downland between West Dean Woods and Storrington/Angmering. This may be fairly close to a saturated population for this stretch of countryside. An interesting development has been a territorial expansion to the north of the Downs where there were 3-4 pairs, too far removed to be dependent on downland habitat.

In the east, the Ashdown Forest area is still the centre of the breeding population, but with scattered, isolated pairs to the south and west. There was also evidence of increasing activity in several areas of downland not previously occupied.

A total of 26 migrants was reported from on or near the coast as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
-	2	1	2	4	-	1	6	3	5	2	-

A single bird at Cuckmere Haven on 13 Aug joined an Osprey, before both flew NE. [MEK]

0301. OSPREY

Pandion haliaetus

Scarce passage migrant.

An exceptional year for this species with a very large number of records submitted. There were 23 different birds in the spring with a further 40 birds in the autumn. These figures allow for the inevitable duplication of records and results in a probable minimum total of 63 different birds. This is a county record, far exceeding the previous record of 52 in 1993. The earliest was at Bawl Water on 28 Mar and the latest at Arlington Res on 20 Oct.

The minimum monthly totals were as follows:

Mar	Apr	May	June	July	Aug	Sept	Oct
1	7	14	4	6	11	16	7

The records can be grouped and summarised as follows:

Chichester and Pagham Hbrs: There were numerous reports from this area. The first of the year was at Sidlesham on 27 Apr. Singles appeared at Pagham Hbr on 5 and 20 May, with other singles at Thorney Deeps on 13 May and at Pilsey Island on 20-21 May and 16-17 and 19 June. In the second half of the year, there were singles at Pagham Hbr on 18 July and 2, 12 and 22 Aug. An immature bird at Thorney Deeps, first recorded on 3 Sept was seen daily until 30 Sept, while an adult at Pilsey Sands was also watched daily from 22-30 Sept. At Pagham Hbr, there were further singles on 20 Sept and intermittently from 28 Sept to 5 Oct. The latter bird also visited Chichester GPs on 4 Oct.

Weir Wood Res: In spring, there were singles on 24 Apr and from 26-28 May. Thereafter, 2 were reported on 12 and 14 June with singles there on 13 and 16 June and 2-3 and 12 July. A further single was seen intermittently from 25 July to 6 Aug with 2 there on 2 and 5 Aug. Singles were recorded on 15 and 24 Aug and then there were numerous reports up to 27 Sept with 2 seen on 31 Aug, 9, 20 and 25 Sept, and 3 on 12 Sept. The last record for this locality was on 4 Oct.

Ashdown Forest: Two on 19 Apr and singles on 23 and 25 May, 15 June, 1 and 16 Aug and 14 Sept. The dates of most of these sightings suggest that these birds were the same as those recorded nearby at Weir Wood Res.

Barcombe Res: Singles on 13 and 18 May and from 7-18 Oct.

Arlington Res/Cuckmere Valley: A good year with records relating to a minimum of 9 different individuals. In the first half of the year, there were records for 16, 23 and 27 May and 17 June. In the second half, there were singles on 4 July, 2, 13, 15-16 and 18 Aug, 27 and 30 Sept, and 2-3 and 20 Oct. The bird on 4 July was also seen over Lullington Heath.

Bewl Water: One on the early date of 28 Mar was seen to catch a trout. It was still present on 30th. Thereafter, singles were reported on 10-13 Apr, 22 Aug, 3 Sept, and 1-2 Oct.

Rye area: Two at Icklesham on 11 Sept, with singles there the following day and at Castle Water, Rye Hbr on 30 Sept.

Elsewhere, there were singles N over Crawley on 2 Apr; at Combe Haven on 9 Apr; Hooe Level, Pevensey on 5 May; Beachy Head on 10 May; over Lewes on 15 May; SW over Offham on 2 Sept; over Hove on 11 Sept; and fishing in the R. Adur at Shoreham on 28 Sept. A single flew over Wivelsfield on 2 Oct and on the same date there was another at Heathfield. [MEK]

0304. KESTREL

Falco tinnunculus

Common resident and passage migrant.

There were records for 58 pairs, with confirmed breeding for 19 of these, figures which do not reflect the species' true status in the county. Fledging success was fairly high, with 6 pairs raising 2 young, 7 pairs raising 3 young, one pair raising 4 young and 2 pairs raising 5 young. Precise details were not known for the remaining 3 pairs.

Sea-watching produced a good number of records of birds considered to be migrants as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
-	-	2	12	6	-	-	-	2	6	3	-

On 30 Oct, there were 3 at Galley Hill, Bexhill on 30 Oct (the same date on which 5 Sparrowhawks were recorded). [MEK]

0309. MERLIN

Falco columbarius

Scarce but regular winter visitor and passage migrant.

The approximate monthly totals, allowing for likely duplication between adjacent sites, were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
10	10	9	5	1	-	-	3	7	16	12	10

Chichester and Pagham Hbrs: In the first half of the year, there were 2-3 different individuals until 25 Mar. Singles at Pilsley Island on 1 Apr and at Selsey on 7 and 18 Apr

were probably migrants. A female was observed attacking the wader roost at Pilsey Island on 12 different dates between 10 Jan and 4 Mar.

The first recorded in autumn were single birds at Pagham Hbr on 13 Aug and at Selsey Bill on 29th. There were no more sightings until 10 Sept and then numerous records followed until the end of the year, involving probably not less than 5 different birds. Most records were of single birds although there were 2 together at Sidlesham Ferry on 3 Oct and at Thorney Island on 29-30 Oct, the latter hunting as a team. A single at Nutbourne on 28 Dec was forced to the ground by a crow.

Downland: Most records were for the downs immediately E of Brighton where single birds were recorded on 6 dates between 24 Jan and 28 Feb dates and on 25 Oct and 28 Dec. Elsewhere, there were singles at Kithurst Hill on 17 Jan, Mill Hill, Shoreham on 18 Jan, Houghton Forest on 20 Feb, West Dean Woods on 28 Feb, Up Marden on 9 Nov, Beeding Hill on 23 Nov and Steep Down, Lancing on 29 Nov.

Arun Valley: There were 6 records for Pulborough Brooks, with singles on 14-15 Feb, 19 Oct, 14 and 17 Nov and finally 12 Dec. Elsewhere, there were females at Littlehampton on 3 Oct and at Ford on 29 Nov and a male at Fittleworth on 22 Nov.

Ouse Valley: Singles at Glynde Levels on 21 Jan, Newhaven on 22 Mar, 18 Oct, 22 Nov, 12 and 28 Dec and at Barcombe on 15 Oct and 25 Nov.

Cuckmere Valley: Singles on 26 Oct, 22 Nov and 9 Dec.

Beachy Head: Singles on 29 Apr, 17 and 27 Sept and 10 and 16 Oct, with 2 on 4 Oct and 3 on 7 Oct

Pevensey Levels: The only record was of a single at Wartling on 3 Dec.

Rye area: There were probably 3-4 different birds, including at least one male, in the first winter period up to 13 Mar. None were then recorded until singles on 30 Mar and 11 Apr. The latter bird was reported on a few occasions until it was last seen on 3 May.

In the autumn, there was a single at Rye Hbr on 22 and 26 Aug. Birds were then seen very regularly until the end of the year with 2 at Rye Hbr on 11 Oct and also on 9 Dec.

A number of other sightings included singles at Lancing on 31 Jan, 15 Sep and 24 Nov, Yapton on 4 Feb, Chichester GPs on 27 Sept, Glyne Gap, Bexhill on 22 Oct, Hastings on 30 Mar and 7 Oct, Fairlight CP on 18 Oct and at Worthing on 24 Dec. Away from the coast, there were singles at Hassocks on 17 Jan, Ambersham Common on 22 Feb and Ditchling Common on 3 Mar.

Single birds flew W at Brighton Marina on 25 Oct and E at Splash Point, Seaford on 3 Dec. [MEK]

0310. **HOBBY**

Falco subbuteo

Scarce breeding summer visitor and regular passage migrant.

More than 400 reports were submitted which is a county record. Analysis of the data reveals a minimum of 44 pairs in the west of the county and 22 pairs in the east. Last year, the comparative figures were 46 and 18 pairs. The figures mentioned above relate to known territorial pairs and are likely to be a conservative under-estimate of the true position. There was confirmed breeding at several sites with one pair raising 4 young.

The earliest sighting of the spring was at Wick, Littlehampton on 20 Apr (3 days earlier than the average for 1970-1993) and at Ivy Lake, Chichester GPs on 24th. A more general arrival occurred on 25th with singles recorded at 2 coastal and 3 inland localities.

It is now apparent that several coastal towns have their own local breeding pairs. This inevitably increases the difficulty in assessing the number of spring migrants at coastal localities but birds seen to fly in off the sea, or flying offshore, pose few problems. At Selsey Bill, a total of 8 was recorded between 4 May and 18 June, including 4 on 6 May, while at Beachy Head 8 were noted between 25 Apr and 22 May. Migrants were recorded at other coastal sites but space precludes the mention of them all.

Several localities had small groups of birds up in the air together. Parties of 6 were recorded at Hooe Level, Pevensey on 5 and 27 May, Icklesham on 7-8 May, and at Bury Hill on 16 May, while 7 were hunting dragonflies at Amberley Wild Brooks on 18 May.

The last seen was at Maresfield on 29 Oct. [MEK]

0320. **PEREGRINE**

Falco peregrinus

Scarce breeding resident.

More than 350 records were received, most of which clearly relate to known breeding pairs. In an excellent year, 7 pairs were successful, raising 22 young. Sadly, one other pair was robbed of at least 2 young. Of the remaining 4 pairs that attempted breeding, 3 pairs failed and no information was received as regards the fourth. At a further 2 sites there were single territorial birds that remained unpaired. The Society acknowledges the assistance given by the *Sussex Peregrine Study* in providing the data on which this summary is based. Observers may be assured that all breeding records received shall remain strictly confidential.

Fortunately, no restrictions apply to the well-publicised pair in Brighton which utilised a metal nest box on the roof of Sussex Heights. Further details of this exciting event can be found on pages XX.

A number of interesting observations were made. A single mobbed an Osprey at Pagham Hbr on 22 Aug. A juvenile female attempted to kill an Oystercatcher at Pilsey Sands on 10 Oct by forcing it into the sea while on 19 Dec, an immature female and adult male worked as a team in attacking the wader roost at this site. A similar strategy was adopted by 2 males at Amberley Wild Brooks on 29 Dec. [MEK]

0358. **RED-LEGGED PARTRIDGE**

Alectoris rufa

Introduced resident. Population augmented annually by captive bred stock.

The only reports in the first winter period which reached double figures were of 12 and 14 on 2 dates in February, both at Castle Hill, near Falmer. Other reports were mostly from the West Sussex downland and totalled 24. Evidence of breeding was confirmed at just 2 sites, Easebourne Great Common and Coombes, near Shoreham, but as the numbers at Castle Hill had increased to 25 by September, it must be concluded that they were also successful there. Coveys of 20 at Scotney Court GP and 37 at Apuldram on 10 May and 16 June respectively must also be indicative of breeding.

The total of 240 reported in the second winter period is a reflection of the release of captive bred birds. The largest numbers, 38 at West Marden and 150 at Lower Standean, both relate to released birds. It is not known how many Chukars *A. chukar*, and their hybrids have survived from the early '90s when their release was licensed. No attempt has been made to separate the two species. [RTP]

0367. **GREY PARTRIDGE**

Perdix perdix

Fairly common but decreasing resident. Species of Conservation Concern in Sussex.

Peak counts in the first winter period were 42 at Goring Gap, 24 at Rye Hbr and 20 at Ryngmer Park, near Lewes. Other reports during this period were mostly from the south of the county, along the Downs and the coastal plain. An increase in the number of breeding records is due to a new source of information and does not necessarily reflect any change in the fortunes of this species. In the Saltdean/Woodingdean area, 29-30 pairs occupied 3 sites totalling nearly 2000ha, giving rise, after breeding, to an estimated population of 270 birds. At Rye Hbr at least 14 territories were located but only a few broods noted and at Goring Gap 13 pairs were found but with no indication of breeding success. Twelve juveniles at Thorney Island at the end of July confirms breeding at this site. A late brood of 3 with a pair of adults was seen at Newhaven Tide Mills on 5 Aug. A further 21 records were received from different locations for the period 5 Apr-31 July. As this is a largely sedentary species, all these records are likely to be indicative of breeding.

A further measure of breeding success are the numbers reported in the second winter period. Maxima of 42 were noted at Goring Gap, 34 at Littlehampton GC and 29 at Rye Hbr. During this period a minimum of 282 birds was seen at 25 different sites compared with 308 at 22 sites in 1997, indicating a stable population. [RTP]

0370. **QUAIL**

Coturnix coturnix

Scarce summer visitor, recorded in variable numbers from year to year. Formerly occasional in winter.

New information on this intriguing species has recently become available (*BWP Update 1998 2: 27-46*). The British population, which breeds in June and July, could include individuals hatched earlier in the year in more southerly regions. The male calls only occasionally once mated, but mobile unpaired singing males have been found in northern France from the last third of June. They gather in flocks which appear and disappear suddenly.

The first record for 1998 was of a single bird seen and heard calling on the Downs near Hangleton on 16 May. Thereafter, records were mostly of 1 or 2 calling males from a further 13 sites, with a maximum of 3 at Harrow Hill, Patching. Birds were reported on several occasions from Chantry Hill, Poverty Bottom near Denton, and at Steep Down, Lancing. About half the observations were for the last third of July. Although breeding is likely to have taken place, there is still no conclusive evidence. One observer saw his first Quail on 16 Aug, the last recorded date, having only heard them for the previous 26 years. Perseverance rewarded! [RTP]

0394. **PHEASANT**

Phasianus colchicus

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

This species is not generally reported by many observers. Breeding was confirmed at just 5 sites but this is obviously not a true reflection of the status of the feral population.

The extent to which the population is augmented annually by released birds is covered by a separate article on page XX. [RTP]

0396. *Cat. C* **GOLDEN PHEASANT**

Chrysolophus pictus

Scarce introduced resident.

Only 4 records were received. The flavescent male first noted in December 1990 was seen at Kingley Vale on 31 Jan while single males were reported from West Dean on 25 May and West Dean Woods on 31 May. A male at West Harting Down on 29 Dec, a site at which the species has not previously been reported, was considered to be an escape. If the above records are a true picture, the species is in imminent danger of extinction in Sussex. [RTP]

0397. *Cat. C* **LADY AMHERST'S PHEASANT**

Chrysolophus amherstiae

Rare introduced, but not established, resident or escape from captivity.

Two males were observed at Fairmile Bottom, Slindon on 30 Dec. This is 17km from Kingley Vale where the species was seen in 1997. There is no evidence of a breeding population in the county and all records to date must refer to escaped birds. [RTP]

0407. **WATER RAIL**

Rallus aquaticus

Scarce resident, winter visitor and passage migrant.

Records originated from some 35 widespread sites and the approximate monthly totals, excluding Icklesham, were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
29	14	12	10	5	-	2	2	10	24	59	35

The first winter period produced mainly single sightings, but 3 were recorded at Combe Haven on 1 Jan and 10 at Thorney Deeps on 21st. On 16 Jan, an observer at the Pulborough RSPB Reserve had excellent views of a bird which spent some 30 mins walking between cover in front of Nettle's Hide.

Single birds remained at many localities throughout March, and during April, when there were 5 at Gravetye Lakes on 24th. Further spring records included 3 at Combe Haven on 14 May, all calling birds, and another calling male at Glyne Gap Marsh, Bexhill, also on 14th.

Counts of birds calling in the early spring at Icklesham suggested around 30 potential breeding pairs, a figure lower than in previous years. At the same site, the July *WeBS* count recorded 60 individuals.

Mostly singletons were recorded throughout August, September and October, except in the west of the county where 3 were seen at The Severals, Church Norton on 10 Oct, and 6 at Sidlesham Ferry on 18th. In November, there were counts of 12 at Thorney Deeps on 11th, 4 at Rye Hbr on 18th, 4 at Paghham Lagoon on 24th and on the 29th there were 9 at Combe Haven and 7 at nearby Glyne Gap Marsh.

Numbers during December showed little indication of a high wintering population, apart from 10 at Thorney Deeps on 3rd, 5 at Rye Hbr on 6th and 4 at Weir Wood Res on 20th. [LGH]

0408. **SPOTTED CRAKE**

Porzana porzana

Very scarce spring and autumn passage migrant and rare winter visitor

1997: The well-watched bird at Pagham Hbr from 12-16 Aug frequented the western end of the Long Pool, near Sidlesham Ferry (BW *et al*).

1998: Fourteen were recorded during an exceptional autumn. Juveniles were trapped at Icklesham on 25 Aug, 3 Sept (2), 6 Sept, 16 Sept, 25 Sept (2), 28 Sept, 29 Sept, 2 Oct, 3 Oct, 12 Oct and 24 Oct (RBRG), while one was seen at North Wall, Pagham Hbr, on 6 Sept (BFF). Thirty-six of the 46 to have been recorded in the 1990s have been trapped at Icklesham. Most recent records have been during the period mid August to early October, with that on 24 Oct being the latest in the county since 1987 (when one was at Pagham Hbr from 28 Oct-1 Nov). [RJF]

0424. **MOORHEN**

Gallinula chloropus

Very common resident and winter visitor.

The monthly *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	576	680	731	162	144	102	372	333	887	782	648	915
Chichester Hbr	39	43	21	29	28	21	15	21	20	45	30	31
Pagham Hbr	14	30	27	14	18	15	151	15	28	26	nc	20
Chichester GPs	125	153	105	5	4	2	5	5	97	125	131	138
Swanbourne Lake	45	42	45	nc	nc	nc	nc	nc	56	120	130	90
Arundel WWT	125	-	121	30	nc	nc	nc	108	113	-	-	151
Offham to Houghton	7	14	16	3	6	7	11	3	18	6	6	10
Waltham Brooks	2	1	12	2	5	7	13	22	16	2	4	2
Pulborough Brooks	-	16	34	4	26	11	14	33	21	16	13	6
Henfield Brooks	28	69	19	nc	nc	nc	nc	nc	1	2	2	4
Weir Wood Res	-	5	3	1	-	1	6	18	31	30	1	4
Glynde Levels	3	2	14	13	10	8	15	9	27	14	4	5
Bewl Water	20	30	60	nc	nc	nc	nc	nc	170	70	50	22
Darwell Res	3	3	2	7	2	nc	nc	20	37	16	12	18
Alexandra Park	32	32	28	nc	nc	nc	nc	nc	35	25	39	45
Pett Level	21	81	78	9	1	5	101	2	6	26	20	127
Rye Hbr	8	19	24	12	8	10	5	28	32	28	40	64

Additional counts to those in the table include 150 at Bewl Water on 16 Aug; and 189 at Arundel WWT on 25 Nov.

Details of breeding surveys can be found on page XX. Most records of nesting involved small numbers but there were at least 29 pairs at Rye Hbr, 12 pairs at Thorney Deeps and 4 pairs at both Barcombe Res and the Seven Sisters CP. [DEGC]

0429. COOT

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

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	2010	2188	1449	289	256	270	388	522	3064	3379	2970	3557
Chichester Hbr	62	66	27	31	26	37	19	30	74	8	67	60
Pagham Hbr	28	47	36	36	19	16	17	31	28	38	nc	41
Chichester GPs	702	739	503	38	24	42	77	64	661	707	781	947
Swanbourne Lake	60	60	120	nc	nc	nc	nc	nc	80	150	150	100
Arundel WWT	64	102	58	53	58	56	80	58	71	80	97	87
Pulborough Brooks	27	45	41	22	5	2	2	2	-	-	1	-
Kneppmill Pond	-	-	-	2	6	8	26	49	35	70	-	-
Brooklands Worthing	nc	nc	nc	nc	nc	nc	nc	nc	160	183	156	140
Glynde Levels	11	25	24	15	18	23	34	72	53	133	57	58
Eastbourne Lakes	127	90	106	nc	nc	nc	nc	nc	227	416	408	503
Bowl Water	400	372	210	nc	nc	nc	nc	nc	1247	1017	600	612
Darwell Res	41	41	35	20	24	nc	nc	19	20	8	10	29
Pett Level	67	130	37	7	10	9	105	3	-	28	11	133
Rye Hbr	257	282	106	11	20	31	3	136	250	354	419	661

Other counts of note included, at Scotney Court GP, 250 in January, 249 in October and 253 in November. Likewise, several counts at Chichester GPs revealed higher totals than the *WeBS*' counts with 865 on 4 Oct, 1280 on 30 Nov and 1120 on 20 Dec.

Breeding counts were received from several waters and the largest numbers were at Bowl Water where 101 pairs produced 49 broods with 148 young. At Rye Hbr there were 20 pairs and at Thorney Deepes 14 pairs produced 15 young. BTO nest record cards for active nests on some lakes at Chichester GPs showed that 30 failed at the egg stage, 7 failed at the young stage and the remaining 14 pairs fledged 31 young from a minimum of 63 chicks. [DEGC]

0450. OYSTERCATCHER

*Haematopus ostralegus***Scarce breeder, fairly common passage migrant and winter visitor.**

Recorded along the whole coast throughout the year. The monthly *WeBS*' counts at the principal sites were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	1956	1730	1261	997	611	555	563	1196	1469	1265	2104	2145
Chichester Hbr	1215	1256	695	538	360	310	428	948	1089	1078	1683	1314
Pagham Hbr	75	261	222	281	100	115	88	172	235	178	nc	375
Rye Bay	645	169	295	178	150	128	47	76	124	5	370	305

The largest concentrations were at Pilsey Sands in Chichester Hbr, where the monthly maxima were:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1000	800	272	382	266	275	472	1000	1200	1100	1112	864

A total of 25 pairs was reported as breeding. In Chichester Hbr, there were 2 pairs at Thorney Deepes and single pairs at Cobnor Fm, Ellanore and Pilsey Island. The pair at Ellanore raised a single chick while the pair at Pilsey Island laid 3 eggs, at least 2 of which were washed out on 12 July. At Rye Hbr, 18 pairs nested but breeding success was again disastrous, with possibly no young fledged at all. Elsewhere, there were single pairs in the lower Cuckmere Valley and at Pett Level, both of which were unsuccessful. Of particular interest was a pair that successfully raised a chick at Arundel WWT. Inland nesting in Sussex has only previously been recorded on the levels of the eastern Rother. The only other inland record was of 1 at Coldwaltham Brooks on 4 July.

Also of interest was a colour ringed bird at Pilsey Island on 2 September that had been ringed at Dawlish Warren, Devon on 29 Sept 1989. [JC]

0456. **AVOCET**

Recurvirostra avosetta

Scarce winter visitor and passage migrant. Has bred.

The approximate minimum monthly totals were:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
15	82	32	24	5	3	-	2	1	5	26	19

In January up to 14 were at Pagham Hbr/Sidlesham Ferry and 1 flew E past Bexhill on 16th. In February, a remarkable influx of 80 occurred at Pagham Hbr on 10th (CAD), arriving in small flocks and later flying off E. It is not known if the 11 which were at Pagham Hbr for most of the month were additional to the birds recorded on 10th. There were also 2W past Brighton Marina on 24th. The usual small passage occurred along the coast in March with maxima of 10 in the lower Cuckmere Valley on 24th and 4E and 1W past Brighton Marina on 20th. In April, the highest count was of 4 at Pett Level on 21st.

A pair was seen at last year's breeding site on 17 and 26 May and may have stayed until the beginning of June. There were also 2 birds at Sidlesham Ferry for most of June.

The first autumn bird was 1 at Sidlesham Ferry on 3 Aug (presumably the same bird was at Pagham Hbr on 4th), followed by 1 at Bexhill on 7th. A single bird at Pagham Hbr on 30th was the only September record. Numbers at Pagham Hbr/Sidlesham Ferry increased to 3 on 19 Oct, then 18 during November and 19 in December. Elsewhere there were 2 at Pett Level on 31 Oct, 2 at the Crumbles on 7 Nov, 3 at Rye Hbr on 17 Nov and 4 there on 30 Nov. [JC]

0459. **STONE-CURLEW**

Burhinus oedicanus

A rare passage migrant. Formerly a scarce breeding summer visitor. Species of Conservation Concern in Sussex.

1998 produced 2 records, one in the spring, on 30 Mar, the other in early autumn, on 19 Sept. The spring bird was recorded at Pulborough Brooks when flushed by one of two errant dogs which were being intercepted by Reserve's staff (APC, MH). The other record was of a bird in flight over the western side of the Cuckmere Valley, near Exceat Bridge (PJW). It was calling and continued SW out of sight. [LGH]

0469. LITTLE RINGED PLOVER

Charadrius dubius

Scarce breeding summer visitor and passage migrant.

The first recorded was at Glyne Gap, Bexhill on 22 Mar, a week earlier than the average for 1970-93. By 24th, the first pair was back on breeding territory. A light spring passage followed with a total of about 24 birds recorded up to 27 May. Sea-watching records in this period were of 1E at Brighton Marina on 21 Apr and 2E at Worthing Beach on 10 May.

During the breeding season, a total of up to 15 pairs was reported, 8 in West Sussex and 7 in East Sussex. A pair that fledged 2 young at Rye Hbr constituted the first breeding record for the LNR. Elsewhere, breeding success was poor. At one site where there were 6 pairs, only 2 were successful, while at another where 3 pairs nested, 2 failed, the other fledging 3 young.

Post-breeding dispersal was indicated by a juvenile at the North Wall, Pagham Hbr on 24 June. Numbers at Sidlesham Ferry, where up to 3 were present throughout June, increased to 6 on 14 July. There were also 6 at Pett Level Pools on 22 July with 9 there the following day. An exceptional flock of 18 at Thorney Deeps on 22 Aug (CBC) equalled the largest party previously recorded in the county on Pevensey Levels in July 1993. No more than 3 were seen at any one site in September, the last at Icklesham on 22nd, within one day of the average for 1970-93. [PJ]

0470. RINGED PLOVER

Charadrius hiaticula

Fairly common breeder, passage migrant and winter visitor.

Recorded along much of the coast for much of the year. The monthly *WeBS*' counts at the principal sites were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	248	286	434	133	131	104	71	621	1134	639	334	330
Chichester Hbr	124	15	47	64	65	18	28	487	370	314	169	114
Pagham Hbr	8	102	300	48	42	63	17	68	197	74	nc	-
Climping	31	32	12	nc	nc	nc	nc	nc	27	-	57	61
Goring Gap	5	-	-	nc	nc	nc	nc	nc	73	nc	-	33
Lower Adur Estuary	62	49	7	nc	nc	nc	nc	nc	285	174	88	84
Rye Hbr	-	68	45	19	24	16	23	56	125	47	-	1

The largest concentrations were at Pilsey Sands, Chichester Hbr, where the monthly maxima were:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
80	64	37	104	220	28	86	450	367	326	232	110

Other significant concentrations, not in the tables above, were of 110 at Worthing Beach on 19 Jan, 100 at Pagham Hbr on 30 April, 276 at Worthing Beach on 31 Aug, 200 at East Worthing Beach, near Brooklands on 12 Sept, 104 at Kingston Gorse on 25 Sept, 192 at Pagham Hbr on 25 Oct, and 150 at Shoreham Beach on 8 Nov.

About 66 pairs were reported as breeding or attempting to breed. At Rye Hbr about 45 pairs nested and many chicks were seen, but very few survived to fledging. In Chichester Hbr there were 8 pairs at Pilsey Island (which fledged 23 young) and a pair at Ellanore which fledged a single chick. There were 4 pairs at Widewater, 3 pairs in the lower Cuckmere Valley (raising 2 young), 2 pairs at Newhaven Tide Mills (one of which was

seen with 3 almost fledged young), a pair at Shoreham Beach which raised 2 young and a pair at Brighton Marina which laid an egg but subsequently deserted. In addition a pair was seen displaying on East Worthing Beach.

There were several inland records in April-May, all from Pulborough Brooks, including 5 on 19 April, 10 on 7 May and 8 on 24 May. [JC]

0477. KENTISH PLOVER

Charadrius alexandrinus

Very scarce spring and autumn passage migrant, formerly bred

Adult males were present at Pilsey Sands on 28 Mar and 14 Apr (CBC), at Pagham Hbr on 15-19 Apr (AH *et al*) and at Pilsey Sands again on 21 Apr (CBC), while an adult female was also at Pilsey Sands on 11 Aug (CBC). Individuals are thought likely to have moved between Pagham and Pilsey (or vice-versa) in both 1996 and 1997 and it is probable that the April records include some duplication. Assuming 4 were recorded during the year, the total for the 1990s becomes 40. Most records are in April or May and that for August is the first in that month since 1978. Most records have been at Pilsey, although most observers have seen the species elsewhere in the county (where news of their occurrence has been more forthcoming and a shorter walk required!). [RJF]

0478. LESSER SAND PLOVER

Charadrius mongolus

Very rare vagrant

1997: The summer plumaged adult in Pagham Hbr from 14-16 Aug (*SxBR* 50:71) has been accepted by the *British Ornithological Union's Records Committee* as the first British record. It showed characters of the *atrifrons* group of races (*atrifrons*, *pamirensis* and *schaeferi*) which breed in Central Asia and winter along the coasts of E and S Africa and S Asia. Generally identified during most of its stay as a Greater Sand Plover (*C. leschenaultii*), it was usually to be found from Church Norton, feeding quite distantly on the exposed mud in front of 'Tern Island'. Few suspected its real identity, which was established beyond doubt by careful examination of photographs (which, with the benefit of hindsight, looked obviously like a Lesser). An illustrated article on its occurrence appeared in *Birding World* (10:294-297). [RJF]

0482. DOTTEREL

Charadrius morinellus

Very scarce spring and autumn passage migrant, one winter record

Recorded in spring on the Downs north of Balsdean as follows: 1 on 21 Apr, 2 on 29th, 1 on 2 May, 1 on 5th, 5 on 9th and 4 on 11th-12th (HP, GAS *et al*). Most birds were in the Swanborough Hill/Harvey's Cross area, preferring south facing fields with no or only very short emergent crops. In autumn, 4 adults were at Steyning Round Hill on 5-6 Sept (ARK). A fairly typical showing. [RJF]

0485. **GOLDEN PLOVER***Pluvialis apricaria***Common winter visitor and passage migrant, rare in summer.**The *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	1489	607	725	-	-	-	-	25	26	334	528	720
Chichester Hbr	1359	548	630	-	-	-	-	25	18	256	470	549
Pagham Hbr	87	40	-	-	-	-	-	-	-	-	nc	-
Offham to Houghton	-	-	-	-	-	-	-	-	-	30	-	-
Barcombe Res	-	-	-	-	-	-	-	-	-	-	-	120
Glynde Levels	-	-	46	-	-	-	-	-	-	7	-	-
Cuckmere Haven	-	-	-	nc	nc	nc	nc	nc	-	-	-	1
Eastbourne Lakes	-	1	-	nc	nc	nc	nc	nc	-	-	-	20
Pevensey Levels	10	-	36	nc	-	nc	nc	nc	nc	24	34	12
Pett Level	25	4	-	-	-	-	-	-	-	1	1	2
Rye Hbr	-	-	-	-	-	-	-	-	-	1	-	6

Counts in the early part of the year were considerably higher than those for 1997. Significant concentrations not shown in the table included, on 1 Jan, 300 at Pett Level, 800 at Thorney Airfield, and 200 at Scotney Court GP. There were also 320 at West Wittering on 7 Jan, 520 on flooded meadows at the North Wall, Pagham Hbr, on 14th, and 600 at Thorney Deeps on 16th while, in February, there were 200 in Pagham Hbr on 8th, 150 at Pulborough Brooks on 10th, 200 at Pett Level on 15th, 600 at Thorney Deeps on 25th, and 120 at Barcombe Res on 27th. There were 250 at both Scotney Court GP and Thorney Island on 1 Mar and 160 in Pagham Hbr on 17 Mar. Thereafter, numbers fell quickly with only 2 being noted at Thorney Airfield on 27 Mar. The only April records were of 5E at Worthing Beach on 25th and 4E at Selsey Bill on 30th.

The first bird returned to Thorney Deeps on 9 Aug, increasing to 24 on 10th. With the exception of 200 at East Guldeford Level on 17th, numbers in August were small. More appeared in September with counts of 150 at Northpoint Pit, Rye, on 4th and 64 at Thorney Deeps on 27th and further increases were noted in October with 235 at Northpoint Pit on 3rd, 450 at Pagham Hbr on 15th, and 250 at East Guldeford Level on 30th. High counts in November were 820 at Castle Farm, Rye Hbr, on 3rd, 750 at Thorney Airfield on 5th, and 800 at Scotney Court GP on 7th. The inter-tidal areas of Pagham Hbr continued to attract this species: no fewer than 1400 were recorded on 26 Nov although this number declined to 500 on 1 Dec.

Additional counts for December, not shown in the table, included 500 at Thorney Airfield on 2nd, 1000 at Snowhill, West Wittering on 20th and, finally, 200 at the North Wall, Pagham Hbr, on 31st. [JLN]

0486. **GREY PLOVER***Pluvialis squatarola***Common winter visitor and passage migrant.**The *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	2093	2709	2038	493	266	82	139	557	1624	2750	1699	2540
Chichester Hbr	1332	1232	739	7	49	6	21	438	705	1704	1510	1849
Pagham Hbr	589	1349	1165	486	213	76	118	119	901	731	nc	405

Goring Gap	99	-	93	nc	nc	nc	nc	nc	17	nc	-	138
Pevensey Levels	-	-	Nc	nc	-	nc	nc	nc	nc	300	60	40

Notable counts from sites not included in the table were 130 at Pett Level on 1 Jan, 56 at Rye Hbr on 13 Feb, 140 at Kingston Gorse on 7 Nov, 101 at Ferring Rife on 17 Nov, 43 at Rye Hbr on 9 Dec and 65 at West Beach, Littlehampton, on 24 Dec.

An interesting movement of 250W was noted at Selsey Bill on 15 Jan but no further movements were recorded until spring. The totals at the main sea-watching localities were as follows:

	Mar	Apr	May	Total
Selsey Bill	-	2	110	112
Worthing Beach	-	2	215	217
Brighton Marina	42	33	329	404
Splash Point, Seaford	-	4	92	96
Glyne Gap, Bexhill	-	14	-	14

Eastward passage in May was considerably higher than last year, with maxima of 152E at Brighton Marina, 65E at Selsey Bill, 51E at Splash Point, Seaford and 85E at Worthing Beach, all on 10 May. As usual few were recorded passing offshore during the autumn; 40W at Selsey Bill on 23 July was the only notable record.

Inland records consisted of single birds at Pulborough Brooks on 1 May and 14 and 16 Dec. [JLN]

0493. LAPWING

Vanellus vanellus

Scarce breeder and very common winter visitor.

The *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	19,149	11,110	1248	262	244	713	997	1830	4555	4963	11,367	6423
Chichester Hbr	2960	2838	147	49	36	34	123	326	457	655	1126	1135
Pagham Hbr	438	1030	110	44	15	47	36	42	237	176	nc	157
Arundel WWT	-	13	10	8	2	1	14	100	-	-	-	-
Amb'ley Wild Brooks	2273	8	53	12	8	-	35	nc	-	190	560	138
Pulborough Brooks	1	-	1	-	3	-	78	2	2	-	-	16
Lower Adur Estuary	4860	2185	46	7	26	10	314	158	362	374	905	618
Henfield Brooks	470	1610	-	nc	nc	nc	nc	nc	110	230	345	87
Newhaven	184	-	-	nc	nc	nc	nc	nc	244	-	-	1
Glynde Brooks	550	760	435	65	78	137	35	-	-	-	5	605
Cuckmere Haven	12	-	-	nc	nc	nc	nc	nc	63	300	650	750
Eastbourne Lakes	2000	600	81	nc	nc	nc	nc	nc	99	46	343	530
Pevensey Levels	500	8	90	27	16	12	221	90	204	406	300	105
Pett Level	1387	701	201	34	22	196	155	252	558	1400	5542	250
Rye Hbr	944	954	49	17	26	201	147	293	103	321	610	326

January was wet and windy but comparatively mild compared to 1997 when the temperature remained below zero for long periods. The differences are reflected in the county totals for the two years: 19,149 in 1998 and 341 in 1997. Numbers remained high into February, with flocks of 3000 at Hooe Level, Pevensey and 2720 at Harbour Farm, Rye Hbr. The combined January/February *WeBS*' counts were 30,259 compared to the 4-year average of 14,656, but nowhere near the 1996 figure of 64,611. Only a few flocks were reported in March, the last being 200 at Icklesham on 15th.

By 11 Mar, the first birds holding territories were seen at Icklesham, and by 18 Apr the first eggs had hatched at Rye Hbr. Breeding or possible breeding was reported from only 18 sites involving about 69 pairs, but birds were recorded at 12 other sites during the breeding season. Only at two sites was breeding success confirmed. At Thorney Island, 17 pairs raised 12 young and at Shermanbury one young was seen from 4 pairs. Such a low rate of productivity must be a cause for concern.

Summer movements usually begin in the second half of May and the first small flocks of 20 and 22 were seen on 17th at Icklesham and on 24th at Pulborough Brooks. In June, numbers rose and 180 were recorded at Rye Hbr on 6th increasing to 330 on 20th and 365 on 30th. Flock sizes continued to rise in July and August, with 400 at Nep Town, Henfield, on 9 July, 533 on East Guldeford Level on 9 Aug and 380 at Thorney Deeps on 10th. During the second winter period, the largest congregations were in the east of the county. On 8 Nov, 5542 were counted on Pett Level and on the same day there were a further 1367 at Rye Hbr and 756 on East Guldeford Level. Other notable flocks during this period were 1000 at Cuckmere Haven on 9 Dec, 2500 at Hurstpierpoint on 12th, 1200 at Thorney Deeps on 16th, with a further 700 on Thorney Airfield and 3500 at Pulborough North Brooks on 30th.

The leucistic bird that has been a regular winter visitor to Newhaven Tide Mills since 1990 was again reported by several observers. It, or a similar bird, was also seen at nearby Cuckmere Haven in November. [RTP]

0496. **KNOT**

Calidris canutus

Common winter visitor and fairly common passage migrant.

The monthly *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	159	710	218	37	3	-	1	2	38	89	340	538
Chichester Hbr	130	436	101	-	2	-	1	2	16	82	340	365
Pagham Hbr	29	273	117	37	-	-	-	-	16	7	nc	173
Cuckmere Haven	-	-	-	nc	nc	nc	nc	nc	4	-	-	-
Rye Hbr	-	-	-	-	1	-	-	-	1	-	-	-

The *WeBS*' low tide count for Chichester Hbr on 10 Jan found a total of 1040 birds but the high tide count a week later produced only 130. An independent count on the mudflats between Pilsey Sands and Marker Point on 23 Jan found 1300 birds. A likely explanation for these discrepancies is provided by the recent *MESH*' (Movements in East Solent Harbours) counts which have shown that this species is very mobile between Chichester and Langstone Hbrs. At Pagham Hbr there were 145 on 13 Jan, 296 on 5 Feb, and 200 on 8 Mar. In the east of the county, 100 were at Pett Level on 22 Feb.

In spring, there were 10 at Pilsey Sands and 5 at Rye Hbr on 3 and 30 April respectively, 54 at Pagham Hbr on 4 May, 4 at Pilsey Sands on 11 May, with another 2 there on 27th, and 1 at Camber on 28th.

Passage up-Channel was noted up to 29 May; the totals at the main sea-watching localities were as follows:

	Mar	Apr	May
Selsey Bill	-	-	11
Worthing Beach	-	-	10
Brighton Marina	-	-	206

Splash Point, Seaford	-	-	48
Glyne Gap, Bexhill	-	-	8

The largest movements occurred on 8 and 10 May with totals of 107 and 63 recorded at Brighton Marina.

Autumn passage began with a single bird at Rye Hbr on 27 June, followed by another at Pilsey Sands on 14 July. Six flew E at Selsey Bill on 23 July. In August, 13 were in the lower Cuckmere Valley on 19th, 26 at Pilsey Sands on 24th, and 15 at Pagham Hbr on 29th. Numbers had increased to 23 in the lower Cuckmere Valley by 5 Sept and to 60 at Pagham Hbr by 15 Sept. In October, up to 120 were recorded at Pilsey Sands, and 5 at Rye Hbr on 7th.

During the second winter period, 340 were observed feeding on the mudflats at Thorney Channel on 11 Nov, while up to 300 were in Pagham Hbr on 21–26 Nov. The flock at Pilsey Sands had increased still further to 400 by 19 Dec, and 100 were at East Head the following day. Away from the western harbours, single birds were recorded at Camber on 23 Nov, and in the lower Cuckmere Valley on 11 and 30 Dec.

There were two inland records: a single bird at Weir Wood Res on 3 Sept and 2 at Arlington Res on 13 Sept. A total of 41 Knot has been recorded inland in Sussex since 1962, of which 19 have been in September (the peak month). Fifteen have been at Weir Wood Res and 5 at Arlington Res. [CBC]

0497. SANDERLING

Calidris alba

Fairly common winter visitor and passage migrant.

The monthly *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	286	210	217	81	24	1	6	253	89	23	147	101
Chichester Hbr	-	204	146	81	24	1	6	252	76	21	76	45
Climping	26	4	1	nc	nc	nc	nc	nc	-	-	-	14
Goring Gap	3	-	49	nc	nc	nc	nc	nc	12	nc	-	19
Lower Adur	2	-	21	nc	nc	nc	nc	nc	-	-	-	-
Rye Bay	255	-	-	-	-	-	-	1	1	2	71	22

The *WeBS*' counts often miss flocks of this species; counts at the beginning of the year additional to those shown were 175 at West Beach, Littlehampton, on 9 Jan, an unusual 54 at Shoreham Beach on 11 Jan, 140 at Kingston Gorse on 21 Mar and 250 on Worthing Beach on 28 Mar. There were 198 at Pilsey Island on 7 Feb, increasing to an impressive 309 on 6 Mar.

Spring passage numbers were much higher than last year and the eastbound totals from the main sea-watching sites were as follows:

	Mar	Apr	May	June	Total
Selsey Bill	2	18	483	12	515
Worthing Beach	2	59	560	-	621
Brighton Marina	3	48	92	-	143
Splash Point, Seaford	-	28	116	-	144
Glyne Gap, Bexhill	-	-	8	6	14

The peak day was 8 May when totals were 136E at Selsey Bill, 389E at Worthing and 26E at Seaford.

Numbers at Pilsley Island decreased from 188 on 21 Apr to 131 on 11 May, 53 on 2 June and only 1 on 19 June. Counts then increased from 6 on 9 July to 148 on 26 July and a maximum of 254 on 30 Aug. Fewer were seen in September but there were 110 on 11 Oct.

Notable counts in the second winter period, not shown in table, were 30 at Kingston Gorse on 30 Sept, 60 at Goring Beach on 30 Oct and 41 at Ferring Rife on 17 Nov. Numbers at Camber increased from 65 on 22 Nov to 135 on 16 Dec and 230 on 19th. There were 90 at Rye Hbr on 13 Dec, 78 at Pilsley Sands on 18th and, finally, 45 at Widewater, Lancing on the last day of the year.

There was only one inland record: a single bird at Arlington Res on 24 May. About 42 Sanderling have been recorded inland in Sussex since 1962. Of these, 17 have been in May and 24 at Arlington Res. [JLN]

0498. SEMIPALMATED SANDPIPER

Calidris pusilla

Very rare vagrant

A juvenile at Portfield GP, Chichester, from 13-21 Sept (ARK *et al*) has been accepted by *British Birds* and is the 2nd county record, the first being in August 1986. A full account of this exciting find is on pages XX and a photograph appeared in *Birding World* (11:325). Following strong, but inconclusive, claims in November 1988 and September 1997 the chance to study this tricky species in detail was particularly welcome, making it 3rd time lucky for some observers. [RJF]

0501. LITTLE STINT

Calidris minuta

Passage migrant, scarce in autumn and very scarce in spring; a few winter in most years.

The approximate monthly totals, allowing for duplication, were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
-	-	-	-	1	-	2	21	148	30	5	6

A very poor spring with just one record: at the North Wall, Pagham Hbr on 20 May.

There were no further records until 25 July when there were singles at both Pett Level Pools and Sidlesham Ferry. Just ones and twos were recorded in August with the exception of 15 at Pett Level on 8th. A major influx of juveniles occurred in September, the largest counts at coastal sites being of 27 at Sidlesham Ferry on 7th and 11th, 23 at Pilsley Island on 18th, 18 at the North Wall, Pagham Hbr on 12th and 16 at Icklesham on 20th. One at Sheepcote Valley, Brighton on 17th was the first record for this site. A number of inland records included 3 at Barcombe Res on 6th, 6 at Chichester GPs on 11th, 4 at Weir Wood Res on 10th and, at Arlington Res, 13 on 8th, 14 on 12th and 18 on 17th. In October, there were still 11 at the North Wall, Pagham Hbr on 12th, decreasing to 4 on 18th and one on 22nd. At East Head, West Wittering, there were 4 on 18 Nov and 5 on 5 and 20 Dec. The only other records for November-December were of singles in Chichester Channel, Birdham on 9 Nov and at Pagham Hbr on 28 Dec. [PJ]

0502. **TEMMINCK'S STINT***Calidris temminckii***Very scarce spring and autumn passage migrant.**

An adult was seen behind the North Wall, Pagham Hbr on 19 May (LGH *et al*), with another at the same site on 7 Sept (BJ, CMJ). A total of 103 Temminck's Stints has been recorded in Sussex in the period 1962-98, including 63 in May and 16 in Sept. [SJP]

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

Two were recorded, a juvenile at Arlington Res from 23 Sept-1 Oct (mo) and 1 at North Wall, Pagham Hbr, on 4 Oct (ARK), the observer of the latter seeming to attract nearctic waders at this time! A photograph of the former bird appears on the front cover of this Report. Nine have been recorded during the 1990s, being found in July, September (6) and October (2). [RJF]

0509. **CURLEW SANDPIPER***Calidris ferruginea***Passage migrant, scarce in autumn and very scarce in spring; rare in winter.**

This was a good year with 175 records totalling 678 birds. There was, however, considerable duplication at well watched sites such as Pagham Hbr, Sidlesham Ferry and Pett Level Pools and it is likely that between 140 and 160 individuals were seen. The approximate monthly totals were:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
-	-	-	-	3	-	13	26	100	5	-	-

Singles at Rye Hbr on 17 and 21 May and at Icklesham on 22 May were the only spring records.

The first autumn bird was seen at Brighton Marina on 14 July and on the following day there were 6 at Pett Pools. Throughout the rest of July and August small numbers were seen, the highest counts coming towards the end of August with 4 at Pilsey Island on 28th and 4 at Pett Level and 5 at Pagham Hbr on 30th.

The table shows that the main influx was in September, the largest arrival occurring in the first few days of the month with 18 at Pagham Hbr on 2nd and 14 at Pett Pools on 3rd. These two sites also held most mid-month as 19 were counted near the North Wall, Pagham Hbr on 17th and 14 at Pett on 15th. Apart from 5 days during the month, there were daily observations at Sidlesham Ferry with a maximum of 16 on 2nd. Smaller numbers were seen throughout September at other sites with 8 at Widewater, Lancing on 10-11th and 5 at Icklesham on 17th being the most notable. Inland records were of 2 at Chichester GPs on 11 Sept and singles at Weir Wood Res on 31 Aug, 3-11 and 24 Sept, with 2 on 10 Sept.

Only single birds were seen in October at Pagham Hbr, Shoreham, Thorney Deepes, Weir Wood Res and, the last, in the lower Cuckmere Valley on 18th. [BW]

0510. **PURPLE SANDPIPER***Calidris maritima***Scarce winter visitor and passage migrant; very rare in summer.**

Peak monthly counts at selected sites from west to east, extracted from the records submitted, were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Shoreham Hbr	7	4	5	6	3	-	-	-	-	-	2	-
Brighton Marina	9	8	7	2	5	-	1	1	1	3	9	6
Newhaven Hbr	2	4	7	9	2	-	-	-	-	3	7	6
Glyne Gap, Bexhill	7	8	8	8	4	-	-	-	-	1	3	-

The July record, first seen on 10th (IJW), was the earliest ever for the county, beating the previous date (5 Aug) by nearly a month. It was present until it was joined by others in October. In addition to the counts in the table, there were 7 at Bulverhythe, St Leonards, on 26 Feb, probably from nearby Glyne Gap.

Single birds were seen at Pagham Hbr on 7 Nov, and either at or flying past Selsey Bill on 6 dates from 18 Oct until 5 Nov. [LGH]

0512. **DUNLIN***Calidris alpina***Abundant winter visitor and common passage migrant. Small numbers summer.**

The *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	9965	7553	5545	710	445	346	483	1291	2144	2841	17,013	14,380
Chichester Hbr	6533	4201	2232	379	85	16	162	786	520	2149	16,421	11,347
Pagham Hbr	1922	2101	3176	293	351	324	300	294	1304	557	nc	1167
Lower Adur	460	665	4	nc	nc	nc	nc	nc	74	32	233	821
Pett Level	560	21	5	1	-	-	1	120	27	4	234	410
Rye Hbr	-	191	6	13	9	5	17	87	120	10	-	6

It is noticeable that the numbers of Dunlin recorded were lower than in recent years. The monthly averages for the county from the *WeBS*' figures were: 10,500 for 1996, 9200 for 1997, and 5300 for 1998. The counts for Pilsley Sands show monthly averages of 4200 for 1996, 6500 for 1997, and 3800 for 1998. Although these numbers are a very small proportion of the estimated 600,000 wintering in Britain, and these variations can occur, perhaps this is a trend requiring further investigation.

Notable counts in the first winter period not shown in the table included 380 at Rye Hbr on 13 Jan, 200 at Langney Point on 15 Jan, 14,000 at Pilsley Sands on 30 Jan, 800 on the River Adur at Shoreham on 31 Jan, 250 at Newhaven Hbr on 8 Feb, and 430 at Rye Hbr on 13 Feb. The only significant movements recorded in winter were at Selsey Bill where there were 120W and 55W on 4 and 15 Jan respectively.

Passage up-Channel in spring was on a similar scale to last year; the totals at the main sea-watching localities were as follows:

	Mar	Apr	May	Total
Selsey Bill	-	30	128	158
Worthing Beach	-	26	316	342
Brighton Marina	44	21	51	116

Splash Point, Seaford	2	7	32	41
Glyne Gap, Bexhill	52	1	4	57

The peak day was 8 May when the totals were 53E at Selsey Bill, 172E at Worthing, and 26E at Seaford. Westbound autumn movements were only noted at Worthing and Selsey Bill where the combined October and November totals were 261 and 310 respectively. The peak movements were 175W at Worthing on 2 Nov and 124W at Selsey Bill on 5 Nov.

Notable counts in the second winter period not shown in the *WeBS'* table were 150 at Pett Level Pools on 13 Aug, 550 roosting on Shoreham Beach on 8 Nov and several counts of about 100 on beaches at Ferring and Goring in mid-November.

Small numbers were recorded at 8 different inland sites; the largest parties were 7 at Bewl Water on both 24 Apr and 14 Oct and at Arlington Res on 17 Sept. The monthly distribution of inland records is shown below:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	-	2	8	1	-	6	9	10	13	6	8

[BW]

0517. RUFF

Philomachus pugnax

Scarce winter visitor and passage migrant.

The *WeBS'* counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
County totals	34	11	2	-	-	-	2	-	14	9	35	2
Chichester Hbr	-	2	-	-	-	-	-	-	-	2	-	2
Pagham Hbr	-	-	-	-	-	-	2	-	7	2	nc	-
Amberley Wild Brooks	-	-	-	-	-	-	-	nc	-	-	11	-
Pulborough Brooks	34	8	-	-	-	-	-	-	3	4	24	-
Pett Level	-	-	2	-	-	-	-	-	1	1	-	-
Rye Hbr	-	-	-	-	-	-	-	-	1	-	-	-

Other significant counts not in the table were of 29 at West Wittering on 7 Jan and 20 at Pulborough Brooks on 6 Feb.

An analysis of the records suggest the approximate monthly totals to be:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
60	41	56	12	2	-	3	20	74	46	40	31

The records suggest a fall in numbers in late February followed by a clear passage in March when, additional to several sightings of small numbers, there were 7NW over Chichester GPs on 21st, 6 at Manxey Level, Pevensey on 22nd and 10 at Icklesham on 24th. The last in the spring was a single bird at Pulborough Brooks on 16 May.

The first in the autumn, still in summer plumage, was at Sidlesham Ferry on 4 July. There was a plethora of records, thereafter, involving small numbers at several, mainly coastal sites. Interesting records include 7 resting on Goring Beach on 13 Aug, a maximum of 13 at Sidlesham Ferry on 1 Sept, 10 at Scotney Court GP on 27 Sept and up to 12 in the North Wall fields at Pagham Hbr in early October. From late October the largest numbers were at Pulborough Brooks where the peak monthly counts were 20 on 22 Oct, 25 on 27 Nov and 24 on 30 Dec. [RPu]

0518. JACK SNIPE

*Lymnocyptes minimus***Scarce winter visitor and passage migrant.**

The minimum monthly totals and peak counts at the main sites were as follows:

	Jan	Feb	Mar	Apr	May	Sept	Oct	Nov	Dec
<i>County totals</i>	20	39	33	13	1	2	11	20	18
No. of Sites	6	8	3	1	1	2	3	7	5
Thorney Deeps	12	23	29	13	1	1	8	11	14
Nutbourne	-	9	-	-	-	-	-	-	-
Pulborough Brooks	1	1	3	-	-	-	-	-	-
Ferring Rife	4	1	-	-	-	-	-	1	-
Icklesham	-	2	-	-	-	-	-	2	-

During the first winter period, a minimum of 54 birds was recorded from 12 localities. The count of 29 at Thorney Deeps on 5 Mar (CBC) is a county record, exceeding the 25 recorded at the same site on 1 Mar 1994. Thereafter, numbers fell rapidly to 13 on 1 Apr, 8 on 20th and 3 on 27th, with one remaining until 1 May.

During the second winter period, a minimum of 31 birds was recorded from 13 localities. The earliest were singles at Sidlesham Ferry and Thorney Deeps on 18 and 23 Sept, respectively.

Records from heathland comprised singles at Millbrook, Ashdown Forest on 17 and 19 Jan and at Lavington Common on 15 Mar.

Analysis of the available data indicates that at least 85 birds were recorded during the two winter periods from 21 sites. It should be noted, however, that no records were received for Combe Haven and only one record for Pevensey Levels, a situation almost certainly attributable to a lack of recording rather than an absence of birds. [CBC]

0519. SNIPE

*Gallinago gallinago***Now a very scarce breeder and fairly common winter visitor.**

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	349	387	321	34	-	-	-	21	48	143	323	247
Chichester Hbr	111	176	91	5	-	-	-	6	1	24	50	35
Pagham Hbr	10	1	-	-	-	-	-	-	-	-	Nc	23
Amberley Wild Brooks	-	10	15	-	-	-	-	nc	9	24	36	47
Waltham Brooks	4	19	9	2	-	-	-	-	-	14	34	7
Pulborough Brooks	152	27	114	-	-	-	-	-	8	36	153	28
Lower Adur Estuary	1	50	-	nc	nc	nc	nc	nc	-	-	-	41
Weirwood Res	-	27	1	-	-	-	-	-	-	17	-	9
Glynde Levels	13	37	44	24	-	-	-	-	-	19	-	-
Eastbourne Lakes	31	14	26	nc	nc	nc	nc	nc	-	-	10	16
Pevensey Levels	1	13	4	1	-	nc	nc	nc	nc	-	19	8
Pett Level	-	1	10	2	-	-	-	5	30	6	1	3
Rye Hbr	2	4	-	-	-	-	-	10	-	-	3	-

The *WeBS* count' figures were substantially higher than 1997 for the first winter period, but much lower in the second.

In the first winter period there were additional significant counts of 101 at Combe Haven on 1 Jan, 91 at Thorney Deepes on 14 Jan, 78 at the same site on 16 Feb, 60 in Pagham Hbr on 5 Feb and about 50 at West Wittering on 26 Feb.

During the breeding season, one or two were noted displaying at Millbrook in Ashdown Forest, but elsewhere a drumming male at Combe Haven on 19 April and a single bird seen at a previous breeding site at Castle Water, Rye Hbr on 26 June were the only possible breeding records.

Single figure counts were reported from mid-July onwards, particularly at Rye Hbr, but the first large count was of 30 at Icklesham on 6 Sept. Numbers remained lower than the first winter period, with the most significant counts being 70 at Pulborough Brooks on 30 Oct, 39 the following day at Thorney Deepes, 38 at Henfield Common on 19 Nov, 60 in the Cuckmere Valley on 23 Nov, 60 flushed by beaters near Woodingdean on 17 Dec, and finally 70 flushed from around the Long Pool in Pagham Hbr on the last day of the year. [AH]

0529. WOODCOCK

Scolopax rusticola

Fairly common resident and winter visitor.

Totals of 25 and 27 were flushed by beaters near Heathfield on 27 Jan and 4 Mar respectively. The only other significant counts for the first winter period were of 5 at West Harting Down on 1 Jan, 5 flushed by beaters near Brightling on 31 Jan and 6 at Icklesham on 12 Feb.

The first display flight reported was at the Old Airstrip, Ashdown Forest, on 27 Mar. Over 80 records of roding birds were submitted. Many, however, were duplications as the records came from just 17 West Sussex tetrads and 16 tetrads in East Sussex, 13 of which were in Ashdown Forest. As in 1997, there was only one confirmed report of successful breeding comprising 2 juveniles at Midhurst Common on 21 July.

There were only single records for the months of August and September, but reports increased in the last 3 months. The majority of November and December records were of birds disturbed by beaters (totals of 24 and 90 birds respectively). The greater number of records of flushed birds in 1998 distorts any comparison with recent years. The highest counts were of 11 at Heathfield on 11 Dec and 25 at Rushlake Green on 30 Dec.

A single bird flew out to sea and then E at Worthing on 21 Mar. [DEC]

0532. BLACK-TAILED GODWIT

Limosa limosa

Fairly common winter visitor and passage migrant. Small numbers summer.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	351	275	125	168	26	18	92	290	247	288	409	377
Chichester Hbr	325	246	122	86	-	-	37	232	223	281	409	362
Pagham Hbr	26	29	1	82	19	14	49	33	24	7	nc	13
Rye Bay	-	-	1	-	7	4	6	25	-	-	-	2

Other January counts included maxima of 750 at the North Wall, Pagham Hbr, on 8th, 160 at Nutbourne on 25th and 120 at Thorney Deepes on 29th. In February and March, the

largest counts were again in the Pagham Hbr area and Thorney Deepes with 140 at the former site on 11 Mar, and 150 at the latter on 29 Mar. There were 5 birds in breeding plumage at Scotney Court GP on 7 Mar.

May saw records of small numbers from a range of traditional sites, with 40 at Pulborough Brooks on 27th. In June, there were reports from 8 sites, the highest count being only 22 at Sidlesham Ferry on 29th. Two at Weir Wood Res on 28 June reversed last year's lack of sightings there. As last year, a summering flock was at Icklesham with monthly maxima of 15 on 19 May, 21 on 16 July, 9 on 30 Aug and up to 10 in early September.

The largest numbers in autumn were recorded at Thorney Deepes with 232 on 9 Aug, 300 on 20 Aug, 330 on 6 Sept, 96 on 5 Oct and 380 on 4 Nov. Elsewhere in Chichester Hbr, there were 207 in Emsworth Channel on 22 Aug and 264 at Nutbourne on 30 Oct. Among the 50 birds seen at Thorney Island on 4 Dec were 2 colour-ringed individuals, and it was probably these which were sighted at the North Wall, Pagham Hbr on 21 Dec. At Pagham Hbr the highest counts at the end of the year were 94 on 3 Nov and 300 on 29 Dec. There were occasional records away from the western harbours, most notable being 20 at Scotney Court Fm on 5 Oct. [JKI]

0534. BAR-TAILED GODWIT

Limosa lapponica

Common winter visitor and passage migrant. A few summer.

The *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	821	429	534	32	48	-	2	150	44	537	453	194
Chichester Hbr	820	424	480	15	5	-	-	150	31	529	452	189
Pagham Hbr	-	5	53	16	21	-	2	-	8	8	nc	5
Rye Bay	1	-	-	1	22	-	-	-	5	-	-	-

The table clearly shows the western harbours as the only sites where this species occurs regularly; only singletons were reported from 7 other sites in January. There was an exceptional count of 534 in Pagham Hbr on 14 Jan and a summer plumaged bird was amongst the 650 at Pilsley Sands on 17 Jan.

Counts in February and March were again low, as in 1997. The totals at the main sea-watching localities in spring were as follows:

	Mar	Apr	May	Total
Selsey Bill	-	286	123	409
Worthing Beach	2	92	190	284
Brighton Marina	-	928	171	1099
Splash Point, Seaford	-	246	105	351
Glyne Gap, Bexhill	2	17	22	41

Passage was poor with peaks of 542E at Brighton Marina and 264E at Selsey Bill, both on 29 Apr.

Numbers remained low for the rest of the year, with the exception of at Pilsley Sands where regular counts included 27 on 9 July, 140 on 1 Aug, 150 on 6 Oct, 600 on 22 Nov and 300 on 2 and 20 Dec. [JKI]

0538. **WHIMBREL***Numenius phaeopus***Common passage migrant; a very scarce summering and wintering species.**

1997: The following counts should be deleted: 122 at Thorney Deeps on 7 Apr, 340 at Pilsley Island on 22 June, 128 at Thorney Deeps on 23 June and 249 there on 21 July. The maximum count at Pilsley Island was 54 on 9 May.

1998: The *WeBS* counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	1	1	3	491	38	6	74	103	34	7	1	1
Chichester Hbr	-	-	-	35	14	4	36	85	12	3	1	-
Pagham Hbr	1	1	3	369	5	-	36	14	17	4	nc	1
Cuckmere Haven	-	-	-	nc	nc	nc	nc	nc	3	-	-	-
Rye Hbr	-	-	-	75	19	2	2	4	1	-	-	-

During the first winter period up to 2 birds were seen in Pagham Hbr and 3 in Chichester Hbr. The first obvious passage bird was seen at Brighton Marina on 18 Mar; the totals at the main sea-watching localities in spring were as follows:

	Mar	Apr	May	Total
Selsey Bill	-	205	72	277
Worthing Beach	-	51	65	116
Brighton Marina	2	564	326	892
Splash Point, Seaford	1	140	156	297
Bexhill & Hastings	-	29	10	39

The peak passage occurred on 22 Apr when there were 119E at Selsey Bill, 41E at Worthing, 183E at Brighton Marina and 18E at Seaford. The impressive roost at Rye Hbr built up rapidly in late April with 116 on 22nd and 185 on 24th, reaching a peak of 375 on 4 May. By 12 May, however, only 17 remained. The largest estuarine count in the spring was of 290 in Pagham Hbr on 28 Apr. In keeping with most springs, small parties were reported feeding on pastures mainly in the Arun Valley and Pevensy Levels; the largest party, of 25, was seen at Lymminster on 16 May.

Throughout the summer, small numbers were recorded either passing westward along the coast or in the estuaries. The monthly maxima in Pagham Hbr were 28 in late July, 20 on 18 Aug and 13 on 3 Sept. Following 8 in the Cuckmere Valley on 11 Sept, only small numbers were seen with at least one remaining in Pagham Hbr until the end of the year. [RPu]

0541. **CURLEW***Numenius arquata***Formerly a very scarce breeder; common passage migrant and winter visitor.**

The *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	2707	2013	1530	108	137	305	1514	1778	2231	2168	1334	1471
Chichester Hbr	1365	1063	1097	45	70	87	1359	1569	1497	1393	1073	862
Pagham Hbr	525	508	305	62	62	217	155	209	531	524	nc	482
Pett Level	639	274	79	-	-	-	-	-	155	109	147	62
Rye Hbr	-	33	35	1	4	-	-	-	19	1	11	-

Additional to the *WeBS*' counts were records of 500 at Northpoint Pit, Rye, on 1 Jan, 450 at Rye Hbr on 6th, and 410 in a flooded meadow by the North Wall, Pagham Hbr on 7th. There were 685 roosting at Pett Level on 9th, a maximum of 41 at the Newhaven Tide Mills on 17th, and parties of 470 and 430 roosting at Rye Hbr on 23 Jan and 10 Feb respectively. On the latter date there were also 115 roosting at Camber.

Numbers generally decreased in March and April, with 128 still at Pilsey Island on 14 Apr.

Coastal movements were small. This is evident from the following table which shows the predominant movements by month at the main sea-watching sites:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Selsey Bill	-	-	5E	-	1E	16W	11W	-	-	4W	22W	-
Worthing Beach	-	-	2E	-	4E	3W	-	-	-	-	6W	-
Brighton Marina	-	3E	39E	24E	2E	8W	9W	-	2W	-	7W	-
Splash Pt, Seaford	-	10E	-	4E	-	-	-	-	-	-	-	-
Bexhill & Hastings	3W	-	12E	-	-	-	-	2W	5W	7W	-	9W

The peak movements at Brighton Marina were 15E on 23 Mar and 17E on 22 Apr while at Selsey Bill there were 12W on 18 June and 18W on 5 Nov.

The return of migrating birds is reflected in the following counts for Chichester Hbr:

South Stakes Island		Thorney Deepes	
31 May	40	9 July	100
22 June	305	26 July	300
9 July	560	8 Aug	256
24 July	770	22 Aug	236
19 Sept	750	8 Sept	254

There were also 420 at Rye Hbr on 5 Sept, 600 at Pilsey Island on 6th, and 375 at Pett Level on 12th. Counts for October-December, not shown in the *WeBS* table, included 128 at East Guldeford Level on 11 Oct, 500 roosting at Rye Hbr on 3 Nov and 22 Dec, and 82 at Climping on Christmas Day.

Inland records north of the Downs consisted of 1 at Weir Wood Res on 28 Mar and at Bewl Water 1 on 7 Aug, 2 on 22 Aug and 3 on 29th. There were also singles at Cissbury Ring on 31 Aug and 19 Sept. [JLN]

0545. SPOTTED REDSHANK

Tringa erythropus

Scarce passage migrant and winter visitor.

The approximate monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	6	13	7	5	6	1	6	6	11	14	9	8
Chichester Hbr	2	4	3	1	-	-	2	2	3	1	3	3
Pagham Hbr	3	5	4	4	2	-	1	2	3	7	4	5
Rye Hbr	1	3	-	-	1	-	-	1	1	4	1	-
Icklesham	-	-	-	-	1	-	2	-	1	-	-	-

During the first winter period, up to 5 were recorded at the Severals, Church Norton and 4 at Thorney Deepes. At Rye Hbr, there were singles on 4 and 10 Jan and 2 Feb and 3 from 13-15 Feb. The only other records for the first half of the year not shown in the table

were of singles at Newhaven Tide Mills on 15 Feb, Pulborough Brooks from 3-8 May and flying E at Galley Hill, Bexhill on 29 May.

Autumn passage began with single birds at Pulborough Brooks on 23 June and 3 July and at both Pagham Hbr and Thorney Deeps on 2 July. Passage was heaviest in September and October; records of note included 3 at Thorney Deeps and Sidlesham Ferry on 18 and 20 Sept respectively, the latter increasing to 7 on 15 and 22 Oct, and 4 at Rye Hbr on 26 Oct.

Additional inland records for the autumn period were 2 at Weir Wood Res on 21 Sept and singles at Wicks Fm, Yapton on 11 Oct and at Chichester GPs on 25 Oct and 1 Nov.

During November-December, up to 5 were recorded at Sidlesham Ferry. At Thorney Deeps there were 3 from 19 Nov to 22 Dec. [CBC]

0546. **REDSHANK**

Tringa totanus

Scarce resident and fairly common passage migrant and winter visitor.

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	1791	2274	1455	310	164	258	945	1773	1624	1941	1602	1864
Chichester Hbr	1187	1391	795	86	48	105	822	1486	981	1421	1273	1263
Pagham Hbr	332	512	377	122	23	78	77	132	371	225	nc	312
Offham to Houghton	-	-	10	16	7	5	1	-	-	-	-	-
Pulborough Brooks	-	-	21	10	13	14	6	1	-	-	-	-
Lower Adur Estuary	130	139	57	nc	nc	nc	nc	nc	69	99	94	155
Glynde Levels	-	-	8	15	23	7	2	-	-	-	-	-
Rye Bay	103	163	104	53	41	43	30	154	190	166	194	87

During the first winter period, the *WeBS*' total for the county was highest in February, with a particularly count in Pagham Hbr. Numbers then decreased steadily in March and April.

There was little coastal passage in spring, with just 9E and 1W at Brighton Marina in 399 hrs of observation.

The first breeding activity was noted at Shermanbury on 28 Mar, with 8 birds displaying. As expected, the *WeBS*' counts recorded an increase on grazing marsh habitat during the breeding season. The largest breeding concentrations were at Thorney Island, Icklesham and Rye Hbr, with 16, 12 and 9 pairs respectively. There were also 4 pairs at Pilsley, 3 at Amberley, and 1-2 pairs at several other sites in the county (totalling about 14 pairs). Successful breeding was recorded at Ellanore, Pilsley and Shermanbury.

A bimodal pattern of return passage is apparent from the *WeBS*' figures, with peaks in August and October, the former presumably boosted by many juvenile birds. The maximum count on Pett Level Pools was late in the year, with 29 on 15 Nov. Coastal movements in the autumn were minimal, with 7W at Brighton Marina in 53.75 hrs of observation during July.

An albino bird was at Pulborough Brooks on 8 Mar. [MD]

Fairly common passage migrant; a few winter.

The approximate monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County totals</i>	15	16	13	41	71	4	136	213	226	115	26	18
Chichester Hbr	14	15	12	26	25	4	119	139	144	94	21	17
Pagham Hbr	-	-	1	5	2	-	5	16	23	13	3	1
Rye Hbr	-	-	-	4	3	-	2	9	6	2	1	-
Icklesham	-	-	-	1	6	-	2	8	7	-	-	-

During the first winter period, the only records away from Chichester Hbr were of single birds at Cuckmere Haven on 20 Jan, Newhaven Tide Mills on 15 Feb, and Pagham Hbr on 30 Mar.

A colour-ringed bird was observed at Thorney Deeps on 7 dates from 13 Feb until 10 May (CBC). Although colour-ringed birds have previously been sighted in the autumn and occasionally in the spring, this is the first to have actually wintered along the south coast. It had been ringed at Farlington Marshes, Hants as a juvenile on 18 Oct 1997. To date, 144 birds have been colour-ringed at this site since the summer of 1992 (PM Potts *pers. comm.*).

Spring passage was again particularly heavy at Thorney Deeps where numbers built up rapidly from 15 on 25 Apr to a maximum of 25 on 28 Apr and 1 May. Numbers then fell to 12 on 10 May, 6 on 26 May, and 4 still there on 6 June. Other records included 5 at Sidlesham Ferry on 28 Apr and 4 at Rye Hbr on 30 Apr. Six were at Icklesham and 7 at Combe Haven on 12 and 14 May respectively. The last record of the spring was of 3 at Thorney Deeps on 12 June.

There were a number of records from Pulborough Brooks, following a single there on 14 Apr, including 5 on 21 May and 8 on 23rd. The only other inland record in spring was of 2 at Coldwaltham Brooks on 17 May.

A total of 10 birds was recorded on spring sea-watches, 3 in April and 7 in May, all flying E. A party of 9 flew E at Pett Level on 12 May.

Autumn passage began with a single bird at Thorney Deeps and 5 at Pagham Hbr on 1 and 2 July respectively. Passage numbers built up rapidly thereafter, and counts at Thorney Deeps included 18 on 5 July, 64 on 10th, 119 on 24th, 137 on 22 Aug and 144 on 8 Sept. Numbers then fell to 84 on 5 Oct, 21 on 4 Nov, and 17 on 2 Dec. Other notable records were of 9 at Rye Hbr and 8 at Icklesham on 8 Aug, 16 and 23 at Pagham Hbr on 25 Aug and 5 Sept respectively, 7 at Pett Level on 7 Sept, and 6 at Chichester GPs the following day. Finally, there were 12 at West Wittering on 22 Sept, with 10 there on 5 Oct.

Inland records of note were of 12 at Weir Wood Res and 4 at Bewl Water on 1 and 3 Sept respectively.

Single birds were recorded at Rye Hbr and Cuckmere Haven on 4 and 9 Nov respectively. [CBC]

0551. **LESSER YELLOWLEGS**

Tringa flavipes

Very rare vagrant.

A juvenile in the lower Cuckmere Valley from 25 Sep-1 Oct (RJF, NMG, JPS *et al*) has been accepted by *British Birds*. It is the 9th to be recorded in the county and the first since August 1988. Originally thought to be a Wood Sandpiper, its true identity provided a considerable, but very pleasant, surprise. Its favoured area seemed to be a small pool adjacent to the east bank of the river, between the lowest oxbow and the sea. It was, however, particularly prone to disturbance here and spent much of its stay in ditches to the west of the river where it was often out of view. One observer spent 9 hours looking for it, before being successful, while another only saw it on his 5th visit to its favoured pool. Records have been during February-April (2) and August-November (7). [RJF]

0554. **WOOD SANDPIPER**

Tringa glareola

Scarce spring and autumn passage migrant; recorded once in winter.

The minimum monthly totals were as follows:

May	June	July	Aug	Sept
7	-	6	16	10

Spring passage began later than usual with one at Icklesham on 9 May and possibly the same bird there on 15th. Further singles were then reported at Rye Hbr on 17th, North Wall, Pagham Hbr on 19th, Cuckmere Haven on 20th and Pulborough Brooks on 23rd when 2 were together at Pevensy Bridge Level. The spring total of 7 is above the 5-year average of 5.

Autumn passage began well with 3 at Sidlesham Ferry on 1 July but was below average for the rest of the season. The other July records were a single at North Wall, Pagham Hbr between 7th and 13th and 2 at Icklesham on 29th. There were August records for 18 dates with a maximum count of 3 at Icklesham on 1st and 7th. It is assumed that other records from this site on 6 dates during the month involved some of the same birds but the monthly total is likely to be an under-estimate. The only other site at which there were multiple sightings was Rye Hbr where 2 were seen on 10th. Elsewhere, singles were at Pagham Hbr, Pebsham, Pett Level Pools, Pulborough Brooks and Sidlesham Ferry. Inland, there was a single at Bewl Water from 6th to 8th.

September commenced with 2 at Bewl Water on 1st followed by singles at most of the same sites as in August apart from one at Weir Wood Res on 8th and one at Nutbourne on 12th. The last record for the year was a single at Sidlesham Ferry on 21st. [TJW]

0553. **GREEN SANDPIPER**

Tringa ochropus

Scarce spring and fairly common autumn passage migrant. Small numbers winter.

The monthly *WeBS*' counts were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	1	5	1	2	-	-	12	37	24	11	3	14
Chichester Hbr	-	-	-	-	-	-	2	2	-	-	-	-
Chichester GPs	-	-	1	-	-	-	-	1	-	-	-	1
Chingford Pond	-	-	-	-	-	-	6	7	4	-	-	-

Arundel WWT	-	-	-	-	-	-	1	2	-	-	-	-
Amberley Wild Brooks	-	-	-	-	-	-	-	nc	2	1	-	-
Pulborough Brooks	-	-	-	1	-	-	1	5	-	-	-	-
Henfield Brooks	-	1	-	nc	nc	nc	nc	nc	-	-	-	-
Weir Wood Res	-	-	-	-	-	-	-	1	3	1	-	-
Barcombe Res	-	1	-	-	-	-	-	1	2	-	1	-
Glynde Levels	-	-	-	1	-	-	2	-	-	-	-	-
Cuckmere Haven	-	-	-	nc	nc	nc	nc	nc	1	-	-	-
Pevensey Levels	1	3	nc	nc	-	nc	nc	nc	nc	-	-	11
Bowl Water	-	-	-	nc	nc	nc	nc	nc	2	-	-	-
Darwell Res	-	-	-	-	-	nc	nc	nc	-	4	-	-
Pett Level	-	-	-	nc	nc	nc	nc	nc	-	-	2	-
Rye Hbr	-	-	-	-	-	-	-	17	10	5	-	2

The approximate minimum monthly totals were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
21	31	29	32	2	19	81	108	61	25	14	22

At the start of the year the highest counts were at Chichester GPs where 8 were seen on 11 and 13 Jan. The actual number present may have been higher as the counts came from separate pits. Other notable counts were of 3 on the Adur Levels, near Steyning on 1st with 3 at Barcombe Res on the same day. The February counts were higher with up to 10 at Chichester GPs and 6 on the Adur Levels. Most other records were of singles apart from 2 at Sidlesham Ferry on 13th and 2 at Castle Water, Rye Hbr on 25th. The wintering birds remained throughout March with a coordinated count at Chichester GPs on 24th producing 13, increasing to 15 on 5 April. All other April records were of ones and twos from the main wintering locations so spring passage was assumed to be minimal. May was typically the month with the fewest records and only 2 singles were recorded: at Chichester GPs on 2nd and Pagham Hbr on 9th.

There was a good autumn passage with totals in all months between June and October higher than in 1997. Return passage may have commenced as early as 7 June when one was at Coldwaltham Brooks. Numbers increased subsequently and included 4 at both Castle Water, Rye Hbr on 20th and at Chingford Pond on 23rd. Birds were reported at 20 sites in July with many counts of 1-5 although up to 9 were at Icklesham and 8 at Castle Water with an additional 15 dropping in to the Long Pits at Rye Hbr on 20th just prior to a thunderstorm. Numbers peaked in August with records on all days in the month from a total of 22 sites. The highest counts were all made in the first two weeks with 9 at Pulborough Brooks on 2nd, 10 at Icklesham on 6-7th with 14 at Chichester GPs and 17 at Rye Hbr, both on 9th. Numbers dropped off considerably in September although the number of sites where the species was present increased to 26. There were no counts in excess of 3 after 8th when there were still 8 at Chichester GPs.

Birds were reported from 14 sites in October, the highest count being of 4 at Darwell Res on 11th. Numbers remained stable throughout November and December with ones and twos at several sites and 3 at Chichester GPs on 30 Dec. [TJW]

0556. COMMON SANDPIPER

Actitis hypoleucos

Fairly common passage migrant. A few regularly winter. Has bred at least once.

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

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
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<i>County totals</i>	1	3	2	10	13	-	35	82	58	14	2	-
Chichester Hbr	1	1	1	3	1	-	5	19	12	3	2	-
Pagham Hbr	-	-	-	1	-	-	4	5	11	1	-	-
Chichester GPs	-	-	-	1	-	-	-	-	-	-	-	-
Arundel WWT	-	-	-	1	-	-	-	-	-	-	-	-
Amberley Wild Brooks	-	-	-	-	1	-	-	nc	1	-	-	-
Waltham Brooks	-	-	-	-	-	-	2	-	-	-	-	-
Weir Wood Res	-	-	-	-	-	-	-	2	1	1	-	-
Lower Ouse Valley	-	nc	-	nc	nc	nc	nc	nc	-	2	-	nc
Barcombe Res	-	-	-	-	4	-	6	3	3	1	-	-
Arlington Res	-	-	-	1	2	-	-	14	2	-	-	-
Cuckmere Hvn	-	-	-	nc	nc	nc	nc	nc	5	-	-	-
Eastbourne Lakes	-	-	-	nc	nc	nc	nc	nc	5	-	-	-
Pevensey Levels	-	-	nc	nc	-	nc	nc	nc	nc	2	-	-
Bewl Water	-	-	-	nc	nc	nc	nc	nc	3	-	-	-
Darwell Res	-	-	-	1	1	nc	nc	2	2	2	-	-
Powdermill Res	-	2	1	-	nc	nc	nc	-	-	-	-	-
Rye Bay	-	-	-	2	4	-	17	37	12	2	-	-

Analysis of the records submitted indicates that the number of birds present throughout the year is considerably higher than might be thought from the *WeBS*' counts, in which many nil counts are recorded. The minimum monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1996	5	-	-	37	76	6	68	197	56	4	-	2
1997	5	2	4	25	72	8	207	348	73	17	3	4
1998	3	2	2	50	146	7	166	174	59	18	7	4

The high total for May 1998 was boosted by sea-watch records of 2 at Selsey Bill, 8 at Splash Point, Seaford and an exceptional 48 at Brighton Marina.

The 2 wintering birds at Ford were seen again on 1 Jan, as was one at Thorney Deepes which was last noted on 16 Mar. It or another was recorded at Apuldrum Manor Fm on 20 Mar.

The first spring migrants were at the North Wall, Pagham Hbr on 2 Apr and at Sidlesham Ferry the following day. There were 2 at the latter site on 7 Apr and 3 on 15th. Inland, singles appeared at Barcombe Res on 15th, Bewl Water on 16th, Warnham LNR on 18th, and Weir Wood Res on 19th, increasing to 3 on 22nd. There were 4E at Brighton Marina on 23rd and by the end of the month ones and twos had appeared at Chichester GPs, Thorney Deepes, and Rye Hbr. In May, birds were recorded in small numbers at various sites; exceptions were 6 at Rye Hbr on 11th, 7 at Warnham LNR on 13th and 19th and, unusually, 13 at Ardingly Res on 20th. The last was at Climping on 30th.

The first returning bird was seen at Rye Hbr on 24 June, with others at Pagham Hbr the following day and at Weir Wood Res on 28th. There were 3 at Sidlesham Ferry by 30th. As usual, there were numerous records of 1-4 birds during July and August. Larger counts included 10 at Kneppmill Pond on 19 July and 12 at Barcombe Res on 30th while the peak at Pagham Hbr was 27 on 6 Aug. At Rye Hbr, there were 24 on 9 Aug and at Thorney Deepes, 18 on 10th.

Numbers decreased in September and still further in October-November. A single at Thorney Deepes on 28 Nov and 2 in the Arun Valley at Ford on 29th were probably over-wintering, as were 2 on the River Ouse at Southease on 27 Dec and another in the lower Cuckmere Valley on 29th. [DEGC]

0561. **TURNSTONE***Arenaria interpres***Fairly common winter visitor and passage migrant. Scarce in summer.**

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

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<i>County total</i>	272	640	586	197	41	39	21	233	520	586	403	329
Chichester Hbr	72	121	88	35	5	8	4	109	69	194	135	97
Pagham Hbr	80	338	314	80	19	24	12	88	298	102	nc	87
Climping	1	2	36	nc	nc	nc	nc	nc	5	77	-	6
Goring Gap	11	-	8	nc	nc	nc	nc	nc	6	nc	-	36
Lower Adur Estuary	10	-	17	nc	nc	nc	nc	nc	2	10	36	4
Glyne Gap	63	100	88	nc	nc	nc	nc	nc	106	149	203	65
Pett Level	34	66	23	51	7	-	-	24	12	28	27	7
Rye Hbr	-	2	7	27	5	7	5	12	22	26	2	20

Additional counts in the first winter period included 75 at Pett Level on 2 Jan and, at Glyne Gap, Bexhill, 105 and 114 on 1 and 31 Jan respectively. At Selsey Bill, 64 flew W on 4 Jan and 90 were on the beach on 28 Feb.

High counts continued into the spring with 107 at Bulverhythe, St Leonards on 14 Mar, and at Glyne Gap, Bexhill: 150 on 26 Mar, 116 on 25 Apr and 83 on 4 May. Likewise, counts from the western harbours were higher than indicated by the *WeBS*' table, with 110 on Stakes Island on 8 Apr and 152 and 65 at Pagham Hbr on 11 Apr and 5 May respectively.

The monthly totals of eastbound birds at the main sea-watching localities were as follows:

	Mar	Apr	May	Total
Selsey Bill	13	38	166	217
Worthing Beach	-	38	23	61
Brighton Marina	-	16	62	78
Splash Point, Seaford	-	5	10	15
Glyne Gap, Bexhill	19	12	12	43

The peak movement was 91E at Selsey Bill on 2 May.

Following a quiet June and July, numbers began to build again in August. At Selsey Bill, monthly totals of 4E and 71W were reported, with 60 on the beach on 8th. Apart from the *WeBS*' counts, the numbers reported in September were low but, in October, there were at least 100 on the beach at Selsey Bill on 21st. There were 350 on the beach E of Hastings Pier on 27 Dec.

Inland, there were singles seen flying SE over Marline Wood, Hastings on 16 Aug and at Weir Wood Res on 23 Aug. [JKI]

0564. **RED-NECKED PHALAROPE***Phalaropus lobatus***A rare spring and autumn passage migrant.**

A juvenile on the Long Pool near Sidlesham Ferry on 19 Sept (RAI, BFF *et al*) was regrettably flushed by a bird photographer and did not return. A total of 24 has been recorded in the county since 1962 including 11 in September. [SJP]

0565. **GREY PHALAROPE**

Phalaropus fulicarius

Very scarce autumn and rare winter visitor, usually occurring after gales.

Gale force SW winds in early January brought a sprinkling of records to the south coast. It is not possible, however, to say exactly how many birds were involved. The first was recorded on the sea off the end of the Palace Pier, Brighton on 5 Jan (IJW). Two days later, on 7th, one was seen briefly on Shoreham Airfield, before being re-found on a small pool in fields at nearby New Salts Fm (DLS). On 10th, birds were present offshore at Worthing (AC, CEH, JAN) and on the sea to the W of Shoreham Hbr (JC, TJW *et al*) while another was at Portfield GP, Chichester (JB, RJF *et al*). The last bird was present until at least 25 Jan. [SJP]

0566. **POMARINE SKUA**

Stercorarius pomarinus

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

Minimum monthly totals of 10 in April, 168 in May and 2 in June resulted in an overall spring passage of 180 birds, just below the 1988-1997 average of 188.

The first record was of one past Bexhill on 20 Apr. Favourable conditions in May resulted in a protracted passage, with the species being recorded on 19 dates in the month. The maximum daily count was on 12th when 31E were seen from Brighton Marina in 5.8 hrs and the same number from Splash Point, Seaford, in 4.75 hrs. Other notable records during the month included 14E at Bexhill on 3rd, at Brighton Marina: 15E on 4th, 16E on 10th and 17E on 11th, and at Splash Point, Seaford: 15E on 13th.

The June records were of singles E at Selsey Bill on 3rd and 18th, the latter the latest county record for the month.

Returning migrants were as scarce as ever. An adult or near adult passed close to Brighton Marina on 3 Aug (IJW), a juvenile flew past Selsey Bill on 13 Oct (OM), and another was seen from Goring Beach on 30 Nov (DIS). [TJW]

0567. **ARCTIC SKUA**

Stercorarius parasiticus

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

The annual total of approximately 506 birds was a considerable increase from last year when 346 were seen. The total is based on minimum daily figures and assumes that birds seen on consecutive days were different. The approximate monthly totals were as follows:

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Birds	3	0	4	201	139	29	16	40	32	33	6	3
Dates	3	0	3	18	28	13	11	15	13	13	5	3

A dark phase individual lingering from 1997 was present at Brighton Marina on 1 Jan before flying off E and was probably the bird seen flying E at Bexhill and then Pett Level. Another dark phase bird was at Arlington Res on 8th and a single flew E at Bexhill on 16th.

Spring passage began on 28 Mar, with a single E past Splash Point, Seaford, but numbers were small until 19 Apr when 15 flew E there. At least 109 birds flew E along the coast between 21-23 Apr including 33E at Selsey Bill on 22nd with 56E at Brighton Marina and 40E at Seaford the next day. A smaller peak occurred in May, with a minimum of 45E along the coast between 7-9th. Passage continued into June with a total of 11E in the first 3 days and 5E at Brighton Marina as late as 9th. Away from sea-watching localities, singles were seen in Pagham Hbr on 8 May and Pilsey Island on 5 June, with a different bird there on 10th.

Monthly totals from the main sea-watching locations were as follows:

	Apr	May	Total	No. per hr watched
Selsey Bill	98	61	159	0.59
Worthing Beach	15	22	37	0.35
Brighton Marina	144	101	245	0.74
Splash Point, Seaford	114	78	192	0.88
Bexhill and Hastings	22	18	40	0.65

At Selsey Bill, Worthing and Seaford, the average per hour increased by between 31 - 47% over last year, reflecting the larger numbers.

From the end of June and throughout July, many wandering singles were seen at the coast, with totals moving E and W being about even. However, by August, westerly passage predominated, notably with 10W at Brighton Marina on 6th. The westerly movement continued throughout September and October with 6W at Selsey Bill on 8 Sept and 11W past there on 11 Oct being the peak counts.

Other than 2W at Selsey Bill on 1 Nov, all records in the last 2 months related to singles, with the December birds being from Selsey Bill on 19th, 20th and 30th. [TJW]

0568. LONG-TAILED SKUA

Stercorarius longicaudus

Rare vagrant

A very pale-headed juvenile was in the entrance to Chichester Hbr on 20 Sept (CBC, RAI, DIS). It had been reported the previous day, although a longer stay would have been appreciated. Eight have been recorded during the 1990s, divided equally between spring (May) and autumn (September-October). [RJF]

0569. GREAT SKUA

Catharacta skua

Scarce spring and autumn passage migrant; very scarce but increasing in winter.

The annual total of 116 birds was a considerable increase from last year with 78 and 1996 with 76. The records are analysed in the following table which shows birds flying E, W or lingering offshore:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
E	1	1	2	29	20	6	5	2	3	6	1	-	76
W	2	-	-	3	2	1	6	6	4	3	1	-	28
O/S	3	-	-	-	1	1	-	1	3	-	1	2	12
Total	6	1	2	32	23	8	11	9	10	9	3	2	116

Of 5 seen at Brighton Marina in the first week of January, the most interesting was one feeding on a dead Kittiwake in the harbour on 4th. The other record in that month was of one which lingered in Pagham Hbr before flying S. In February, one flew E past Bexhill on 20th. A single E past the same site on 8 Mar was probably the start of spring passage, although the next record was not until 28th with 1E at Splash Point, Seaford.

As usual spring passage peaked in April, with the best site count being 5E at Selsey Bill on 24th and in May the peak was 4E at Seaford on 29th. Spring passage continued into June, with 6 birds flying E in the first 8 days. Thereafter, a number of singles were seen during the summer months, mostly from Selsey Bill and Brighton Marina, with 4W off Selsey Bill on 22 July being notable.

Autumn passage was uneventful with records from many coastal sites, although no more than 2 were seen on any day, other than 5 Sept, when one was off Pett Level and 2 were off Cow Gap, Beachy Head. The year ended quietly with singles off Selsey Bill on 7 and 26 Dec.

There were no records away from the coast. [TJW]

0575. MEDITERRANEAN GULL

Larus melanocephalus

Scarce but regular visitor throughout the year. A few pairs have attempted to breed in recent years.

With a similar pattern of records to the past few years, this was another excellent year. The total of 431 records of 679 sightings on 233 different days is comparable to 1997. The table, which gives the approximate numbers seen in each month, with those birds of unknown age included in the totals, shows the usual spring peak with a small but obvious passage of 1st-year birds in April and May.

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Adults	11	17	14	28	11	3	10	10	10	9	8	9
2nd-years	2	1	6	12	4	-	-	1	5	3	5	2
1st-years	2	1	-	18	16	2	3	4	4	2	5	2
TOTAL	19	25	41	78	43	10	16	16	23	20	20	17
Inland	1	1	-	-	-	-	1	-	2	1	1	1

Allowing for duplication, it appears that there was an increase to between 150-180 individuals, the highest annual total for the county.

Wintering individuals were recorded at the regular coastal sites with the largest counts being 3 at Selsey Bill on 1 Jan, 5 roosting at Pagham Hbr on 7 Jan, 5 at Rye Hbr on 23 Feb and 4 in Chichester Hbr on 25 Feb.

There was a good coastal passage between March and May with totals of 13E at Selsey Bill, 6E and 4W at Worthing, 51E and 7W at Brighton Marina, 23E and 1W at Splash Point, Seaford, and 8E and 2W at Bexhill. On several dates up to 4 were noted, but on both 2 Apr and 24 May there were 6 at Brighton Marina.

During April, there were 2 adult pairs and regular records of 2nd-year birds at Rye Hbr, but despite a pair seen displaying at Northpoint Pit on 12 Apr, there were no breeding attempts. At another site in East Sussex there were 3 pairs, at least one of which laid eggs, but all were unsuccessful.

The table shows how the numbers fall in summer; the most notable records in this period were of 4 adults at Thorney Island on 18 July and 3, but only one adult, at Pilsey Island on 27th. The highest counts in the autumn were 4 in Newhaven Hbr on 4 Oct and 5 at Selsey Bill on 16 Oct. Records thereafter involved just 1-2 individuals, apart from 3 roosting at Brighton Marina on 24 Dec.

The few sightings far from the coast were of singles at Offham, near Lewes in January, at Arlington Res in February and November, and at Chichester GPs in July, September, October and December. There were 4 different Darvic rings reported, including the regular '24H' which was seen at Shoreham and Brooklands, Worthing, in January and February, but not subsequently. It was first seen at Shoreham in late 1992, having been ringed as a nestling in the Netherlands that summer. [JAN]

0578. LITTLE GULL

Larus minutus

Scarce visitor and passage migrant, most numerous on passage in spring.

The total of approximately 430 birds seen during the year was similar to the past 2 years. The pattern of occurrence, however, was different, with fewer seen in the spring and the best autumn passage since 1990. The following table of approximate monthly totals shows this and confirms that the species is mostly encountered at the coast:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Total	29	1	28	116	65	6	1	6	14	81	75	9
Inland	-	-	16	11	1	-	-	3	6	1	1	-

During the first 16 days of January, there was a scattering of records mainly involving ones and twos, but there were 3 in Shoreham Hbr on 8 Jan and 4W and 6 offshore at Bexhill on 16th. Some stayed for a few days while an adult at Brighton Marina remained from 5th to 28th. A single bird that flew W at Brighton Marina on 20 Feb was the sole record for that month, followed by singles in Pagham Hbr on 4 Mar and at 3 locations on 7th. During March, more were seen inland than at the coast, with a 1st-winter at Chichester GPs from 7th until the end of the month and 13 there on 28th. Additionally, there were birds at Pulborough Brooks and Arlington Res.

The spring coastal movements were disappointing as shown by the monthly totals for the main sea-watching localities:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Selsey Bill	1	-	1	45	9	-	-	-	2	7	64	-
Worthing	1	-	1	4	11	-	-	-	-	1	7	-
Brighton Marina	2	1	1	40	44	-	-	1	-	72	1	4
Seaford	-	-	10	57	8	-	-	-	-	-	3	2
Bexhill	6	-	-	2	15	-	-	2	-	2	1	-

The best period was in late April when day totals included 10E at Seaford on 19th, 12E at Selsey Bill on 21st, 28E at Brighton and 22E at Seaford on 22nd and 17E at Seaford on 29th. The only movement to reach double figures in May was 14E at Brighton Marina on 10th. The records in late May and June mainly involved immatures, except for an adult at Pulborough Brooks on 29 May.

An adult lingered off Brighton Marina on 27-28 July. Autumn passage continued slowly through August and September with inland records coming from Arlington Res, Chichester GPs and Weir Wood Res and, in November, from Poverty Bottom, near

Newhaven. The autumn numbers were boosted by some interesting westward coastal movements; at Brighton Marina 50 and 22 were seen on 13 and 31 Oct respectively while at Selsey Bill the main movement was slightly later with 10 on 1 Nov, 30 on 2nd and 13 on 3rd. Most of the few December birds were seen with the movements of other seabirds during the last 3 days of the year. [JAN]

0579. SABINE’S GULL

Larus sabini

Rare vagrant

A juvenile flew W off Brighton seafront at 09:40 BST on 27 Oct (IJW) and is only the 6th to be recorded during the 1990s and the 7th since the Great Storm of 1987 (when at least 19 were seen). Most records have been in September and October. [RJF]

0582. BLACK-HEADED GULL

Larus ridibundus

Common breeding species and abundant winter visitor and passage migrant.

The largest winter counts were of 5000 at Weir Wood Res on 8 Jan, 2400 at Pebsham refuse tip on 31st and 2500 roosting on the shore at Camber on 23 Feb and 14 Mar. There were 8500 at Rye Hbr, also on 14 Mar, and a comparable count of 8000 at Southwick on 22nd.

This species tends to be inconsistently recorded by sea-watchers, but the monthly eastbound totals and peak movements for the spring are shown below:

	Mar	Apr	May	Peak movement
Selsey Bill	77	222	83	72 on 5 Apr (4 hrs)
Worthing	369	132	357	182 on 28 Mar (7 hrs)
Brighton	574	1246	944	834 on 23 Mar (3 hrs)
Bexhill/Hastings	2543	51	79	736 on 15 Mar (3 hrs)

There was also 641E at Newhaven in 4 hrs watching on 15 Mar.

Only 85 nested on the islands of Ternery Pool, Rye Hbr, the first young being noted on 27 May. Breeding success was high with about 150 chicks fledging. At Icklesham there were 400-500 pairs, but there was no breeding in West Sussex.

Counts in the summer were small, the highest being 200 at Bexhill on 15 June. Roost counts at Brighton Marina were of 120 on 13 July, 470 on 25th and 1700 by 22 Oct. Autumn coastal movements are seldom recorded, but at Selsey Bill there were 437E on 26 Sept and 560W on 16 Oct. The largest inland counts at the end of the year were of 2000 at Arlington Res on 14 Nov, 1000 at Barcombe Res on 29 Nov, and 2800 at Weir Wood Res on 13 Dec. [JAN]

0590. COMMON GULL

Larus canus

Common winter visitor and passage migrant; small numbers summer; bred until 1963.

High winter counts included 2000 near Hurstpierpoint on 1 Jan, 1000 at Rotherfield on 18th, 1300 in the lower Adur Valley on 31st and 2000 roosting on Pilsey Sands on 2

Feb. The roost between Rye Hbr and Camber held 16,000 on 23 Feb, rising to 20,000 on 14 Mar. 12,000 roosted between Southwick and Hove on 25 Feb. These counts are amongst the highest recorded in the county. In contrast, the records of spring movements were small, with a peak of 151E at Selsey Bill on 22 Apr.

An adult and 4 immatures were present at Icklesham throughout the spring but there was no evidence of breeding at this site or any other in the county. Regular counts at Thorney and Pilsey Islands demonstrate the build up of numbers in the autumn with 1 on 1 June, 4 on 30th, 22 on 2 July, 82 on 18th, 1600 on 18 Aug, 4000 roosting on 15 Nov and 600 on 25th. Elsewhere, notable counts were of 200 adults at Stedham and Petworth on 15 and 29 Aug respectively, 380 at Weir Wood Res on 13 Dec and 720 near Cissbury on 24 Dec.

An albino individual was seen at Camber on 2 Apr. [JAN]

0591. LESSER BLACK-BACKED GULL

Larus fuscus

Fairly common passage migrant and winter visitor; small numbers (mainly immatures) summer and a few pairs breed.

With the exception of 30 at Pagham Hbr on 25 Jan, all the highest counts early in the year were from coastal sites in East Sussex. These included respective counts of 30 at Northpoint Pit and 52 at Icklesham on 1 Mar, 42 and 80 at Rye Hbr on 10 Mar and 3 Apr respectively, and up to 185 at Pett Level in early April.

Although single pairs were present throughout the spring at both Littlehampton and Rye Hbr, there were no breeding attempts. However, roof top nesting was successful with 6-7 pairs at Worthing and 3 pairs at Bexhill.

Autumn and early winter counts were also low with the only notable exceptions being 78 at Rye Hbr on 24 July, 70 at Lidsey refuse tip on 2 Nov and 53 at Pagham Hbr on 6 Dec. Inland, there were 80 at Warnham LNR and 22 at Weir Wood Res on 13 Dec. [JAN]

0592. HERRING GULL

Larus argentatus

Common breeding resident, passage migrant and winter visitor.

1997: The 1st-year Pontic or Caspian Gull, *L.a. cachinnans* recorded on the River Adur at Shoreham-by-Sea on 15 Sept was the first county record of this race. More records can be expected in the future as awareness of the relevant identification criteria grows.

1998: Once again, there were no co-ordinated winter counts so the records of this, and other gulls, do not give a clear picture of the numbers wintering in the county. As usual all the highest counts were from coastal locations including 700 at Combe Haven on 1 Jan, 1000 at Southwick on 7 Jan and 650 at Glyne Gap, Bexhill on 31 Jan.

Roof top breeding was recorded from Chichester (1 pair), Littlehampton (5 pairs), Worthing (83 pairs), Saltdean (4 pairs), Eastbourne (4 pairs), Bexhill (34 pairs), St Leonards-on-Sea (2 pairs) and Rye Hbr village (many). The figures given, even at Worthing, are from casual observations but readers are reminded that a systematic survey of all seabirds, including roof nesting gulls, is planned for the year 2000. Elsewhere a pair nested at Chichester GP, 2 pairs at Icklesham and 9 pairs at Rye Hbr.

Summer gatherings included 300 at Pebsham on 29 May, 250 loafing offshore at Worthing on 12 June, 300 at Pilesey Sands on both 4 and 26 July, 700 at Pebsham on 7 Aug, and 430 at Bexhill on 9 Aug. At Brighton Marina, all 270 on 7 Aug were juveniles but a more mixed age structure was noted for a count of 700 there on 28 Oct. A roost count of 3000 at Camber on 22 Dec is the third highest recorded at a single site in the county. The only notable inland count was of 200 at a landfill site near Warnham on 10 Feb.

An albino individual was recorded at Galley Hill, Bexhill on 18 Mar.

Single adults showing the characteristics of the Scandinavian race *L.a.argentatus* were recorded at Southwick Beach on 10 Feb (PJ) and in Pagham Hbr on 14th (JC).

Most records of 'yellow-legged' gulls in Sussex involve the Mediterranean race *L.a.michahellis*. The following table of the minimum monthly totals reveals the usual summer peak:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
5	-	4	-	-	2	313	313	25	7	-	3

As usual, most were recorded in Pagham Hbr with 54 on 4 July, 307 on 24 July and 293 on 28 Aug. Elsewhere, the only regular records were from the lower Adur Valley where a maximum of 19 was recorded on 18 Sept.

There were no substantiated records of birds showing the characteristics of the race *L.a.cachinnans*. [JAN]

0598. ICELAND GULL

Larus glaucooides

Rare winter visitor and passage migrant.

A 1st-winter bird at Selsey Bill on 2 Jan (OM) was probably the individual seen between Shoreham and Brighton on many dates from 7 Jan to 19 Apr (DLS, IJW *et al.*). Records from Selsey Bill on 5 Apr (BFF) and at Splash Point, Seaford on 19 Apr (RJF *et al.*) and 23 Apr (CJR) could also relate to the same bird, although the timing of the sightings on 19 Apr would suggest that this was not the case. [JAN]

0599. GLAUCOUS GULL

Larus hyperboreus

Very scarce but regular winter visitor and passage migrant.

An adult and two 1st-winters were seen in Pagham Hbr between 1 Jan and 8 Mar (many obs.) with all 3 seen together on 11 Jan (IJW) and 13 Jan (AH). Presumably the same adult was at Selsey Bill on 11 Jan (KBG) and one of the 1st-winters at Climping on 23 Feb (BFF). A 1st-winter, also at Climping, on 19 Nov (JW) was the only record later in the year. [JAN]

0600. GREAT BLACK-BACKED GULL

Larus marinus

Common winter visitor and passage migrant; small numbers summer.

The following table, showing the maximum number counted in each month from 3 sites where this species is regularly recorded, reveals the pattern of occurrence:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep t	Oct	Nov	Dec
Chichester Hbr	-	-	-	-	20	40	240	60	80	80	-	-
Pagham Hbr	200	30	1	-	-	-	-	-	227	150	170	-
Bexhill	204	87	118	31	-	6	-	5	114	219	219	217

Elsewhere, the only counts exceeding 200 birds were of 500 at Combe Haven on 1 Jan, 350 at Shoreham Airport on 17th, 350 at Cuckmere Haven on 7 Feb, 230 at Arlington Res on 20th, 250 at Rye Hbr on 27 Sept, 280 and 300 at the Cuckmere Haven on 25 Oct and 22 Nov respectively, and 420 roosting at Camber on 22 Dec.

A partial albino bird was noted at Arlington Res on 24 Feb. Two colour-ringed birds at Brighton Marina, carrying orange rings from Jersey, were seen between July and September, one being the same as in 1997. [JAN]

602. KITTIWAKE

Rissa tridactyla

Common but localised breeding species; common winter visitor and passage migrant.

1997: There were 545 occupied nests on the Newhaven cliffs and 901 at the colony at Splash Point, Seaford.

1998: As usual, most of the records of this species refer to movements at the coast. The following table shows the monthly totals for the main sea-watching sites although the significance of these movements is unclear:

	Selsey Bill		Worthing		Brighton		Seaford		Bexhill	
	E	W	E	W	E	W	E	W	E	W
Jan	70	98	2	3	274	-	127	-	131	339
Feb	-	-	-	2	140	38	2	1	32	26
Mar	11	1	5	1	251	36	nc	nc	153	111
Apr	67	38	21	1	443	109	nc	nc	58	30
May	67	68	34	8	1230	54	nc	nc	54	8
June	8	39	2	2	51	77	nc	nc	9	31
July	-	22	-	-	51	26	nc	nc	17	-
Aug	3	7	1	2	254	103	nc	nc	4	1
Sept	-	6	-	2	100	23	2	-	-	3
Oct	2	148	1	4	-	16	-	-	1	40
Nov	24	381	12	28	52	3	172	1	-	138
Dec	161	108	3	26	378	10	153	6	22	677

Movements in excess of 200 in a day were 205W at Selsey Bill on 8 Nov, 546W at Bexhill on 29 Dec and 336E at Brighton Marina on 31st.

On 1 June, there were 241 occupied nests at Newhaven and 567 at Splash Point, Seaford. At both sites, predation by Peregrines and Carrion Crows was reported and a later count showed 96 occupied and 105 abandoned nests at Newhaven, with 623 occupied and 36 abandoned nests at Seaford.

The summer roost at Brighton Marina started on 5 July and reached a peak of 125 on 30 Aug, with 72 there in late September and just 8 by 1 Nov. There were several birds recorded away from the coast, particularly in periods of strong winds. Records from

inland sites included up to 7 at Weir Wood Res between 8 and 10 Jan, 2 at Bewl Water on 9th, 1 in flooded fields on the Adur Levels on 10th, an immature at Barcombe Res on 2 and 9 Aug and, finally, 1 at Arlington Res on 9 Sept. [JAN]

0610. LESSER CRESTED TERN

Sterna bengalensis

Very rare vagrant

An adult in the tern roost at Ternery Pool, Rye Hbr at 05:00 BST on 4 May (PT) flew out to sea at 05.10 BST. It was found with ca. 350 Common and Sandwich Terns, all of which steadily left the roost soon after dawn. It has been accepted by *British Birds* and is the 3rd county record. The previous two, at Ternery Pool on 13 May 1986 and E past Splash Point, Seaford and Birling Gap on 6 May 1989, both related to the female that returned to the Farne Islands each year between 1984-97. The Farne Islands bird, known affectionately as “Elsie”, did not return in 1998, making it likely that this record involved a different individual. [RJF]

0611. SANDWICH TERN

Sterna sandvicensis

Scarce breeding summer visitor and common passage migrant; rarely recorded in winter.

One in Brighton Marina on 6-7 Jan (IJW) was the 6th county record for the month.

The first bird of the spring was at Rye Hbr on 9 Mar with the next being more typical ‘fly-pasts’ at Selsey Bill and Bexhill on 14th. Passage increased slowly during the month, with peaks of 22E at Bexhill on 22nd, and 44E at Brighton Marina and 56E at Splash Point, Seaford on 28th. A total of 104 had gathered at Rye Hbr by the end of the month.

The easterly spring passage totals at the main sea-watching localities were as follows:

	Mar	Apr	May	Total	No. per hr watched
Selsey Bill	59	1184	901	2144	6.5
Worthing	18	342	494	854	6.7
Brighton Marina	111	1931	930	2972	7.5
Seaford	85	1168	511	1764	6.9
Bexhill	48	547	62	657	5.2

Passage was unspectacular in April, with counts of over 200 recorded on just 4 days with the peaks being 243E at Brighton Marina on 19th and 228E from the same site on 21st. The maximum number recorded at Rye Hbr during the month was 90 on 18th. In May, counts were even lower with 162E at Worthing on 8th being the peak. There were 2 inland records during the spring with singles at Chichester GPs on 20 Apr and at Pulborough Brooks on 8 May. Spring passage was still evident on 1 June when 53 flew E at Splash Point, Seaford, in just 2.5 hrs.

At Rye Hbr, 13 pairs nested at Ternery Pool, with the first chick seen on 1 June and the first fledged young on 7 July. About 9 birds fledged in total.

The westerly autumn passage totals at the main sea-watching localities were as follows:

	July	Aug	Sept	Oct	Total	No. per hr watched
Selsey Bill	192	132	175	3	502	1.9
Worthing	11	52	63	0	126	3.2
Brighton	134	65	29	8	236	1.9

Seaford	-	-	9	-	9	1.3
Bexhill	10	49	15	1	75	1.8

The most notable movements were of 48W at Selsey Bill on 23 July and 41W there on 26 Sept, although 49E at Brighton Marina on 4 Sept was unusual. At Pagham Hbr, 120 had gathered by 25 Aug. Inland, 5 flew SW over Weir Wood Res on 26 July and 2 were at Bewl Water on 26 Sept.

The last record of the year was of 1W at Selsey Bill on 22 Oct. [TJW]

0614. ROSEATE TERN

Sterna dougallii

Very scarce passage migrant and non-breeding summer visitor.

On 7 May, a single bird flew E at Selsey Bill (BJC, TJE). A total of 4 was recorded at Splash Point, Seaford during May: 1E on 12th (BRG *et al*), 1E at 06.34 on 13th (SD *et al*) and 2E together on 16th (SD, BRG, NJT *et al*). The bird on the 13th was also seen flying E at Brighton Marina at 06.06 (IJW). The only other records were of one at Ternery Pool, Rye Hbr on 26-27 May (PMT, BJY) and 2 adults fishing off Pilsey Island and occasionally roosting on Pilsey Sands between fishing trips on 28 Aug (JB, CBC, JG). [PJ]

0615. COMMON TERN

Sterna hirundo

Scarce breeding summer visitor and common passage migrant.

1997: The reference to birds in *portlandica* plumage (*SxBR* 50: 105) should be removed. This term is now redundant and is simply a euphemism for '1st-summer'.

1998: An adult in summer plumage was present between Shoreham Hbr and Hove Lagoon from 8 to 19 Jan (IJW, TJW *et al*). This represented the first wintering record for the county.

Spring passage began early with singles past Brighton Marina and Splash Point, Seaford on 28 Mar, followed by a further single past Brighton on 30th. Thereafter, there were numerous records from coastal and inland localities. By the end of April, 60 had gathered at Chichester GPs and 192 at Rye Hbr. Higher numbers were recorded in May with 320 at Rye Hbr on 4th, 363E at Worthing on 8th and 447E at Bexhill on 9th.

Breeding success was generally good, although records were not received from all sites. At New Lake, Chichester GPs, 56 chicks were ringed and a total of 97 eggs laid, while a pair at nearby Portfield GP hatched 2 young. On 17 June, at Arundel WWT, there were 3 pairs, 1 with 3 chicks, 1 with a single chick and 1 still on eggs. At Rye Hbr, 120 pairs nested on Ternery Pool and about 200 young were fledged. At Icklesham, 14 pairs were present, but breeding success was unknown and, at Bewl Water, a pair was noted with a fledged young on 15 Aug.

Up to 6 were at Coldwaltham Brooks and 2 at Weir Wood Res on 5 July, suggesting early return passage. The maximum counts during the autumn were as follows: 150 in Pagham Hbr on 25 Aug, 200 at Pilsey Sands on 30th, 225W past Brighton Marina on 5 Sept and 436E there on 9th.

There were 15 records involving some 24 birds in October and the last record was a single at Church Norton on 7 Nov. [TJW]

0616. **ARCTIC TERN**

Sterna paradisaea

Uncertain, but probably a fairly common spring and autumn passage migrant.

The number of records received continues to increase, but this is more likely to reflect improved identification skills rather than larger numbers in the county. The first records of the year were a single E at Splash Point, Seaford on 5 Apr, followed by one at Weir Wood Res on 6th. A total of 61 were identified from Brighton Marina during April. Passage peaked in May with a minimum of 222 birds recorded. All records were from sea-watching sites other than a single at the Long Pit, Rye Hbr on 26th. The highest counts were at the end of the May, with 43E past Brighton Marina on 27th and 22E there the next day. The last recorded were 13E past Seaford on 30th.

Return passage commenced on 17 July, with an adult at Church Norton and two there on 27th, but there were no other records until 4 were seen at Weir Wood Res on 4 Aug. Thereafter, small numbers were seen on many dates at a number of sites up to 14 Oct with 10E at Brighton Marina on 9 Sept being the only double figure count.

There were 3 late birds in November, with singles on 7th at Church Norton and Sovereign Hbr Marina, Eastbourne, and at Pett Level on 20th. [TJW]

COMMON/ARCTIC TERN

Sterna hirundo/paradisaea

Most birds passing sea-watching locations remained unidentified as ‘Commic’ Terns. The first of these was a single flying E at Splash Point, Seaford on 28 Mar followed by another at Selsey Bill on 1 Apr. The totals at the main sea-watching localities were as follows:

	Apr	May	Total	No. per hr watched
Selsey Bill	1102	3883	4985	18.6
Worthing	337	1683	2020	19.2
Brighton Marina	1704	5757	7461	22.7
Seaford	1548	5042	6590	34.5

The peak movement was in the second week of May with 9th producing 1379E at Brighton Marina and 1378E at Splash Point, Seaford, followed by 941E at Selsey Bill and 1240E at Seaford on 10th.

Autumn passage was uneventful, the only notable counts being 225W and 210W at Selsey Bill on 6 and 7 Sept respectively, and 230E at Brighton Marina on 10th. [TJW]

0624. **LITTLE TERN**

Sterna albifrons

Scarce breeding summer visitor and fairly common passage migrant.

Spring arrival was first noted at Selsey Bill where one flew E on 15 Apr. From this date onwards, birds were recorded almost daily moving E along the coast, with maximum counts of 87 in 11 hrs off Selsey Bill on 22 Apr, and 92 in 9.5 hrs at Brighton Marina on 10 May. The monthly totals at the regular sea-watching sites were as follows:

	Apr	May	Total	No. per hr watched
Selsey Bill	287	314	601	2.2
Worthing	79	108	187	1.8

Brighton Marina	45	178	223	0.7
Seaford	76	197	273	1.4
Bexhill	5	18	23	0.4

During what proved to be a poor breeding season, the only encouraging news came from Ellanore, Chichester Hbr, where a pair fledged one young. This was the first successful breeding attempt at the site for 10 years. At Rye Harbour, breeding numbers were the lowest since the 1970s. There were 29 nesting pairs, with some re-nesting. Of 47 nesting attempts, 19 nests survived to the hatching or near hatching stage, but no young were fledged. As in previous years, predation by Kestrels accounted for a high loss of chicks. Despite this lack of success, 2 juveniles were recorded at Rye Hbr on 2 dates in July-August, and a juvenile was seen at sea off Camber on 2 Sept. These were presumably offspring raised outside the county.

The largest post-breeding concentration was of just 19 at Pilsey Sands on 12 Aug. The last record of the year was of 2E at Splash Point, Seaford on 30 Sept. [MD]

0627. BLACK TERN

Chlidonias niger

Fairly common passage migrant.

The approximate monthly totals were as follows:

Apr 10	May 121	June 0	July 1	Aug 20	Sept 114
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The first of the spring was an early bird E at Bexhill on 13 Apr, followed by singles at Selsey Bill and Chichester GPs on 23rd. Five flew E at Selsey Bill on 29th. The main spring passage took place in May, with records on 19 days in the month. There was a clear peak between 8th and 11th, with 86 birds recorded including 35E at Worthing on 8th and 32E at Selsey Bill on 10th. Inland, one was at Arlington Res on 12th and 2 at Chichester GPs on 22nd.

The only summer record was of a single W at Selsey Bill on 23 July. A total of 56 records were received for the period 2 Aug to 15 Sept, mostly singles, although a notable passage took place on 5 Sept with 30 at Weir Wood Res and 24 at Bewl Water. Other than these records, the peak counts were of 9W at Brighton Marina on 21 Aug and 9 at Chichester GPs on 9 Sept. The last record was a single at Brighton Marina on 30 Sept. [TJW]

0628. WHITE-WINGED BLACK TERN

Chlidonias leucopterus

Rare vagrant

A juvenile at Ivy Lake, Chichester GPs, from 15-21 Sept (AH *et al*) has been accepted by *British Birds*. Five of the 7 recorded during the 1990s have appeared on Chichester GPs in August-September, with 3 on Ivy Lake. [RJF]

0634. GUILLEMOT

Uria aalge

Fairly common winter visitor and passage migrant; formerly bred.

1997: A single bird of the bridled form was seen at Splash Point, Seaford on 1 May (SL *et al*).

1998: The approximate monthly totals, mainly birds moving at sea, were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
48	43	10	6	50	14	-	3	2	19	31	224

The total for the year shows an overall increase of 50% on the figures for 1997. Counts were less in the January-February period, but there was a striking increase in December. On 31 Dec, there were 50E and 40W at Selsey Bill and 61E off Newhaven West Pier.

Totals included 2 dead, 3 oiled and dead, and 14 oiled. [DEGC]

0636. **RAZORBILL**

Alca torda

Scarce winter visitor and passage migrant; formerly bred.

The approximate monthly totals, mainly birds moving at sea, were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
117	49	4	18	22	6	-	-	-	55	10	96

The total of 377 is higher than last year's very high figure of 338. Numbers were down by comparison in January, but much higher in December.

Totals included 3 found dead and 2 which were oiled. [DEGC]

0647. **LITTLE AUK**

Alle alle

Very scarce but now annual autumn passage migrant and winter visitor.

Another good year with a total of 7-9 recorded. On 4 Nov, there was 1 on the sea off the west arm of Brighton Marina (KBG, ADW, IJW *et al*). It was followed by singles W at Selsey Bill at 07.28 and 08.55 and E at 08.00 the following day (BJC, TJE) and further singles W there at 06.55, 08.10 and 08.12 on 6th. One at Portslade-by-Sea at the eastern end of Southwick Canal on 8th remained until 11th although it had reportedly been present since 6th. The final record of the year was of 1 on the sea off the east arm of Brighton Marina on 19 Nov. It then moved into the Marina itself, becoming visibly slower and more sickly during its 11-day stay. It was reportedly picked up by a yachtsman on 29 Nov, presumed dead (PJWh, KBG *et al*). [PJ]

0654. **PUFFIN**

Fratercula arctica

Very scarce visitor, most frequently recorded in spring.

Singles flew E at Birling Gap at 07.40 and 08.05 on 9 May (RDME, TWP *et al*) and at Brighton Marina on 28 May (IJW). The Birling Gap records recall the total of 17 that flew E at this site in spring between 1980 and 1989.

Of 67 Puffins recorded in the county since 1962, just over half (35) have been in May. [PJ]

1997: The 498W at Bexhill and Hastings on 4 Feb were in 2.5 hrs not 21 hrs.

1998: Totals at the main sea-watching localities were as follows:

Direction of Movement	Jan-Feb		Mar-May		Aug-Oct		Nov-Dec	
	E	W	E	W	E	W	E	W
Selsey Bill	5	10	13	27	9	128	254	178
Brighton Marina	158	91	402	31	1	11	2022	460
Seaford	345	127	274	19	-	-	1227	68
Bexhill	83	68	6	3	-	-	243	1977

Counts in January were but a fraction of those last year, but those in December showed huge increases. The largest movement was on 31st, with 1000 in about 1.5 hrs at Beachy Head; 1120 in 2.5 hrs at Bexhill and 1535 in 6 hrs at Brighton Marina. [DEGC]

0665. FERAL ROCK DOVE

Columba livia

Common Resident.

There were only 13 reports of this common species and these mostly came from the coastal fringe and urban areas. On 7 Jan, there were 250 birds on Newhaven Cliffs, and on 26 Jan, 500 were at Steep Down, Lancing. At Lewes, there was a resident flock of 70. There was a flock of the same size in Bognor Regis town centre on 10 Dec, whilst at nearby Yapton, 208 were feeding around a farm granary on 16 Dec.

A rare and welcome breeding report was of 15 birds sitting on a total of 41 eggs and very young nestlings at Brighton Marina on 6 June. [RK]

0668. STOCK DOVE

Columba oenas

Common resident and possible winter visitor.

Reports of medium-sized, winter feeding flocks were quite widespread including 30 at Patching on 10 Jan, 40 at Friston Forest on 27th, 100 at Groombridge on 22 Feb and 120 at Lancing on 1 Mar. Then, as late as 21 Apr, 50 were feeding in meadows at Rye Hbr.

There were numerous breeding reports, with the first coming from Ashdown Forest on 18 Mar and the last, of a bird sitting on eggs in a nestbox in a barn at Donnington, on 11 Aug. Nestboxes were also used at Rye Hbr and Bosham in May and at Fernhurst and Sidlesham in July. At the last named site, an owl box was occupied and 2 chicks were ringed. Also in July, a pair fledged 2 young at Newbridge Fm, Wittersham, while on the East Rother Levels, a pair fledged 1 young from a clutch of 3 eggs.

In October, there was possible evidence of migration. About 20 birds were seen flying W at Hastings on 18 Oct, and a further 64 the following day. Also on 19th, 150 were seen with a large flight of Woodpigeons near Beachy Head, while on 20th, there were 150 in Hastings.

Later in the autumn, 102 were seen in 3 flocks at Hassocks on 26 Oct and 87 flying W with Woodpigeons over Harting Down on 1 Nov. A flock of 46 fed throughout November on stubble and set-aside sown with birdseed mix at Icklesham. The largest count of the year came from Lower Standean with 500 on 5 Dec. [RK]

0670. WOODPIGEON

Columba palumbus

Abundant resident and winter visitor.

The largest flock for the first half of the year was of 300 birds with 1000 Jackdaws and 500 Rooks at Upwaltham Hill on 11 Jan. A flock of 600 at Ninfield on 26 Jan was the only substantial record for the east of the county. Counts of movement along the Bexhill and Hastings shore in Mar produced only modest figures, for example, 43W and 50E in 2.2 hrs on 19 Mar and 58W and 182E on the next day. There were 21 records of confirmed breeding, and it goes without saying they represent only a small fraction of the county's breeding population.

Movement in Oct was recorded all along the coast at regularly watched sites from Selsey Bill in the west to Hastings in the east. The largest counts were at Selsey with 8500 on 26 Oct. A total of 3135 flew W at Hastings in 0.5 hrs on 20 Oct, while 2080 flew W in 0.4 hrs at Worthing on 30th. Movement, mainly to the west, continued up to mid-November.

Apart from approximately 1000 near Emsworth on 6 Dec, there were no substantial counts up to the year's end. [DEC]

0684. COLLARED DOVE

Streptopelia decaocto

Very common resident.

A total of just over 50 records for the county during the year shows how observers generally ignore this species. A regularly reported flock at Harbour Fm, Rye Hbr reached a peak of 265 birds on 10 Jan. On 10 Feb, a bird was on eggs at Bognor Regis. There were 11 reports of confirmed breeding, a situation that obviously does not reflect the species' status in the county. It would seem that there are few sites in the county that attract large numbers. In Bexhill, there used to be upwards of 200 gathering on power cables over a local farm, but changes in practice have apparently made the site unattractive over the last few years. [DEC]

0687. TURTLE DOVE

Streptopelia turtur

Fairly common, but declining, summer visitor and passage migrant. Species of Conservation Concern in Sussex.

The 3 birds seen on 8 Apr in Whiterock Gardens, Hastings were 6 days earlier than the average first date during 1965-93. It was not until 18 Apr that the next record was forthcoming, with a singing bird at Icklesham. Birds continued to arrive to the end of the month, but the number of records was modest. Sightings increased as May progressed with birds were heard calling as they established territories.

There were about 40 records of probable breeding, but only 5 confirmed breeding records. Between 5 and 10 pairs probably bred at Rye Hbr and 2 pairs were confirmed at Thorny Island.

During return passage, 16 were reported on the west side of Pagham Hbr, on 30 Aug, but this was the largest flock recorded in the autumn. By the end of September, only singles were being noted and the last record was from Rye Hbr on 11 Oct. [DEC]

0712. *Cat. C* **RING-NECKED PARAKEET***Psittacula krameri***Very scarce introduced breeding resident.**

This species continues to be scarce in the county despite being well established in some other parts of south-east England. As in previous years, most records were from the Brighton area, but there was no proof of breeding. There were singles at Hangleton on 17 Jan and 19 Mar, and roosting on the West Pier, Brighton, on 13 Sep and 12 Oct. Three in Stanmer Park on 23 Jan and at the University of Sussex, Falmer on 3 Feb were probably the same birds. Elsewhere, birds were reported at 5 sites as follows: 1 at Ardingly Res on 31 Mar, 1 in a Burgess Hill garden from 28-30 Aug and 2 there from 21-23 Dec, 1 at Hastings on 13 Oct, 1 at Bexhill on 18 Oct and, at Langhurst, 4 on 24 Nov and 1 on 13 Dec. The birds at Burgess Hill in December used seed feeders. [PJ]

0724. **CUCKOO***Cuculus canorus***Fairly common summer visitor.**

First recorded on 2 Apr at Millbrook, Ashdown Forest, 5 days earlier than the average for 1971-93. Birds were heard at 2 further sites on 6th. Typically, no large 'falls' were reported during the spring, the highest count being just 4 at Sidlesham Ferry on 28 Apr.

Breeding records included 5 pairs at Thorney Island and 2 pairs at Marline Wood, Hastings. A nestling at Billingshurst, fostered by Dunnocks, was seen from 13 July until 19 Aug. There were just 2 records for Sept while, in Oct, there were late singles at Seaford Head on 3rd and at Icklesham from 4th-10th. [PJ]

0735. **BARN OWL***Tyto alba***Scarce breeding resident.**

The monthly totals were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
24	18	7	2	25	47	105	20	10	4	11	24

The total of 297 sightings is an increase of 21 compared with 1997. It is likely, however, that the monthly totals have been boosted by a number of studies which took place in 1998. These probably boosted the total for July, as only 28 were recorded in that month in 1997. Contacts in the north, north-east and central regions of the county were few.

Breeding was confirmed at 62 sites, no fewer than 38 of these being in man-made boxes. This is an indication of how the efforts of conservationists can affect this species. Full results were available from 47 of these nests where 138 young were hatched. At the remaining 15 nests, 2 clutches failed to hatch, 6 clutches were laid but not followed up and, in 9 cases, the results were not known. Thirteen clutches ranged from 1 to 8 eggs and averaged 4.5. An average of 2.4 young was reared from 24 nests, with a range of 1-4. Nest sites, other than the boxes, included tree holes, derelict buildings and an old railway bridge.

Four road deaths were reported. [JTAB]

0757. **LITTLE OWL**

Athene noctua

Fairly common resident.

The monthly totals were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
12	22	23	8	18	21	19	14	14	14	23	9

The total number of birds recorded was 197 from 71 sites, well down on the 1997 figure of 267.

Records were thinly spread, with a big gap in central East Sussex. According to the *Birds of Sussex*, it has always been more common in the west of the county.

Birds were reported from 37 sites from April to July but breeding was confirmed for a total of 15-17 pairs at only 10 of these sites. The only 2 broods seen were of 3 and 4 young.

No road deaths were reported. [JTAB]

0761. **TAWNY OWL**

Strix aluco

Fairly common resident.

The approximate numbers recorded each month were:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
22	9	12	21	71	13	15	8	13	15	16	4

The total for the year was 219 but, allowing for duplication, a figure of about 185 individuals is more realistic. Not surprisingly, many of the records submitted were of calling birds. Reports were received from many parts of the county. The maximum counts came from Abbots Wood, Hailsham with 9 pairs and Friston Forest with 6 pairs. It must be assumed, however, that the remaining wooded areas in the county were not adequately searched for this species given that *Birds of Sussex* estimates the breeding population to be of the order 1000-2000 pairs. Breeding was confirmed for 30 pairs and birds were seen during the breeding season at a further 36 sites. At least 19 young birds were seen or heard. Outside the breeding season, records came from a further 29 sites which must represent potential breeding areas.

Four road deaths were reported. [JTAB]

0767. **LONG-EARED OWL**

Asio otis

Rare resident and very scarce passage migrant and winter visitor.

There were only 22 birds recorded from 13 different sites; the totals for each month, allowing for likely duplication, were:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
6	3	6	1	8	-	5	-	1	1	1	-

As expected, most sightings were of roosting birds; the largest group being of just 3 individuals at Rye Hbr on 1 and 10 Jan. A pair bred in East Sussex raising 3 young. On

20 May, a late migrant flew in from the sea and landed on the west arm of Brighton Marina (IJW). [JTAB]

0768. **SHORT-EARED OWL**

Asio flammeus

Scarce winter visitor and passage migrant. Has bred.

The number of sightings for the year was 146 but, allowing for likely duplication, a total of about 50 birds is more realistic. The following table, which shows the approximate monthly totals, emphasises the lack of birds in the first winter period with no records at all for February!

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
7	-	3	1	3	-	-	1	5	28	17	9

With the exception of 2 at Camber GC on 10 Jan, all the records for the first winter period were of singles. The only inland sightings were at Stretham Manor on 11 Jan and at Shermanbury on 12 April. The last of the spring was at Rye Hbr on 13 May.

The first recorded in autumn was at Icklesham on 6 Aug. Most subsequent records were again of singles; exceptions included 3 at Pevensey Bridge Level on 6 Nov and up to 7 at Thorney Island during November and December. Inland, there were singles at Amberley Wild Brooks on 6 Oct and at Pulborough Brooks intermittently from 29 Oct to 7 Dec.

A number of migrants included 1N at Galley Hill, Bexhill on 3 May and 3N at Selsey Bill on 8 Oct.

A bird which flew into overhead cables on Nook Meadows, Rye Hbr broke its wing. [JTAB]

0778. **NIGHTJAR**

Caprimulgus europaeus

Fairly common summer visitor rarely seen on migration. Species of Conservation Concern in Sussex.

The first record for the year was of 2 on 30 Apr on Lavington Common. This was followed by many records from 5 May onwards, including 1 bird which flew in off the sea at 09.55 hrs at Brighton Marina on 10 May.

Breeding season records this year were much in excess of those of previous years, with 183 territories reported, compared to 110 in 1997 and 140 in 1996. In West Sussex, 58 territories were reported from 20 localities, again more than last year. In East Sussex, there were 115 territories on Ashdown Forest and 10 at other sites.

The last records of the year were of a road casualty at Pett Level on 6 Sept and one trapped at Icklesham on 2 Oct. On the same date, a disorientated bird spent the day resting on top of a greenhouse in Ringmer before departing at dusk. [JB]

0795. **SWIFT**

Apus apus

Common summer visitor and passage migrant.

First recorded at Beachy Head on 12 Apr, 10 days earlier than the average arrival date during 1970-93 and a week before the next seen over Rye Hbr on 19th. Given that in some years few Swifts are seen before the end of April, counts of 40 at Rye Hbr on 26th and 54 at Chichester GPs on 30th were significant.

Counts for May were lower than those for last year, which was itself a poor spring for the species. The only 3-figure counts for the month were of 300 at Chichester GPs on 5th and 100 at Barcombe Res on 24th. Good numbers were recorded in June, particularly on 11th, when 685 flew W after a thunderstorm at Brighton Marina, 700 were counted at Chichester GP and 400 were seen at both Pagham and Rye Hbr. There were 250 at Bewl Water on 12 June and towards the end of the month there were *ca.* 1000 birds at Amberley Mount on 28th.

The largest count of the year was *ca.* 1200 at Pett Level on 13 July but other notable counts included 250 at Barcombe Res on 12 July, 300 over Broadwater, Worthing on both 19 July and 8 Aug, and 550 at Selsey Bill on 1 Aug. The last significant movement was 108E at Goring on 26 Aug. As usual, numbers then fell away very rapidly. During October, a total of 7 was seen, the last at Littlehampton on 12th.

Apart from 36 pairs in Bexhill and 3 in Durrington, Worthing, few breeding records were received. This species is the subject of a breeding survey in 1999 and 2000. [RPu]

0798. **ALPINE SWIFT**

Apus melba

Rare vagrant.

1997: The bird at Worthing on 14 May was not seen to arrive off the sea. It flew NE over a residential area of Broadwater, about a mile from the coast. [PJ]

0831. **KINGFISHER**

Alcedo atthis

Fairly common resident and probable winter visitor.

1997: The 2 at Arundel were on 4 Jan.

1998: Observations during the winter months were as follows:

	Jan	Feb	Nov	Dec
Number of birds	31	19	50	34
Number of inland sites	9	7	12	11
Number of coastal sites	9	6	18	11

There was a slight increase in overall numbers, mainly in November when the species was recorded at almost twice as many coastal sites compared to last year. In January-February, mainly single birds were recorded, with 2 seen together on only 4 occasions. The frequency of sightings of more than one bird in November-December may indicate an improvement in breeding success. The largest count for this period was of 3 at Pagham Hbr on 21 Nov.

Reports for the breeding season were of 3 pairs at Bewl Water and a single territory in the Millbrook area of Ashdown Forest. Adults with a juvenile were seen at both

Billingshurst and Cooksbridge, while at Weir Wood Res, there were 4 adults and 3 juveniles on 27 July. At Hassocks, an adult and 2 juveniles were seen flying over the village on 29 June.

A total of 11 was ringed at Icklesham. [DEGC]

0846. **HOOPOE**

Upupa epops

Very scarce spring and autumn passage migrant, has bred

Seven birds were recorded during the year compared to only a single in 1997. The first was at Plaistow on 7 Apr (JK) followed by 1 at Cow Gap, Beachy Head from 24-26 Apr (DPD, RTP *et al*). What was almost certainly a second bird was seen at Shooters' Bottom, Beachy Head on 25th (MK). A photograph of the widely appreciated Cow Gap individual appeared in *Birding World* (11: 130).

In autumn, there was 1 at Bewl Water on 6 Aug (RP) followed by another in a garden at Offham, near Lewes which stayed from 9 to 11 Sept (DCL). Two records in November may have referred to the same bird. The first on 14 Nov was at Roselands, Eastbourne (STU) while the second stayed in a garden at Willingdon from 19th to 21st (EW). This is the latest since 1970 when 1 was present at Climping during 21 Nov-6 Dec, although there have been 2 subsequent records for early November (in 1989 and 1992).

Forty-four have been recorded during the 1990s, half of them in April. [RJF]

0848. **WRYNECK**

Jynx torquilla

Very scarce passage migrant; has bred. Species of Conservation Concern in Sussex.

1997: The bird at Thorney Deepes was seen from 31 Aug to 4 Sept. The annual total should therefore be 9, not 10.

1998: Reports of 16 birds were received. There was only one spring record: a single at Arundel on 13 Apr.

The first recorded in autumn was at Marline Wood, Hastings on 29th. In September, there were reports of singles at Church Norton on 5th and 16th; Icklesham on 7th; Climping and Sedlescombe on 12th; Sheepcote Valley, Brighton from 12-19th, with a second bird there from 15-19th; Belle Tout, Beachy Head on 19th; and at Horsham on 24th, this bird being found in a bedroom and fortunately released unharmed! One on the west side of Pagham Hbr from 28 Sept to 1 Oct had the misfortune to be killed by a Sparrowhawk. The last records of the year were of a single at Thorney Island and 2 at Beachy Head on 4 Oct, and a single trapped and ringed at Icklesham on 13th. [LM]

0856. **GREEN WOODPECKER**

Picus viridis

Fairly common resident.

A total of 353 records was received from 152 sites across the county, with reports from 63 of the sites being in the breeding season. This continued the upward trend in reporting over recent years.

Estimates of breeding pairs included 3 at Thorney Island, 7 at Pippingford Park, Ashdown, and 2 at Old Lodge NR, Ashdown Forest, with 1-2 pairs reported from 49 other sites. Details of breeding surveys are given on page XX.

On 25 Feb, 7 were feeding on Upperton's Field, Pulborough Brooks. One seen feeding on Pilsey Island, Chichester Hbr on 18 Apr, was reported as only the second record for the site. A single was present on the seafront at West Worthing on 12 Aug. At Darwell Res, the maximum count for the year was 12 on 16 Aug. Two adults with two very recently fledged young were seen at South Stoke on 25 Sept. [LM]

0876. **GREAT SPOTTED WOODPECKER**

Dendrocopos major

Common resident.

A total of 212 records was received from 113 sites across the county, with reports from 73 of these being in the breeding season. The earliest territorial activity reported was on 5 Jan at Coates Common, Fittleworth. Estimates of breeding pairs included 7 at Pippingford Park, Ashdown Forest; 4 at Old Lodge NR, Ashdown Forest; 3 at Park Wood, Hellingly; and 4 at Marline Wood, Hastings. One or 2 pairs were reported from 29 other sites. Details of breeding surveys are given on page XX.

There were 4 records of movements at the coast: singles flying E at Galley Hill, Bexhill on 29 Mar and 6 Oct, flying W along dunes at Camber Sands on 6 Nov, and in off the sea at the Crumbles on 17 Nov. The latter bird landed in scrub. [LM]

0887. **LESSER SPOTTED WOODPECKER**

Dendrocopos minor

Fairly common resident.

Records were received from 51 sites across the county, 35 of them in the breeding season. Pairs, or territorial males, were reported from Stubbermere, Emsworth (2 sites); Stopham; Rackham Woods; Pulborough Brooks; Storrington (2 sites); Capite Wood, Dial Post; North Heath, Horsham; Nep Town, Henfield; Furners Fm, Henfield; Burlands Copse, Ifieldwood; Tilgate Park, Crawley; Ashdown Forest (3 sites); Bewl Water; Marline Wood, Hastings; and Fairlight.

A total of 106 records was received for this year, a significant increase over the 68 and 85 for the previous two years. All records, especially of territorial behaviour or confirmed breeding, are required for this species. [LM]

0974. **WOODLARK**

Lullula arborea

Very scarce resident and passage migrant. Species of Conservation Concern in Sussex.

In January, a total of 29 was recorded from 4 localities in West Sussex, the main concentration being of 20 at Coates Common, near Fittleworth. Song was heard on 5th and 11th.

During the breeding season, 60 territories were found at 29 localities in West Sussex and young were seen at 11 sites. This was a great increase over the figures for 1997. Two, possibly 3, pairs bred on Ashdown Forest, the first breeding records for many years. One

bird sang throughout the summer there, and 2 birds were singing at Broadwater Forest in mid-April.

After the breeding season, parties of up to 7 birds were recorded inland at the breeding sites with ones and twos reported on or near the coast from 27 Sept until 11 Nov. Seven were seen at Roedean on 9 Oct, a flock of 12 flew W at Beachy Head on 10 Oct, and 9 flew W at Selsey Bill on 26th.

There was a winter gathering of 24 at Coates Common on 16 Nov and 30 flew W in one flock at Amberley on 20th. [JB]

0976. SKYLARK

Alauda arvensis

Fairly common resident, passage migrant and winter visitor. Species of Conservation Concern in Sussex.

There were no really large flocks reported during the first winter period. At East Dean (East Sussex), there were 120 on 24 Jan and, on Thorney Island, 137 were on a stubble field on 3 Feb. These low numbers probably reflected the mainly mild weather during this time.

The first singing bird was noted on the early date of 12 Jan on Ashdown Forest and the second at Bewl Water on 28th. Thereafter, singing birds were recorded from many sites along the coastal plain, the Downs and Ashdown Forest. This distribution is likely to be a reflection of the activities of observers as much as that of the birds. Only about 250 singing males were noted, compared with the estimated county population of 14,000-18,000 pairs (*Birds of Sussex*). On Ashdown Forest, an estimated 57-64 pairs compares with 60 in 1997. The results were similar at other sites where comparisons could be made: at Rye Hbr there were 33 pairs in 1998 (29 in 1997), on Lewes Race Hill there were 6 (5 in 1997) and on a CBC plot at Yapton there were 4 in 1998 (3 in 1997).

Few flocks were reported in the second winter period. At Thorney Island, there were flocks of 60 on 7 and 14 Oct, and on 19 Nov there were four flocks totalling 184 there. On 5 Dec, there were 123 at Highdown, near Worthing. A male was still singing on 4 Oct on Ashdown Forest and the only movements reported were of 27W at Bexhill during October, with a peak of 17 on the 9th and 51W past Brighton Marina on 7 Nov. [RTP]

0978. SHORE LARK

Eremophila alpestris

Rare winter visitor

One was present on the beach near the mouth of the River Rother at Rye Hbr from 22-24 Mar (AJH, BJH *et al*) and 3 put in a brief appearance on the dam at Arlington Res on 13 Nov (PJW). Seventeen individuals have been recorded in the county during the 1990s, all between 18 Oct-21 Apr, with most in November. The only other to be recorded well away from the coast was at Chichester GP in January 1984. [RJF]

0981. **SAND MARTIN**

Riparia riparia

Fairly common summer visitor and very common passage migrant.

The first sighting was at Barcombe Res on 21 Mar, an average arrival date, 16 days later than the exceptionally early record in 1997. Parties of no more than 30 were noted at various sites from Thorney Island in the west, to Rye in the east, except for 150 at Barcombe Res on 21 Apr. 150 birds were over Pulborough North Brooks on 1 May, while 600 were seen going to roost at Combe Haven on 14 May.

Breeding records were from Sullington Sand Pit, Storrington (5 pairs); Washington Sand Pit (15 pairs); Duncton Sand Pit (a minimum of 20 pairs); Coates Common (5 pairs); and Nyewood Sand Pit (about 4 pairs). There was also a record of a pair feeding young in a nesting hole at Stedham Sand Pit on the late date of 20 Sept. No nesting took place at Rye Hbr.

About 1500 birds were at Church Norton, 250 at Thorney Island and 450 at Rye Hbr on 16 July. Larger flocks in August included 300 at the North Wall, Pagham Hbr on 14th; 230 at Pebsham on 19th; and 170 over Pett Level Pools and also 65 at Selsey Bill, both on 31st. Maxima of 1000 birds were reported from Barcombe Res and Weir Wood Res on 13 Sept, and 500 at Ivy Lake, Chichester GPs on 16th. The only double-figure count for Oct was of 25 at the last-named site on 8th. One at Pulborough Brooks on 30 Oct was the final record for the year. [MJM]

0992. **SWALLOW**

Hirundo rustica

Common summer visitor and abundant passage migrant.

Three very early records were of a single at Brighton Marina on 20 Feb (PJWh), and 3 at both Pett Level (JET) and Rye Hbr on 26th and 28th, respectively. There have been only 2 previous February records for the county, dating from 1914 and 1967! Numbers in double-figures were not seen until 6 Apr when 25 were over Barcombe Res.

Some 250 were at Selsey Bill on 22 Apr and a nest site, in a garage at Mill Hill, Shoreham was in use for its' 20th year by that date. Confirmed breeding records were received from a number of other sites including Bawl water (11 pairs), Plumpton (11 pairs), Foxhole Bottom, Cuckmere Valley (6 pairs), and Streat (5 pairs). The birds at Plumpton raised 88 young while those at Foxhole Bottom, which included 4 adults ringed in 1997, raised 33 young. Single pairs at Hardham had broods of 4 and 5 young respectively while 3 young were raised in a nest in a railway shed at Bulverhythe, St Leonards.

Around 400 birds were counted going to roost at Combe Haven on 14 May and 250 roosted at Thorney Deeps on 31 July. Autumn passage intensified towards the end of August, with 500 at Sidlesham Ferry on 29th and 227 at Selsey Bill on 31st. A total of 7500 birds flew E at a rate of 1500 per hr at Rye Hbr on 2 Sept; 1000 were at Weir Wood Res on 13th; 10,000 and 7000 at Pannel Sewer, Pett, on 19th and 20th respectively, and 1850 flew E along the shore at Bexhill in 2.3 hrs on 24th. The largest counts for October were 400E at Worthing on 4th; 700 at Church Norton on 7th; at least 1000 at Icklesham on 11th; and 350 at Church Norton on 15th, after which numbers dropped rapidly. The last of the year were 2 at Selsey Bill on 29 Nov. [MJM]

1001. HOUSE MARTIN

Delichon urbica

Common summer visitor and abundant passage migrant.

Three birds over Pulborough North Brooks on 5 Apr were the first for the year, while 300 there on 1 May was the largest count for the spring. The only other counts reaching 3-figures were of 100 at both Barcombe Res on 24 Apr and at Arlington Res on 1 May, and 200 at Bewl Water on 26 May.

Many more breeding reports were received for 1998 and the Society is grateful to observers who submitted records. The largest concentrations were at Plumpton Agricultural College (80 pairs); Knepp Castle (23 pairs); Maynards Green (23 pairs); Marle Green, Horam (11 pairs); Bewl Water (10 pairs); and Sheffield Park Station (10 pairs). At Birling Gap, 2 pairs nested on the cliffs for the first time since 1987. A pair at Wisborough Green did not start nest building before 5 July and 3 fledglings were last seen on 25 Oct.

There were 200 at Bewl Water on 12 July but only 4 records of 100 or more birds in August: 100 at Littleworth on 11th; 150 at Ladywells, near Coombes on 26th; 100 over Pulborough Brooks on 28th; and 200 at Whitbread Hollow, Beachy Head on 29th. Observers at the last site described the autumn numbers as 'awful', perhaps suggesting a poor breeding season.

Numbers grew in September, with 20,000 flying W or NW at Sheepcote Valley, Brighton on the morning of 13th. On the same day, 5000 flew W at Splash Point, Seaford, and 1000 were seen over Weir Wood Res. At Marline Wood, Hastings, 3000 flew W on 14th. Numbers at Whitbread Hollow were still very low, with 500 on 15 Sept the best count, instead of the usual thousands. The west of the county produced larger numbers, notably 2500 at Thorney Deepes on 17th, and 2000 and 5000 at Pagham Hbr on 17th and 19th respectively. Some 2000 were reported from the Pannel Sewer, Pett on 19 Sept and, a week later, 1000 flew E at Belle Tout, Beachy Head. Autumn movements continued with counts of 360E at both Worthing Beach and Bexhill and Hastings on 4 Oct. The monthly totals at the latter site were 1126E and 220W. There were 1000E at Cow Gap, Beachy Head on 7 Oct and counts of 300 at Pagham Hbr on 7-8th.

The final record for the year was of a single bird over Pulborough Brooks on 20 Nov, 8 days earlier than the average last date for 1965-93. [MJM]

1009 TREE PIPIT

Anthus trivialis

Fairly common but local summer visitor and passage migrant.

The first bird to be recorded was singing at Cripps Manor, Ashdown Forest on 31 Mar, near the average arrival date. First records for this species often come from the breeding areas but 1998 was unusual in that only 5 were reported on spring passage. Was this a fluke of under-recording, or is it a matter for concern?

During the breeding season, a total of 47 territories was reported in West Sussex at 20 different sites. This figure includes 10 territories on Woolbeding Common but no more than 4 at any other site. In East Sussex, the majority of breeding records were for Ashdown Forest where up to 94 territories were located, including 19 pairs in the 200ha of Pippingford Park (as in 1997). A further 10 territories were located away from Ashdown Forest including 5 in Broadwater Forest.

The first autumn migrant was a very early bird at Littlehampton on 19 July followed by singles at Beachy Head and Combe Haven on 2 Aug. Passage became more evident from

10 Aug. Beachy Head provided all but one of the 8 double figure day totals during the autumn including 20 on 16 and 28 Aug, 24 on 12 Sept and 29 on 4 Oct. About 69 birds were recorded in the county in September and 130 in October. Following daily records up to 11 Oct, the last recorded were 8W at Hastings on 13th. The abrupt end to passage and perhaps the absence of birds from coastal sites in spring, might suggest a very successful migration strategy. The total number reported in autumn was just over 300, better than the 172 in 1997, but well down on the 569 in 1996 and the 674 in 1993. A total of 200-300 characterises 'a typical autumn' (*Birds of Sussex*).

A total of 40 was ringed at Icklesham. [CB]

1011 MEADOW PIPIT

Anthus pratensis

Locally common resident, very common passage migrant, winter visitor.

Significant numbers were found at a variety of locations in January including 100+ at Sidlesham SF, 55 on Weaver's Down, Liss, 50 on the river bank at Ford, 30 at Danny, Hurstpierpoint, and 32 in two separate flocks on Ashdown Forest. The wide-ranging distribution continued into February, when numbers increase as birds move into (and through) the county. There were 85 at Church Norton on 5th, 100 roosting at Lavington Common on 14th, and flocks of 62 and 50 on Ashdown Forest on 14th and 19th respectively. Birds were noted moving north from early March with 28 over Cuckmere Haven in 10 mins on 8th, just as breeding birds began displaying. Numbers at the Lavington roost had fallen to 22 by 15 Mar and 46 were at Pulborough Brooks and 100 on the shingle at Church Norton on 19th. Major movements occurred in the second half of the month with 160N off the sea at Belle Tout on the morning of 28th and 200W at Cuckmere Haven on 29th, when 200 came in at Pagham Hbr. There were 82 at Selsey Bill as late as 10 Apr and 20 were at Seaford Head on 15th.

Breeding records were incomplete. There were 55 pairs in the Seven Sisters CP, but they raised only 20 young. Rye Hbr held 17 breeding pairs and there were 7 pairs on Pilsey Island. Other breeding records came from river valleys and Downs and from Ashdown Forest, where there were about 20 pairs.

A concentration of up to 50 birds was noted at Newhaven Tide Mills from early August, but there were few other records for that month. Movements, mainly to the east, were noted in September. For example, at Bexhill and Hastings, 1170 flew E in 4.3 hrs between 21st and 24th, with a further 280E in 1.6 hrs on 26th. On the same day there were 500-600E per hr at Rye Hbr. At Splash Point, Seaford, 100 in 1 hr on 13th and 500 at Burpham on 29th were the only westerly movements. Substantial movements continued through most of October, mainly to the east up to 9th, with westerly movements between 10th and 13th. The peak counts, at Beachy Head, were 390E and 30W in 2.8 hrs on 9th and 614W in 5.7 hrs between 10th and 13th. The last recorded movements were 165 at Selsey on 19th and 140, also at Selsey on 26th. On 4 Oct, 400 were seen on a field of stubble at Thorney Island. Coastal movements obviously exceeded those from inland, but interesting counts away from the immediate coast included 144 at Marline Wood, Hastings on 14 Sept, at least 60 in a sheep grazed field on Harrow Hill, Patching on 30 Sept; and 33 at Bawl Water on 11 Oct.

The distribution in November and December was, as early in the year, widespread with maximum counts of 60 at Chelwood Beacon, Ashdown Forest on 6 Nov and 50 at both Newhaven Tide Mills on 10 Dec and on Lavington Common on 20 Dec. A number of

smaller counts were received and presumably there were very many other small groups wintering in the county. [CB]

1014 **ROCK PIPIT**

Anthus petrosus

Very scarce resident, fairly common passage migrant and winter visitor. Rare away from the coast.

January records were for 16 localities, the highest numbers being 14 at Apuldrum on 14th and 25 at Sidlesham SF on 31st, the latter a very high count not matched since 1993. There were records for a further 6 localities in February, when the maximum was 17 on the saltings at Pagham Hbr. The wintering birds left in March with the last being seen at Shoreham Hbr on 27th.

Breeding was recorded only at Brighton Marina, where 3 young fledged. There were, however, breeding season records for other sites between Brighton and Newhaven, and for Splash Point, Seaford.

In both October and November, the sole double figure counts came from the lower Cuckmere Valley (17 on 8 Oct, 23 on 4 Nov, 25 on 19 Nov and 10 on 7 Dec). Reports came from 16 sites in November but from only 9 in December.

There were no inland records during the year.

The decline in the breeding population, noted in *Birds of Sussex*, is clearly proceeding and apparently the species is on the verge of disappearance. The reduced numbers on passage and in winter suggest that the decline in Sussex is merely part of a larger problem.

A single bird in summer plumage showing the characteristics of the Fenno-Scandinavian race, *A.p. littoralis* was recorded at Brighton Marina from 18-22 Mar (KBG, ADW, IJW). [CB]

1015 **WATER PIPIT**

Anthus spinoletta

Scarce winter visitor and passage migrant.

There were only 3 substantiated records: singles at Icklesham on 24 Jan (RJF), Sidlesham SF on 31 Jan (AH) and at Newhaven Tide Mills on 1 Mar (JSG). [CB]

1017 **YELLOW WAGTAIL**

Motacilla flava

Scarce and localised summer visitor and common passage migrant.

Spring passage was noted from 30 Mar to 18 May. There were rather more concentrations than usual, notably 20 at Rye Hbr on 8 Apr and 52 at Northpoint Pit, Rye on 18th. A total of 64 roosted at Combe Haven on 14 May and there were 15 at Middle Bridge, Pevensey Level the next day.

At least 12 pairs nested around Rye Hbr, perhaps only half the number recorded in 1997 (*cf.* 66 pairs there in 1990). On the positive side, there were a remarkable 7 pairs around Plumpton. Only one pair remained faithful to the Brede Valley where there were 18-23 pairs in 1994.

The decline in breeding in the county was matched by a considerable reduction in the scale of autumn passage, with very few records from north of the Downs. Only one was noted at Bewl Water, the "worst year on record". Double figure counts of birds on return passage began with 10 at Pagham Hbr on 19 Aug. On 25 Aug, there were 50 at Sidlesham Ferry and 38 at Climping. The maximum for the month was the 235 roosting at Pagham Hbr on 30th. The same day, there were 30 on the Downs at Cissbury Ring while 100 were at Crowlink on 31st. In September, there were 21 double figure counts with 70 at New Salts Farm, Lancing on 27th the peak. A total of 35 birds was reported in October, with the last at Cuckmere Haven on 26th, other than an exceptionally late bird at Atherington on 20 November (CAH). Apart from 4 apparently over-wintering birds in 1947, 1960/61, 1967 and 1973, one reported from Hove on 21 Nov 1926 just maintains its position as the county's latest.

A male of the continental race *M.f. flava*, Blue-headed Wagtail was recorded at Bewl Water on 26 Apr (AJH).

Single pale-headed males at Rye Hbr on 29 Apr and 14 May (PJW) and at Pevensey Bridge Level in late May (SL *et al*) showed some characteristics of the western Siberian race *M.f. beema*, Sykes Wagtail, but were more likely to be Yellow x Blue-headed Wagtail hybrids. The former bird was thought to have probably bred. [CB]

1019 GREY WAGTAIL

Motacilla cinerea

Fairly common resident, passage migrant and winter visitor.

There were records from 13 localities in January, including, oddly, West Harting Down (where presumably the same bird was also noted on 8 Feb). Two were at Ringmer SF and on Thorney Island, with 3 at Apuldram. There were records from several sites in February and March where birds had not been reported the previous month. It is hard to discern whether this was because passage birds were arriving, or rather because birds were newly discovered. A wintering bird in Preston Park, Brighton left on 3 Mar.

Breeding season records came from 21 localities; several 1997 sites appear not to have been used in 1998. Three young were seen on a factory roof at Chichester in early April and a party of 9 at Barcombe Res on 5 July included 4 juveniles.

Post breeding movement was noted from 3 July when a bird was at Preston Park, Brighton, and then 19 Aug when a bird flew over Broadwater, Worthing. On 21 Sept, 4 were on a barn roof at Bower Fm, Chailey, with 3 Yellow Wagtails and 3 Pied Wagtails. It is striking that only 6 of the 49 September records came from inland. Do birds really leave the vicinity of their breeding territories at this stage? On the coast, birds moved through while others lingered. One at Hastings stayed from 19 Sept to the end of November. There were more inland records in October, especially from 6th. Birds found specific habitats to their liking, for example, the slurry pit at Stapleash Fm, Chilgrove; the village stream in Hassocks (a previous breeding site); and Scrase LNR at Lindfield. The year ended pretty much as it had begun with December records of 17 birds (including 5 at Weir Wood Res) from 11 sites, 6 of them inland and 5 on the coast. [CB]

Common resident, passage migrant and winter visitor.

Four substantial roosts were recorded in the first 3 months of the year: 325 at the Seaboard offices in East Worthing on 20 Jan; and 150 at the Princess Royal Hospital, Hayward's Heath on 27 Jan, at Tescos in Lewes on 26 Feb, and at Hollington, St Leonards on 11 Mar. Other roosts were at predictable locations including 80 at Thorney Island, 75 at Apuldram and 30 at Shoreham Hbr. A count of 80 in Benson Rd., Henfield was less expected and shows the ability of this species to overlay regularity with unpredictability. Few significant records of spring passage were received, though the maximum at Ivy Lake, Chichester GPs was 75 on 17 Mar, coincident with an increase noted in Preston Park, Brighton on 17-18th. The last bird left Preston Park on 31 Mar.

Many records of single pairs were submitted. Three pairs bred at Rye Hbr and 6 pairs at the Seven Sisters CP raised 17 young. Five young were believed to have fledged from a nest on a launch in Chichester Hbr (perhaps that mentioned last year?) and 2 from a railway shed at Bulverhythe. Three pairs at Brighton Marina raised 6 broods with 18 young. Details of breeding surveys are shown on page XX.

The second half of September and the first week in October saw a typical movement of birds along the coast, almost exclusively to the east. Subsequent movement were largely to the west although there were 9N over Bexhill on 7 Oct. High counts included 287 around Goring Gap on 9 Oct and, at Selsey Bill, 365 on 12th, 245 on 15th, 160 on 20th and 55 on 26th. There were 3 flocks totalling 60 birds at Bewl Water on 8 Oct and 51 at Stonehills Car Park in Ashdown Forest on 26th. The first birds flying over Preston Park in the early morning were on 21 Sept while the first birds on the ground there were on 8 Oct.

The substantial roosts at the end of the year were at sites not used at the start: 200 at ASDA, Hollingbury on 10 Nov; 300 in Eastbourne on 11 Dec; and at least 200 at Brighton Marina on New Year's Eve. Observers at the reservoirs commented on the scarcity of the species at the end of the year with maxima of only 3 in November and 1 in December at Weir Wood and 3 in November and 2 in December at Barcombe.

The first birds showing the characteristics of the nominate continental race *M. a. alba*, White Wagtail, were 2 at Pilsey Island on the very early date of 10 Feb. The next was on the more usual date of 7 Mar. About 30 were seen up to 22 Apr, with further singles at the North Wall, Pagham Hbr on 19 and 30 May. Subsequent records were of singles at Weir Wood Res on 26 July and 12 Oct and at Durrington on 26 Sept. [CB]

1066. **WREN***Troglodytes troglodytes***Abundant resident.**

Counts from surveys during the breeding season can be found on page XX. Additionally there were 26 in Marline Wood, Hastings, an increase on last year attributable to coppicing. Figures from CBCs at Marsh Fm, Yaptan; Grantleys Fm, Maynards Green; and at Barn Copse, Binsted shown on page XX give a breeding density of 51 pairs per km², a figure comparable with the 55 pairs per km² for broad-leaved woodland quoted in *Birds of Sussex*.

Records for outside the breeding season included a maximum count of 49 at Old Lodge NR, Ashdown Forest in October. A count of 10 at Beachy Head on 14 Aug may have indicated post-breeding dispersal. At Cissbury Ring, 38 new birds were ringed during the year. [JAH]

1084. **DUNNOCK**

Prunella modularis

Abundant resident.

Counts of breeding birds in defined areas are shown on page XX. Additional to these were 26 pairs within the Rye Hbr SSSI and 9 pairs in 7ha at Hotham Park, Bognor Regis. The figures from the surveys give an average breeding density of 27 pairs per km² compared with a probably more representative 10 pairs per km² quoted for the county in the *Birds of Sussex*.

Significant numbers in the autumn involved an unusually high 15 at Whitbread Hollow, Beachy Head on 19 Sept (usually 6-10 at this time of year), followed by a count of 50 there on 9 Oct and at least 50 at Pagham Hbr on 18th. A completely albino bird was seen in Sheepcote Valley, Brighton on 24 Dec. At Cissbury Ring, 59 new birds were ringed, involving from 1 to 7 per session. [JAH]

1099. **ROBIN**

Erithacus rubecula

Abundant resident, passage migrant and winter visitor.

Counts of breeding birds in defined areas are shown on page XX. Additionally, there were 21 pairs on Romany Ridge Common, Chailey, 15 pairs in Marline Wood, Hastings and smaller numbers at several other sites including Rye Hbr, where just 5 pairs were found within the SSSI.

The first significant autumn influx was of 40 at Whitbread Hollow, Beachy Head on 2 Sept, followed by a very high count for Galley Hill, Bexhill of 34 on 4 Oct. A total of 44 were trapped at Icklesham on 10 Oct and no less than 200 were counted at Whitbread Hollow, Beachy Head on 9th. The latter appears to be the largest day total for a single site in Sussex

A total of 89 new birds was ringed at Cissbury Ring and 185, the best total since 1977, at Whitbread Hollow. [JAH]

1103. **THRUSH NIGHTINGALE**

Luscinia luscinia

Very rare vagrant

A juvenile trapped at Icklesham on 11 Sept (RBRG) has been accepted by *British Birds* and is the 2nd county record. The first was also trapped, at Beachy Head in August-September 1984. [RJF]

1104. **NIGHTINGALE**

Luscinia megarhynchos

Fairly common summer visitor and infrequently seen passage migrant.

Once again, the first records were remarkably early, with one seen at Ditchling Common on 29 Mar and another singing near Mountfield on 30th. More typical was the arrival date of 9 Apr at Pulborough Brooks, and thereafter there were records for most days until June. At least 42 birds had been recorded from 28 different sites by the end of April, with maxima of 4 at Powdermill Res on 26 Apr, and 3 at both Polegate on 26 Apr and at Pulbrough Brooks on 22nd. By the end of June, a further 111 from 43 additional

sites had been noted, with high counts of 12 at Plumpton and 8 pairs at Marline Wood, Hastings. The last heard singing was at Houghton on 11 July. The total of about 153 singing birds is the highest recorded since the last survey year in 1980 and, as usual, most were found in West Sussex with potential breeding birds recorded from 47 tetrads compared with 21 tetrads in East Sussex.

With the exception of singles at Cissbury on 9 Aug and at Marline Wood on 16th, all the autumn records were from Icklesham and Whitbread Hollow, Beachy Head. A total of 15 was ringed at the former site while at the latter, about 12 birds were recorded on 9 dates between 1 and 25 Aug, with 3 on both 14th and 15th. There were also singles on 12 and 20 Sept. [JAN]

1106. **BLUETHROAT**

Luscinia svecica

Very scarce spring and autumn visitor

An apparently exhausted adult male was seen on a Bexhill pavement on 29 Mar (JGR) and a juvenile female was trapped at Icklesham on 11 Sept (RBRG). The first of these records was of the white-spotted form (*L.s.cyanecuta*) and recalls a similar male at Cuckmere Haven in March 1996, while the other is the 6th to be trapped at Icklesham in September (and preceded the Thrush Nightingale by a little over 2 hrs). Fourteen have been recorded during the 1990s, in March (2), May (1), August (1), September (7) and October (3, all trapped at Icklesham). [RJF]

1121. **BLACK REDSTART**

Phoenicurus ochruros

Rare resident, fairly common passage migrant and scarce winter visitor.

The approximate monthly totals were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
17	10	34	14	6	1	-	-	-	11	26	17

Between 15 and 20 birds were recorded during the early part of the year, the highest number being 4 at Newhaven Tide Mills on both 26 Jan and 4 Mar. The records show a small, but clear, peak in passage in late March coincident with 2 seen arriving from the sea at Beachy Head on 28th. There were fewer sightings into April and May with singles at Denton, Newhaven on 19 May and at Shooters' Bottom, Beachy Head on 4 June being the latest migrants. Throughout this period most were recorded at coastal sites but singles were seen at Ashcombe Bottom on 1 Feb and at 5 other inland sites between 12 Mar and 16 Apr.

A pair seen on 25 May in an older residential area of Bexhill may have been nesting but they were not recorded subsequently.

The first autumn bird was at Southwick Beach on 11 Oct, thereafter ones, and occasional twos, were recorded all along the coast with the highest count of 4, again at Newhaven Tide Mills, on 15 Nov. There were just 5 individuals seen between October and December away from the coast, the last at Wivelsfield on 22 Dec. [DEC]

1122. **REDSTART***Phoenicurus phoenicurus***Scarce summer visitor and fairly common passage migrant.**

The first recorded arrivals were a female at Cissbury Ring on 30 Mar and a male there on 1 Apr, a slightly earlier first date than the average of 3 Apr for 1970-93. From 6 Apr onwards there were reports of ones and twos inland and on the coast, with 3 at Church Norton on 21st and 4 at Beachy Head on 25th. The latest migrant was on 13 May at Thorney Island.

The first territorial behaviour noted was on Ashdown Forest on 22 Apr and thereafter singing males and pairs were found on 33 sites there, an increase of 12 compared with 1997. No fewer than 25 singing males were noted in Pippingford Park, Ashdown Forest. There were no other breeding records for East Sussex. In West Sussex, there were 11 territories at 6 localities.

The exodus began in early August, with small counts almost daily along the coast. The highest counts were of 10 at Beachy Head on 30 Aug and 7 at Church Norton on both 28 Aug and 3 Sept. The records submitted indicated that the main emigration took place throughout September. The last bird of the year was at Pulborough Brooks on 25-26 Oct, a week earlier than the average last date for 1972-93. [JB]

1137 **WHINCHAT***Saxicola rubetra***Rare summer visitor and fairly common passage migrant.**

The approximate monthly totals, allowing for likely duplication, were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
-	-	-	6	20	-	1	121	374	40	1	-

The first recorded in spring was a male at Rye Hbr on 24 Apr, 12 days later than the average arrival date for 1970-93! Subsequent records in a poor spring up to 25 May were of ones and twos, the only exception being 14 at Church Norton on 5 May.

There were no breeding reports this year, but there was a characteristically early July record for Church Norton on 8th.

Autumn passage was protracted and never concentrated. The daily maximum for August was 10 at Steyning Round Hill on 30th; that in September was only 18 at Beachy Head on 3rd and Church Norton on 4th. The total for October, which was substantially higher than the 13 recorded in 1997, included only 5 birds away from the coastal strip. The daily maximum was 6 in the lower Cuckmere Valley on 2nd. The last bird was recorded at Thorney Deeps on 4 Nov, 6 days later than the average for 1970-93. [CB]

1139 **STONECHAT***Saxicola torquata***Scarce resident and partial migrant.**

A total of 45 birds was noted in January. Most of these were inland, though 9 were at Thorney Island on 29th. The 57 reported in February were similarly divided between the coast and the inland breeding areas, notably Ashdown Forest and the western commons. Only one record came from the Downs, a pair at Falmer on 14th.

During the breeding season, 28 territories were reported in West Sussex at 17 different sites. A total of 23 territories was reported for East Sussex at 12 sites, excluding Ashdown Forest, where the intensity of occupation makes estimating numbers difficult. The largest concentrations were 6 pairs at both Hope Gap and Woolbeding Common and 5 pairs in the Seven Sisters CP. There were scattered pairs on the Downs (e.g. at Cissbury Ring and West Dean Woods) and near the coast (e.g. at Fairlight, Newhaven Tide Mills, Peacehaven and Thorney Island). Breeding success was variable with 25 young raised in the Seven Sisters CP but only 4 young at Hope Gap. Single juvenile birds at both Barcombe Res and Weir Wood Res on 26 July were indicative of post-breeding dispersal.

The first autumn bird to appear around Pagham Hbr was on 7 Sept; Sheepcote Valley recorded its first on 18 Sept with a maximum there of 9 on 30th. Birds were widely distributed during the autumn. Apart from 19 between Cuckmere Haven and Seaford Head on 27 Sept, the only double figure counts came from Thorney Island, perhaps the local breeding pairs reinforced by incomers. Some 50 birds were recorded from 21 sites in December. Several sites appear not to have been occupied in the winter. At Ambersham Common, for example, the last record was of 8 on 9 Nov.

There were 3 records of association with Dartford Warblers this year. At a site in the west of the county, a pair of Stonechats was seen with a pair of Dartford Warblers on 5 Mar. Stonechats also accompanied single Dartford Warblers at Newhaven Tide Mills on 17 Oct and at Belle Tout, Beachy Head the following day. *BWP* comments on relations between the 2 species and suggests that the Dartfords might (like several other species of pipit, warbler, finch and bunting) gain advantage from the 'greater vigilance' of the Stonechat. [CB]

1139. SIBERIAN STONECHAT

Saxicola torquata maura/stejnegeri

Very rare vagrant

A female or 1st-winter showing characteristics of one of the eastern races (*maura* or *stejnegeri*), and colloquially known as Siberian Stonechat, was found near Lime Kiln Cottage, Rye Hbr, on 29 Oct (PMT *et al*). It has been accepted by *British Birds* and is only the 2nd county record, although one at Beachy Head during 8-10 Oct would pre-date it were it to be documented. The 1st county record was at Selsey Bill in Oct 1994. [RJF]

1146. WHEATEAR

Oenanthe oenanthe

Very scarce breeding summer visitor and common passage migrant.

The first arrival, a male, appeared at Castle Farm, Rye Hbr on 8 Mar. Thereafter, singletons, for the most part, were recorded on the coast until 25th when there were 10 at Church Norton. That a fall had taken place on that date was underlined by a further 12 birds at Selsey Bill and, further east, 30 at Sheepcote Valley, Brighton. Spring migration continued with 34 at Worthing Beach on 28 Mar, another count of 34 at Bexhill the same day, and 35 at Beachy Head. Substantial numbers were still passing through into April, with some 24 at Sheepcote Valley on 11th.

Breeding was noted at Rye Hbr where there were at least 8 pairs present on the Beach Reserve, 4 of which were seen with young out of the nest. In the Seven Sisters CP, 4 pairs had 12 young and by mid-June, a pair at Southwick Beach had fledged 3 young. A pair at Newhaven Tide Mills was seen with 3 newly-fledged young on 23 July.

Small numbers were recorded at many localities throughout May, June and July, both on the coast and inland. The first signs of return passage were in August when 22 were at Church Norton, on 5th. On 16th there were 30 along the shoreline of Thorney Island and 12 were counted at Bullock Down, Beachy Head. Further counts during the month were of 11 at both Church Norton and Thorney Island on 25th and 20 at Steyning Round Hill on 28th. Although numbers were beginning to thin out by early September, 19 were at Church Norton on 4th and 20 at Steyning Round Hill on 6th. Numbers were small, thereafter, apart from 19 at Thorney on 6 Oct. A male and a female at Hodcombe, Beachy Head on 18th may have been of the Greenland race, *O.o. leucorhoa*.

Singles, for the most part, were recorded at various localities into November, the last bird for the year being recorded at Castle Water, Rye Hbr on 10th. [LGH]

1186. RING OUZEL

Turdus torquatus

Passage migrant, scarce in spring, often fairly common but local in autumn.

A year with records of only 18 birds in spring, compared with the previous 10-year average of 30, but with a high total of 418 in autumn (average 174). This was the highest autumn figure since 1988 when almost 500 were recorded. The approximate monthly totals were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
-	-	6	12	-	-	-	-	15	380	23	-

The first arrivals were singles at Seaford Head and Pulborough Brooks on 28 Mar followed by 4 at Church Norton the next day and a single in the lower Cuckmere valley on 30 Mar. During April, singles were seen at sites along the coast from Selsey Bill to Rye Hbr and inland at Cissbury Ring and Hollingbury Camp. The last was at Halseys Fm, Sidlesham on 27 Apr.

The autumn influx began with a single at Whitbread Hollow, Beachy Head on 5 Sept. At Sheepcote Valley, Brighton, 4 were observed on 25 Sept with a different 4 the next day and then 2 until 29th. Small numbers were seen at Beachy Head until 4 Oct when a number of sizeable flocks were seen at different locations. At Whitbread Hollow, 3 flocks totalling 74 birds were counted while reports of 46 at Shooters' Bottom and 21 at Cow Gap were also received. On the same day there were also records from Brighton Wild Park (2), Cuckmere Haven (4), Elms Farm, Icklesham (21), Rye Hbr (2) and, inland, a single on Ashdown Forest. Birds continued to be reported from Beachy Head until 15 Oct with a maximum of 60 at Cow Gap on 7th. Unprecedented numbers were also seen on Ashdown Forest during this period. On 5 Oct, 15-20 were seen around Camp Hill and from 7-10th a flock of 10 was reported from the Roman Road area. This compares to a maximum of 3 and an average of just over 1 per year since 1987. In November, there were records from Brighton (Sheepcote Valley and Wild Park) and Beachy Head, with the last of the year at Rye Hbr on the 8th.

The influx in October was also reflected in Kent where quite exceptional numbers, far exceeding those in Sussex, were recorded. [LM]

1187. BLACKBIRD

Turdus merula

Abundant resident and winter visitor: perhaps a passage migrant.

All the long-term breeding surveys and regular winter counts in rural areas and at urban sites have shown a sharp decline over the past 5 years, so the population may not be as stable as once thought. Nevertheless, the Blackbird remains one of the most numerous and ubiquitous breeding birds throughout the county.

In the winter, 90 were recorded along the North Wall, Pagham Hbr on 2 Feb, and 50 on 29 Mar.

The first of many breeding reports came from Horsted Keynes on 17 Mar. There were 34 breeding pairs within the Rye Hbr SSSI, and 22 pairs in Marline Wood, Hastings. Twenty-two pairs reared 37 young at Plumpton Agricultural College. More counts of breeding Blackbirds in defined areas can be found on page XX. The last breeding report of the season came from Ashdown Forest on 3 Aug, with a female attending 2 young in the nest.

In the autumn, 27 migrant birds were seen at Galley Hill, Bexhill on 4 Oct, and 37 flew in from the sea, landing in gorse bushes at the same location, on 17 Nov. Among other autumn counts, 40 were seen at Sidlesham Ferry on 18 Oct, 58 at Hollingbury Camp on 27 Nov, and 42 at Darwell Res on 6 Dec. [RK]

1198. FIELDFARE

Turdus pilaris

Common to abundant passage migrant and winter visitor.

Relatively few records were received for the early part of the year, with no reports of flocks in excess of 200. By adding the maximum monthly numbers in each 10km square, it is again possible to obtain a rough picture of the distribution of the species across the county:

Easting	Jan	Feb	Mar	Apr
SU/SZ 70-99	474	198	111	-
TQ/TV 00-49	649	562	424	23
TQ/TV 50-99	340	280	190	29

As in 1997, the largest numbers were recorded in TQ/TV 00-49, especially in the river valleys of the Arun and Ouse. The last of the spring were 3 at Weir Wood Res on 19 Apr.

The first autumn record was of 1W over Ashdown Forest on 25 Sep. Just 15 were reported in October. In November, however, there were 600 in fields adjacent to the North Wall at Pagham Hbr and 300 at Kingley Vale on 26th and 400 on Beeding Hill on 29th. In December, 1200 flew SE from an orchard at Hartfield in 1hr on 16th. In an otherwise poor month, the only other large flocks reported were of 300 at Chilgrove, also on 16th, and 200 at Pulborough Brooks the following day. [PJ]

1200. SONG THRUSH

Turdus philomelos

Decreasing resident and partial migrant; abundant passage migrant and very common winter visitor. Species of Conservation Concern in Sussex.

Records began with one in full song at Upper Beeding on 10 Jan. There was a quarterly maximum of 6 at Hotham Park, Bognor Regis on 21 Jan, and 14 at Pagham Hbr on 5 Feb. A winter census recorded a maximum of 2 at Marsh Fm, Yapton on 12 Feb.

Breeding records included 4 pairs at Thorney Deepes, 8 pairs at Marline Wood, Hastings and 12 pairs with 16 young at Plumpton Agricultural College on 1 June. More counts of breeding Song Thrushes can be found on page XX.

A quarterly maximum of 7 was counted at Hotham Park on 7 July.

Autumn brought a substantial influx, with 26 at Hotham Park on 24 Aug, 30 at Icklesham on 3 Oct and 20 at Shooters' Bottom, Beachy Head, on the same date. There were 34 at Gatehouse Fm, Trotton on 7 Oct, 21 in a single yew bush at Hollingbury Camp on 8th, some 40 at Church Norton on 9th, 30 at Shooters' Bottom on 10th and 25 at Whitbread Hollow, Beachy Head on 15th. The latter count was considered low for the time of year, however. Two continental birds of the nominate race were trapped at Whitbread Hollow on 26 Sept and singles on 4 and 9 Oct.

Singles, singing, were noted at Shoreham on 23 Nov and at Upper Beeding on 28th. [JLN]

1201. REDWING

Turdus iliacus

Abundant passage migrant and very common winter visitor.

Given that observers tend to submit only those records which involve exceptional numbers of this species, it may be that the few reports received for the early part of the year do not accurately reflect its true status. It is possible, however, to obtain a rough picture of the distribution across the county by adding the maximum monthly numbers in each 10km square:

Easting	Jan	Feb	Mar
SU/SZ 70-99	53	550	456
TQ/TV 00-49	466	571	663
TQ/TV 50-99	10	50	151

As with Fieldfare, the largest numbers were recorded in TQ/TV 00-49, especially in the river valleys of the Arun and Ouse, a pattern that may reflect the distribution of birdwatchers rather than birds! The apparent slight increase in March may reflect return passage through the county, especially as there were heavy nocturnal movements on 16th and 26-27th. The last recorded was on 1 Apr at Hastings.

The first autumn records were of 2 at Weir Wood Res on 12 Sept (12 days earlier than the average for 1970-93) and 2 at Icklesham on 28th. A number of movements in October included 490W over Ashdown Forest on 15-16th and 106W at Bexhill on 19th. The only large flocks reported for November were of 200 at Weir Wood Res on 2nd and 500 coming in to roost at Kingley Vale on 26th. A handful of reports for December included 300 at Hurstpierpoint on 12th and 150 at Pulborough Brooks on 17th. [PJ]

1202. MISTLE THRUSH

Turdus viscivorus

Very common resident and partial migrant.

The maximum count for January-March at Warnham LNR was 4 on 25 Jan, while at the Old Lodge NR, Ashdown Forest, there were 5 on 15 Mar. Further reports included 5 at West Dean on 28 Jan, 12 at Pulborough Brooks on 25th and 20 at the same site on 12 Mar.

Breeding season records included 6 pairs at Rye Hbr, and 4 pairs at Marline Wood, Hastings. More counts of breeding pairs in defined areas can be found on page XX.

Following a flock of 9 at Pulborough Brooks on 7 June, further gatherings were noted elsewhere in the county: 26 at Chichester GPs on 11 June; 38 at Harrow Hill, Patching on 28 July; 40 at Yew Tree Fm, Balcombe on 1 Aug; and 20 at Pulborough Brooks on 20 Aug. This was followed by a monthly count of 22 at the Old Lodge NR, Ashdown Forest on 23rd, 32 on a field of cut barley at Barcombe Res on 29th and 19 in elder bushes at Falmer Bottom on 31st.

Autumn records included 25 and 18 at the Old Lodge NR on 1 Sept and 18 Oct respectively, 10 at Wych Cross, Ashdown Forest on 3rd, and 10 at Barcombe on 5th. Further early winter records were of 5 at Barns Copse, Binsted on 1 Dec and a maximum of 2 during a winter census at Marsh Fm, Yapton on 16th. [JLN]

1220. CETTIP'S WARBLER

Cettia cetti

Very scarce resident, passage migrant and winter visitor.

At Icklesham, 2 females were present at the beginning of the year, and again from October onwards, with a male also recorded on at least 16 Dec. At Thorney Deeps, single birds were recorded up to 1 April, and again from 24 Sept to 19 Nov and, at Arundel WWT, on 19 and 22 Feb and 22 April.

At other sites, there were breeding season reports of singles at Filsham Reedbed on 24 Apr, Rye Hbr on 4 May, Streat on 4 and 21 May, Combe Haven on 14 May, and by the River Arun near Houghton on 30 May. The Streat bird was trapped on 1 June at the same site as a bird was ringed in 1997. There were, however, no records of confirmed breeding this year. Finally there were singles at Castle Water, Rye Hbr on 26-27 Nov and at Combe Haven on 29 Nov. [VPB]

1236. GRASSHOPPER WARBLER

Locustella naevia

Very scarce and declining summer visitor and fairly common passage migrant.

The first arrival was a male reported at Paghham Lagoon on 14 Apr. Other April records were of singles at Weir Wood Res and Galley Hill, Bexhill on 19th, and a male singing in a rape field at Barnham on 22nd.

During May-July, reeling males were heard at Amberley Wild Brooks, where there was a maximum of 3; West Dean Woods (2); Marline Wood; Poverty Bottom, Newhaven; Weir Wood Res; and 2 sites at Rye Hbr.

Both Beachy Head and Icklesham reported a good autumn for passage birds, with a total of 496 trapped at the latter site including daily maxima of 20 and 13 on 4 Sept and 2 Oct respectively. On 12 Sept, a single bird was seen at Ansty, feeding on elderberry, in company with 7 Blackcaps and a Lesser Whitethroat. The last inland record came from the Old Airstrip, Ashdown Forest on 9 Oct while the following day produced the final

sightings of the year with singles at both Icklesham and Shooters' Bottom, Beachy Head. [VPB]

1242. **AQUATIC WARBLER**

Acrocephalus paludicola

Scarce autumn visitor to selected sites, very scarce elsewhere. Species of Conservation Concern in Sussex.

Just one was recorded in the worst year since 1988: a juvenile trapped at Icklesham on 13 Aug (RBRG). A very disappointing showing, especially for Icklesham where 81 have been trapped during the 1990s, including 30 in 1997, 14 in 1995 and 10 in 1994. Eighty-nine have been recorded during the 1990s (an average of just under 10 a year). All were between 30 July-6 Oct with 78 of them being in August. [RJF]

1243. **SEDGE WARBLER**

Acrocephalus schoenobaenus

Fairly common summer visitor and abundant passage migrant.

First recorded on 31 Mar at Pagham Hbr and Thorney Deeps, 7 days earlier than the average for 1964-93. Singing birds were reported from 17 sites, totalling at least 125 birds, and a further 29 were seen at other suitable sites during the breeding season. Comparisons could be made at Rye Hbr where at least 50 singing males were present compared to 92 in 1997 and at Thorney Deeps where there were 40 compared to 38 the previous year. The numbers trapped at Icklesham were not quoted, but they were recorded on 27 days in September with a maximum catch of 278 on 4th, the last date being 20 Oct with the maximum daily catch of 14 for that month. Beachy Head reported a rather poor autumn, with only 22 ringed. At this site, 60 Reed Warblers were ringed during the same period whereas, in the 1960s, Sedge Warbler was the more common species.

Other significant counts included 21 at Combe Haven on 7 Aug, 13 at Glyne Gap Marsh on 9th and 10 at Pagham Hbr on 6 Sept. The last recorded date was 18 Oct at Castle Water, Rye Hbr. [RTP]

1250. **MARSH WARBLER**

Acrocephalus palustris

A very scarce summer visitor and passage migrant. Species of Conservation Concern in Sussex.

Four birds were trapped and ringed at one site: a male and female on 24 June and juvenile birds on 8 and 11 July. The only other record was of a singing male at Arundel WWT on 28 June (RJF). [SJP]

1251. **REED WARBLER**

Acrocephalus scirpaceus

Common summer visitor and very common passage migrant.

The first, and earliest county record, was at Icklesham on 8 Apr (JW). Singles were at Rye Hbr on the next 2 days and again at Icklesham on 13 Apr but not until 15 Apr was the

first recorded in West Sussex. Numbers then built up slowly throughout the remainder of the month.

During the breeding season an incomplete census at Rye Hbr revealed 97 singing males within the SSSI. There were 77 pairs at Thorney Deeps, 22 singing males at Combe Haven and 21 singing males along 2km of the Arun meanders at South Stoke. Further details of breeding survey counts are shown on page XX.

Return passage began in August and, as last year, numbers were generally low. The largest numbers were, as usual, at Icklesham where 115 were trapped on 11 Sept and 34 on 3 Oct. Elsewhere there were 35 at Combe Haven on 7 Aug. Of a total of 60 trapped at Whitbread Hollow during the autumn, 20 were on 6 Sept.

A total of 4 birds was recorded at 3 sites on 15 Oct and then singles at Icklesham on 26 Oct and in the lower Cuckmere Valley on 7 Nov. [RPu]

1253. GREAT REED WARBLER

Acrocephalus arundinaceus

Very rare vagrant

One at Castle Water, Rye Hbr, on 8 May (AG, AP, BJY) has been accepted by *British Birds* and is the 16th county record. It is only the 2nd record during the 1990s and, like that and all previous records during the last 25 years, was not widely known about, keeping the species high on many wanted lists in the county. [RJF]

1262. DARTFORD WARBLER

Sylvia undata

Scarce resident and partial migrant.

1997: At least 4, possibly 5, birds were recorded at Thorney Island during November-December.

1998: In January and February there were again few records from the coast, mainly from Pagham Hbr and Thorney Island, but in Ashdown Forest 21 birds were found in 13 sites. Additionally, up to 8 were seen at Ambersham Common and there were also records from Iping Common, St Leonard's Forest, Hollingbury Camp, and Chailey Common.

During the breeding season, a record 67 territories were reported from Ashdown Forest, including some pairs with second or more broods. Elsewhere in East Sussex there was a failed breeding attempt near Hastings while the male first seen at Hollingbury on 15 Jan was still present on 15 July. A single bird at Beachy Head on 17 Mar, where breeding ceased in the late 1970s, was most likely on return passage. In West Sussex, 19 territories were located at 11 sites.

A single bird at Peacehaven on 25 July may have been indicative of early autumn dispersal. There were, however, no further records of coastal birds until late Sept when singles were seen at Thorney Island and Pagham Hbr on 19th and 28th respectively. These were followed in Oct-Nov by about 22 different birds between Thorney Island and Camber including 3 at the former site from 19-30 Nov. These records represented less than half of the 1997 total. However, many remained inland, notably a total of 71 on Ashdown Forest and 12 at Ambersham Common. In December, 27 were recorded on Ashdown Forest but only two at the coast, in contrast to 1997 when far more were found at the coast than inland. [JB]

1273. **BARRED WARBLER**

Sylvia nisoria

Very scarce autumn visitor

A 1st-year was trapped at Whitbread Hollow, Beachy Head on 12 Sept (RDME, SPH, SEHM *et al*). It was the 12th record during the 1990s. Most records have been in Sept (30 in total) with 7 in both Aug and Oct. 28 have been recorded at Beachy Head, of which 13 have been trapped at Whitbread Hollow (the first in Sept 1965). [RJF]

1274. **LESSER WHITETHROAT**

Sylvia curruca

Common summer visitor and passage migrant.

As in 1997, the first report for the year came from Thorney Deeps where a male was recorded on 7 Apr (CBC), a week earlier than in 1997 and the second earliest county arrival date. Thereafter none was seen until the main arrival started on 23 Apr.

During the breeding season, there were records from approximately 30 sites. The number of pairs at Thorney Deeps was back to 6, after a drop to 3 in 1997 and there were at least 3 nesting pairs at both Rye Hbr SSSI and Cissbury, the latter figure based on brood patches found on females trapped for ringing. Details of other breeding survey records can be found on page XX.

Steining RG ringed a total of 15 at Cissbury and 71 were ringed at Whitbread Hollow, Beachy Head, an improvement compared with the 1997 totals for the latter site. There were records from 8 sites during October while, in November, single birds were seen at Church Norton on 17th (TJE) and at Newhaven on 18th (MA). These are the latest county records since 1957 when one was recorded at Burgess Hill from 12-21 Nov. [VPB]

1275. **WHITETHROAT**

Sylvia communis

Very common summer visitor and passage migrant.

Unusually, the first record was in March, when a single bird was reported at Sidlesham on 27th. The next was not until 7 Apr at Icklesham, still 3 days earlier than the average arrival for 1965-93. The main influx occurred from 21st onwards with 10 at both Belle Tout, Beachy Head and Lancing Gap on 22nd and 24th respectively.

During the breeding season, there were 5 pairs at Cissbury, 17 pairs at Marline Wood, Hastings, 36 pairs at Thorney Island, and 37 pairs at Rye Hbr. Further details of breeding survey records can be found on page XX.

Day totals in autumn at Whitbread Hollow, Beachy Head included 40 on 15 Aug, 50 on 16th and 29th and 60 on 2 Sept. An exceptionally pale bird was trapped for ringing and photographed at this site on 15 Aug. Counts from other sites included 55 at Sidlesham Ferry on 13 Aug, 50 at Climping on 25 Aug and 32 at Chuch Norton on 4 Sept. The final record of the year was at Icklesham on 19 Oct, a typical last date for this species. [VPB]

1276. **GARDEN WARBLER**

Sylvia borin

Very common summer visitor and passage migrant.

First recorded on 17 Apr at Weir Wood Res, 2 days later than the average for 1965-93, and then at a further 11 sites by the end of the month.

During the breeding season, there were records from over 40 different sites. Details of breeding surveys can be found on page XX but, additionally, there were 7 pairs at Cissbury.

Day totals in autumn at Whitbread Hollow, Beachy Head included 30 on 8 Aug, 40 on 14th, 50 on 29th and 60 on 2 Sept. A total of 142 was ringed at the site in what was reported to be a good autumn. Elsewhere, there were 14 at Church Norton on 19 Aug. There were records from 5 sites during October up to 7th at Icklesham, significantly earlier than the average last date of 20 Oct for the period 1964-93. [VPB]

1277. **BLACKCAP**

Sylvia atricapilla

Very common summer visitor and passage migrant; small numbers winter.

During Jan-Mar there were records of at least 33 birds at 27 different sites, down by almost a half on the 1997 total for the same period. Is this a genuine decrease in wintering individuals, or are observers becoming more accustomed to seeing this species in winter and not submitting all records?

The first singing male was heard at Bognor Regis GC on 12 Mar, and by early April males were establishing territories throughout the county. There were 3 pairs at Shoreham Sanctuary, 27 at Streat and 18 at Marline Wood, Hastings, where coppicing has increased the available habitat. Detailed results of breeding surveys can be found on page XX.

The 1998 total of 457 ringed at Cissbury was a great improvement on the previous year's tally of 308, and was nearly double the 1996 total. At Whitbread Hollow, Beachy Head 1022 individuals were ringed, the 4th highest total there. Day totals at this site, where 1000 or more have previously been recorded, included 300 on 2 and 6 Sept, 500 on the 12th, 400 on the 20th and 450 on 4 Oct. On the same date, 40 were seen flying out of a single bush in the churchyard at Pagham Hbr. At Icklesham, 254 were trapped on 18 Sept; birds were recorded on 24 days in Oct at this site with 111 trapped on 10th.

There was only a scattering of sightings after 10 Oct, and during November and December just 22 were recorded at 17 different sites, though these included a pair in a Billingshurst garden on 29 Dec. [VPB]

1298. **PALLAS'S LEAF WARBLER**

Phylloscopus proregulus

Very scarce visitor, mostly in late autumn

1997: One in All Saints Wood, Hastings from 24-26 Nov (IS, PMT) was the 5th record for the year and although the latest to be recorded in the county since 1987 (when 2 were seen in Dec) it followed hot on the heels of records in E Brighton on 22 and 23 Nov.

1998: Three were recorded: at Belle Tout Wood, Beachy Head on 18-19 Nov (JFC, TWP *et al*), near Brighton Marina also on 18-19 Nov (KBG *et al*) and in a garden in Briar Close, Fairlight on the late date of 14 Dec (IS, JS). Only one in Friston Forest (on 25 and 28 Dec 1987) has been later although 2 others were recorded in Dec in 1986 and 1987. The Brighton Marina bird frequented a small patch of bushes on the undercliff path adjacent to the car park of the ASDA superstore. Due to its confiding nature and prominent location it attracted some notoriety, and provided admirers with as good views

of this species as one could wish for. On one occasion one of its forays onto the ground attracted the attention of a large, but fortunately comparatively slow, rat. 34 have been recorded during the 1990s, 1 in Mar (1992), 1 in Dec and the rest equally divided between Oct (earliest 14th) and Nov. [RJF]

1300. **YELLOW-BROWED WARBLER** *Phylloscopus inornatus*

Very scarce visitor, mostly in autumn

One in Belle Tout Wood, Beachy Head, on 17 Nov (AJB, CAH, SJT) was the only record. This species is in danger of being overtaken by the preceding one, with 36 records during the 1990s, in September (from 26th), October (25) and November (9, latest 29th). [RJF]

1308. **WOOD WARBLER** *Phylloscopus sibilatrix*

Very scarce summer visitor and passage migrant.

The first arrival was at Galley Hill, Bexhill on 19 Apr, followed by 4-5 different birds at Church Norton between 22nd and 30th, with 3 on 25th. The only other migrants reported from the coast were singing males at Hollingdean, Brighton on 26 Apr and Sidlesham Ferry on 4 May. The first inland record was of single birds singing at 2 sites in Ashdown Forest on 24 Apr.

During the breeding season, a total of 8 singing males was found at 7 localities in Ashdown Forest. The only other breeding record for the east of the county was of 2 singing males in Brede High Wood on 31 May. In the west of the county, a total of 5 singing males was reported at 4 localities: Hesworth Common, St Leonard's Forest, Stansted Forest (2) and West Harting Down. It is possible, of course, that some of these records refer to migrants given that a number of birds were recorded on one date only.

There were only 3 records which indicated emigration: singles at Sidlesham Ferry on 16 Aug, Pulborough Brooks on 23 Aug and, the last record for the year, at Littlehampton GC on 5 Sept. [JB]

1311. **CHIFFCHAFF** *Phylloscopus collybita*

Very common summer visitor and passage migrant; small numbers winter.

1997: A first year of the race *abietinus* or *tristis* was trapped at Icklesham on 16 Sept (RBRG).

1998: Until 7 Mar, wintering birds were mainly recorded from the coast at 39 localities, including 11 at Thorney Island on 21 Jan and 10 on 10 Feb. One was heard singing at Icklesham on 15 Jan.

The main spring influx began in mid-March and falls were noted at Pagham Hbr of 23 on 17 Mar, 25 on 21st, 20 on 25th, and 30 on 19 Apr. Other falls on the coast were of 24 at Selsey Bill on 21 Mar, and 26 at Galley Hill, Bexhill on 19 Apr. There were 14 at Bewl Water on 27 Mar and 18 at Warnham MP on 2 Apr.

Breeding counts included 4 pairs on Thorney Island, 15 territories on Chailey Common, 30 pairs at Streat, near Plumpton, and 4 pairs in 6.6ha at Cissbury Ring. At Marline Wood, Hastings, 16 pairs were reported, an increase on previous years possibly attributable to coppicing. Further details of breeding surveys can be found on page XX.

An exceptional return passage produced some very large day totals although not on the scale of the 3 counts of 1000 or more listed in *Birds of Sussex*. On 6 Sept there were 150 at Whitbread Hollow, Beachy Head while on 12th, there were 600 in Whitbread Hollow, 67 at Marline Wood, Hastings and 169 trapped at Icklesham. Numbers remained high throughout much of September, particularly at Beachy Head, with 450 on 18th, 300 on 20th and 200, in Belle Tout Wood alone, on 25th. The high numbers continued into October with 300 at Whitbread Hollow on 3rd and the same number in both Belle Tout Wood and Whitbread Hollow on the following day. There were at least 170 at Beachy Head on 10 Oct when 283 were trapped at Icklesham. Sites in West Sussex recorded fewer than those in East Sussex although there were 83 at Climping on 3 Oct and 105 at Church Norton on 10th.

After mid-October, numbers declined greatly. There were, however, a number of significant counts in November including 7 at Church Norton on 10th, 6 at West Wittering on 18th and an unprecedented 17 at Thorney SF on 30th (CBC), the latter the largest count at any one site in Sussex in winter. In December, there were still 10 at Thorney on 17th while other concentrations included 4 at Coldwaltham SF on 5th and counts of 5 at Rye Hbr on 11th and Rodmell SF and Sheepcote Valley, Brighton on 13th. The association of wintering birds with sewage farms has not been commented on before in Sussex although counts of up to 26 have been recorded at sewage farms in Hampshire (*Birds of Hampshire*).

Individuals showing characteristics of either the Scandinavian race *abietinus* or the Siberian race *tristis* were at Sheepcote Valley on 1 Nov (IJW), West Wittering on 23 Nov (OM) and Rottingdean Undercliff on 16 Dec (ADW, IJW). [JB]

1312. WILLOW WARBLER

Phylloscopus trochilus

Abundant summer visitor and passage migrant.

The first arrival was at the Old Airstrip, Ashdown Forest on 13 Mar, 11 days earlier than the average for 1964-93. There were no further records until 25th, at Climping, but small numbers were recorded daily thereafter, with 25 reported from Church Norton on 30th. No large falls were recorded in April, the highest day total being just 29 at Galley Hill, Bexhill on 10th.

Breeding records were received from all over the county and details of surveys can be found on page XX. Additional counts were of 24 pairs in 200ha of Pippingford Park, Ashdown Forest; 19 in Old Lodge NR, Ashdown Forest; 19 on Chailey Common; 16 in 1 km² at Broadwater Forest; 6 at Darwell Res, Hesworth Common and in Marline Wood, Hastings; 5 at Streat; and 4 at Thorney Island.

The first significant record of departing birds was of 200 at Whitbread Hollow, Beachy Head on 1 Aug, followed by 200 on 16th, 100 on 18th, 500 on 23rd and 200 on 25th. On 18th, 300 were counted crossing a ride at Patching and 138 were seen in Marline Wood, Hastings. The total recorded for the month was 2562, about equal to last year's figure. Passage continued into September with 100 at Beachy Head on 2nd and 50 on 12th. Numbers declined rapidly thereafter with no reports after 11 Oct. [JB]

1314. **GOLDCREST**

Regulus regulus

Very common breeding resident, common passage migrant and winter visitor.

Records were received from 78 sites across the county (21 of them in the breeding season). Of the 32 records in the first quarter, all were in single figures, except for counts in January of 13 near South Harting, 12 at Clapham Wood, 20 at Micks Cross, St Leonard's Forest, 18 at Old Lodge NR, Ashdown Forest, and 10 at Cuckmere Haven; and in February of 12 at Church Norton, 14 near South Harting and 10 at Old Lodge.

Similar numbers were recorded in early March but during the last 10 days of the month there was clear evidence of passage with counts at Pagham Hbr of 20 on 21st and 60 on 29th, 70 at Church Norton on 25th and 20 at Sidlesham Ferry on 27th. There were 13 at Cuckmere Haven on 20th and 40 there on 29th. A total of 10 were seen coming ashore at Belle Tout, Beachy Head during the morning of 28th.

Details of breeding surveys can be found on page XX.

From the 102 records in the last 4 months of the year, the largest counts were in October, with 30 at Church Norton and 50 at Whitbread Hollow, Beachy Head on 10th, 30 at West Wittering on 12th and 28 at Old Lodge NR on 18th. In November, there were again 28 at Old Lodge on 1st and 30 at Whitbread Hollow on 7th. In December, only 4 records were of more than single figures: 12 at Thorney Island and 15 at Darwell Res on 6th, 10 at Church Norton on 9th and 10 at Old Lodge on 13th.

The maximum day count of birds ringed at Icklesham during the year was 18 on 13 Oct. At Cissbury Ring and Whitbread Hollow, the totals ringed during the autumn were 64 and 82 respectively. The maxima at the former site were 27 on 4 Oct and 17 on 18th. [LM]

1315. **FIRECREST**

Regulus ignicapillus

Rare breeder and scarce passage migrant and winter visitor.

The numbers reported in late winter and spring (36) and in autumn and winter (108) were both below the previous 10-year averages of 48 and 116 respectively. The approximate monthly totals were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
3	3	14	10	6	-	-	-	10	21	50	27

Singles were seen in January at West Harting Down on 1st, Sidlesham Ferry on 18th, and Lullington Heath on 26th. In February, 2 were seen at Church Norton between 3rd and 12th and a single at Billingshurst on 25th. In March, there were totals of 4 at Pagham Hbr and 3 at Rye Harbour and singles at Selsey Bill, Ferring, Brighton (Marina and Sheepcote Valley), Ashdown Forest, Beachy Head and Bexhill. In April, apart from totals of 3 at Pagham Hbr and 5 at Beachy Head, the only other records were of singles at Cuckmere Haven on 11th and Weir Wood Res on 17th.

A total of 6 singing males was reported in May from West Dean Woods, Tilgate Park and Worth Forest, with a probable immature bird at West Dean Woods on 19 July.

The approximate totals in the autumn/winter were:

	Sept	Oct	Nov	Dec
Pagham Hbr	2	4	18	16
Beachy Head areas	2	6	3	1

Rye Hbr	4	1	5	2
Other localities	2	10	24	8

The table clearly shows that most were seen at Pagham Hbr where the species was recorded on 35 dates between 24 Sept and December with 7 individuals recorded at Church Norton on both 1 and 25 Nov. The 'other localities' involved 22 sites where 1 or 2 individuals were seen. There were, however, 5 at Sheepcote Valley, Brighton on 25 Nov, 3 of which remained for a long period, and 3 at West Wittering on 7 Nov. [LM]

1335. SPOTTED FLYCATCHER

Muscicapa striata

Fairly common summer visitor and passage migrant. Species of Conservation Concern in Sussex.

The first arrival date in spring, 3 at Church Norton on 30 Apr, was about average. Arrival dates during the period 1965-93 varied between 11 Apr and 9 May, with the average of 28 April. Thereafter, records in May were of passage birds on the coast or of pairs settling down on territories inland, shortly after arrival. Arriving migrants appeared on various dates at a number of localities including 5 at Selsey Bill and 4 at Beachy Head on 21st and the last at Thorney Island on 29th.

A total of about 30 pairs was reported during the breeding season, 14 of which were in Ashdown Forest. Details of breeding surveys are given on page XX. The young of a pair at Hove died in the nest, possibly as a result of poor weather, while at Wivelsfield a nest and eggs were destroyed by rain. A scattering of other records in the county throughout this period suggests a much wider distribution of breeding birds.

By mid-August there were signs that post-breeding movements were already in evidence, with records from Patching on 10th and 23rd where 6 birds were seen on each date; at Church Norton on 12th where 4 were seen; at Atherington where 3 were noted on 19th; and from High Woods, Bexhill, where 6 were recorded on 23rd. A total of 13 at Beachy Head on 30th indicated a major departure, emphasized by another record of 13 birds at Church Norton on 5 Sept. On the following day, 7 were noted at Atherington while on 12th, 12 were recorded at Marline Wood, Hastings. Inland records included 4 at Walberton on 20th and 3 at Pulborough Brooks on 21st.

Five birds at Church Norton on 1 Oct featured among many single bird records during that month. The last bird of the year was at West Worthing on 10 Oct, close to the average date of 13 Oct during 1970-93. [LGH]

1343. RED-BREASTED FLYCATCHER

Ficedula parva

Rare vagrant

A juvenile in a private garden at Beachy Head from 6 to 9 Nov (RHC *et al*) was the latest county record and only 2nd to be recorded in Nov. It often gave extremely good views, sometimes frequenting guttering and an adjacent chimney pot, and was photographed during its stay. It was only the 4th to be recorded during the 1990s and the 24th in total (15 of which have been at Beachy Head). Most records have been in Sept (9) and Oct (12). [RJF]

1349. **PIED FLYCATCHER***Ficedula hypoleuca***Scarce passage migrant, more numerous in autumn than spring. Has bred.****1997:** The male at Ifield from 13-26 May was not seen at the railway station as stated.**1998:** The approximate monthly totals were:

Apr	May	June	July	Aug	Sept	Oct
7	6	-	1	14	10	1

There were fewer records than in the previous 2 years, with the August passage being particularly disappointing. The first record was of a male seen at Church Norton on 21 Apr. Two were at Rye Hbr Wood on 22nd and a female spent several days favouring an apple tree in a West Worthing garden from 23rd to 27th. Further east, 3-4 females were seen in the Beachy Head area on 25 Apr and the last of the spring was also at Beachy Head on 27 May.

A singing male was recorded at Nap Wood, near Frant in mid May, interestingly at the same site and on the same date as 1997. There was, however, no further evidence of breeding.

A bird was trapped and ringed at Cissbury Ring on 25 July but the main passage was in August when ones and twos were recorded throughout the month at 10 different sites. Observers at Beachy Head reported a 'poor year', with 1 on 25 Aug and 2 on 2 Sept and, the last of the year, on 4 Oct. [DEC]

1364. **BEARDED TIT***Panurus biarmicus***Very scarce breeder, scarce passage migrant and winter visitor.**

The minimum monthly totals outside the breeding season were:

	Jan	Feb	Mar	Apr	Sept	Oct	Nov	Dec
No of Sites	4	2	4	3	1	4	4	2
No of Birds	13	8	16	9	40	56	19	10

In all, 9 different sites were involved, 6 in the first winter period and 6 in the second, including only 3 from Jan-Apr. Breeding was confirmed at three sites: at Thorney Deeps, 5 pairs produced at least 35 young; at Icklesham, 8 pairs bred; and at Pett Level, there were at least 2 nests. At Combe Haven, a pair probably bred. Elsewhere, twos were seen at three other sites during the pre-breeding period, 1-3 at two other sites during the breeding period and 1-3 at 4 other sites post-breeding. High flying dispersal activity was first recorded on 9 Sept and continued into October. [JAH]

1437. **LONG-TAILED TIT***Aegithalos caudatus***Very common resident.**

1997: Two at Whitehawk, Brighton on 26 Oct (JC) showed features of birds of European origin, one with characteristics of the race *caudatus* and the other with characters of a *caudatus/europaeus* intergrade.

1998: Numerous reports showed the species to be well distributed throughout the county, including the coastal fringe, but with some conflicting evidence on abundance. Smaller than average flock sizes, low ringing totals at Cissbury Ring and lower than average results from long-term breeding surveys, all pointed to a poor year. However, the sighting of 52 birds along the Pulborough Brooks Nature Trail on 15 Feb and the presence of 24 pairs around Bewl Water in May were examples of reports suggesting quite a high population.

The largest flock in winter was 19 on 12 Jan in the grounds of Swandean Hospital, Worthing. The first breeding activity seen was nest building at Bewl Water on 24 Feb. Amongst many breeding reports, 3 pairs raised a total of 9 young at West Harting Down, and a group of 29 birds at Stanley Common, Liphook on 27 June included 23 juveniles. Details of breeding surveys are shown on page XX.

In autumn, there was a flock of 25 at Findon on 14 Oct and 24 at Ivy Lake, Chichester GPs on 15 Oct. Many medium-sized flocks of between 10 and 20 birds were reported from all round the county. At Thorney Island, on 18 Oct, a total of 69 was counted in four locations.

During the first and last two months of the year, birds were seen feeding at peanut feeders at 5 different localities. [RK]

1440. MARSH TIT

Parus palustris

Common resident.

Most records for this species emanate from West or mid-Sussex, with reports from only 6 sites to the east of Ashdown Forest.

There were 4 engaged in an apparent dispute at Grevitts Copse, Up Marden on 24 Jan, 10 were at Burton MP on 3 Feb, 4 were seen at Arundel WWT on 8 Mar and 6 were noted at Ebernoe Common on 14 Apr.

Breeding reports included 5 pairs at Pippingford Park, 4 at Marline Wood, Hastings, 3 at Cissbury and 2 at Ardingly Res. The pairs at Ardingly successfully raised 12 young in nest-boxes. Other results from breeding surveys can be found on page XX.

During the latter part of the year, the maximum count at Darwell Res was of 8 on 11 Nov. Four were noted at Weir Wood Res on 7 Dec, and a single bird was observed feeding on spindle seeds at Stoke Down on 21 Dec. [VPB]

1442. WILLOW TIT

Parus montanus

Probably now a scarce resident.

As usual there was sparse selection of records from across the county involving just 20 sites and 26 different tetrads, 16 of which were in West Sussex. Most of the sightings involved just 1 or 2 birds, exceptions being 3 at Patching on 24 July and at Bewl Water on 29 Oct. Although pairs/singing males were reported from 11 sites there were no records of birds with fledged young. This species is unusual near the coast so one at Beach Field, Rye Hbr from 14 Aug to 29 Sept was noteworthy.

The status of this species is difficult to define from the above summary. Observers, especially those living north of the Downs, are urged to record this species in detail so that a clearer picture may emerge. [LGH]

1461. COAL TIT

Parus ater

Very common resident.

Only one gathering was recorded this year, comprising 19 birds on West Harting Down on 8 Feb. Monthly counts made at Old Lodge NR, Ashdown Forest were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
44	42	32	21	20	40	65	50	45	46	35	23

Although a widespread species, there were records from only 28 sites in the spring and summer, 14 of which were of confirmed breeding. Details of breeding surveys are shown on page XX. Additionally, a pair nesting in a box in Rivers Wood, Haywards Heath had 8 young on 1 June.

No birds of the continental race *P.a.ater* were reported. [JB]

1462. BLUE TIT

Parus caeruleus

Abundant resident.

The highest counts in the first winter period were only of 50 at Warnham LNR on 19 Mar and 40 at Pagham Hbr on 22 Feb. In the second winter period, the maxima reported were 108 trapped at Weir Wood Res on 3 Dec and 65 in a monthly count on 6 Sept at Old Lodge NR, Ashdown Forest.

The annual winter census in 7ha of the urban Hotham Park, Bognor Regis produced a peak of 14 in Jan but only 8 in Dec, virtually the same as the previous year. The equivalent counts for 67ha of mixed farmland at Marsh Fm, Yapton, produced peaks of 18 in Jan and 16 in Dec, a marginal improvement on 1997.

Breeding records were received from throughout the county, with quite good success rates reported from various nest-box schemes. At Ardingly Res, 12 successful pairs (out of 24) reared 109 young; at Rivers Wood, near Haywards Heath, 7 pairs raised 60 young, at Arlington Res, 2 pairs produced 22 offspring, and 8 pairs were reported to have fledged young from new nest-boxes at Hotham Park. Details of breeding surveys are shown on page XX. [AH]

1464. GREAT TIT

Parus major

Abundant resident.

Very few records of large gatherings were received; the highest counts outside the breeding season were of 40 at Warnham LNR on 19 Mar and 37 on 6 Sept at Old Lodge NR, Ashdown Forest. The annual winter census at Hotham Park, Bognor Regis produced a maximum of 5 in both winter periods, while on mixed farmland of Marsh Fm, Yapton, a slight increase was noted, with respective peaks of 16 and 7.

There were a number of breeding records from nest-box schemes suggesting a reasonably successful breeding season. Two pairs fledged 19 young at Thorney Deepes, 5 (out of 6) pairs reared 39 young at Ardingly Res, 4 (out of 5) pairs reared 32 chicks at Arlington, 16 boxes produced 99 fledglings at Pippingford Park and 2 pairs fledged young from the new nest-boxes at Hotham Park. Details of breeding surveys are shown on page XX. [AH]

1479. **NUTHATCH**

Sitta europaea

Very common resident.

Winter records included a monthly count of 5 at Old Lodge NR, Ashdown Forest in January and 6 at Rackham Woods on 1 Feb. At the end of the year, 7 were recorded at Darwell Res on 6 Dec. Birds using feeders included 4 at Pulborough Brooks RSPB Reserve.

Numerous records were submitted relating to the breeding season and details of breeding surveys are found on page XX. Additionally, there were 5 territorial males in Park Wood, Hellingly and, at Sharpthorne, 7 *pulli* were ringed. Success in nest-boxes included 3 out of 4 pairs raising 19 young at Ardingly Res and 4 pairs raising 13 young at Pippingford Park, Ashdown Forest. In late August, Marline Wood, Hastings held a population of some 12 birds.

On 12 Sept, there was an unusual record of a bird in woodland on the coast, at West Wittering. Otherwise, most records came from well-wooded areas in the north and west of the county.

All counts of calling males and pairs in the breeding season from defined areas are welcomed. [PL]

1486. **TREECREEPER**

Certhia familiaris

Very common resident.

Counts of breeding pairs in defined areas are given on page XX. Additional breeding records included 6 pairs at Plumpton Agricultural College and 3 pairs at Marline Wood, Hastings.

There were the usual reports from coastal areas comprising singles at Atherington on 1 Jan, Angmering on 20 Jan, Church Norton on 4 Feb, 27 Mar, 15 Oct and 25 Nov, Whitbread Hollow, Beachy Head, on 25 Aug and 1 Nov, and Hotham Park, Bognor Regis, on 5 Dec. Two were recorded at Church Norton on 5 Feb and 3 on 12 Feb. A pair bred in Rye Hbr Wood. [PJ]

1490. **PENDULINE TIT**

Remiz pendulinus

Rare autumn vagrant.

1997: The 1st-winter male trapped at Icklesham on 25 Oct had been ringed as a *pullus* on 7 July 1997 at Malmohus, Sweden. [PJ]

1508. **GOLDEN ORIOLE**

Oriolus oriolus

Very scarce passage migrant and summer visitor, may have bred

A sub-adult male singing in Whitbread Hollow, Beachy Head, early on 25 May (SPH) was the only record. Twenty-eight have been recorded during the 1990s of which 16 have been in May, half being at Beachy Head. [RJF]

1515. **RED-BACKED SHRIKE**

Lanius collurio

Very scarce passage migrant; formerly a breeding summer visitor. Species of Conservation Concern in Sussex.

Adult males were found on the W side of Pagham Harbour to the N of Church Norton on 11 May (AH *et al*) and at Pulborough Brooks on 17 May (TMM). In the autumn, there was a juvenile between Church Norton and the Severals on 12-13 Sept (RP *et al*). [SJP]

1520. **GREAT GREY SHRIKE**

Lanius excubitor

Very scarce winter visitor and passage migrant.

1994: The bird at Ifield on 20 Mar was at Ifield Brook not Ifield MP.

1998: There were many more records than usual, but even accepting the fact that this species tends to cover large territories in winter, the actual number present cannot have been less than 14, and possibly 16. In recent years, annual totals have been no more than 4 or 5 birds. This year's figure is the largest since 22 were recorded in the winter of 1974/75.

As usual, birds were present in Ashdown Forest, the first being recorded in the Old Lodge area on 14 Feb (RAO). From 1 to 3 others were seen from 15 Apr until 5 May in the Millbrook, Wych Cross and Chelwood Vachery areas of the Forest (many obs). The latest birds previously recorded were in Ashdown Forest on 2 May 1978 and at Rye Hbr on 14 May 1950. Another bird was at Cissbury Ring from 13 Mar until 19 Apr (JCS *et al*).

The first autumn bird was at Beachy Head on 10 Oct (RJF, PJ, NJT *et al*), followed by others at Thorney Island on 15th (CBC) and at Church Norton on 19th (TJE). One at Lavington Common on 22 Oct (AP, JR) stayed until 7 Nov while others were seen at Ambersham, Iping and Stedham Commons on 26 Oct (all AP). Birds were seen on many dates from 15 Oct until 18 Dec in Ashdown Forest, the records suggesting that 4 were involved. The last record away from Ashdown Forest was at Blackcap, near Plumpton on 6 Nov (RAS). The October records were part of an exceptional influx during the month with at least 120 recorded nationally (*Birding World* 11 (10): 377) [DEGC]

1539. **JAY**

Garrulus glandarius

Very common resident; passage migrant and winter visitor.

The records in the first quarter of the year were all in single figures, except for 13 at Darwell Res on 15 Feb. Details of breeding surveys are shown on page XX.

Counts in autumn and early winter included 13 at Playden Saltbarn, Rye on 26 Sept; in October, 8 at Pulborough Brooks on 8th, 13 at Church Norton on 13th, 7 at Darwell Res on 11th, 6 at Goring Gap on 15th, and 6 at Old Lodge NR, Ashdown Forest on 18th; and in November, 6 at Goring Gap on 7th and 17 at Weir Wood Res on 29th.

The only probable migrants reported were of singles flying W at Galley Hill, Bexhill on 18 and 30 Oct. [LM]

1549. **MAGPIE**

Pica pica

Very common resident.

The highest counts in the first quarter were of 112 at the North Wall, Pagham Hb, on 29 Jan, 25 at Burgess Hill on 4 Feb, 28 at Aldingbourne Rife on 16 Feb and 20 at Warnham LNR on 21 Feb.

Counts of breeding pairs included 6 at Littlehampton GC, 6 at Rye Hbr and 4 at Marline Wood, Hastings. Details of breeding surveys are found on page XX.

In the autumn and early winter, the highest counts were: 22 at Whitbread Hollow, Beachy Head on 30 Aug; 22 at Warnham LNR on 17 Sept; 50 flushed from a game cover crop near Woodingdean on 29 Oct, with an estimated 200 birds on 520ha at the same location; 45 at Climping on 1 Nov; and 24 at Littlehampton GC on 8 Nov. [LM]

1560. **JACKDAW**

Corvus monedula

Very common resident.

The highest counts recorded in the first half of the year were of 1000 at Upwaltham on 11 Jan, with 500 Rooks and 3000 Woodpigeons; 150 at Tas Combe, Willingdon on 15th, 1200 at South Stoke on 17th, 400 at Pebsham on 31st, 200 at Forest Mere on 19 Mar and 100 at Broadhurst, Horsted Keynes on 14 Apr. In the second half of the year there were 150 at Shooter's Bottom, Beachy Head on 18 Oct; 500 at Weir Wood Res and 500 at Steyning (roosting with 500 Rooks) on 15 Nov; and 200 at Weir Wood Res on 20 Dec.

A total of about 30 pairs nested at Camber Castle.

Movements reported were: 54W at Hastings on 27 May; at Galley Hill, Bexhill in October, 26W on 2nd, 11W on 4th and 61W on 18th; 100W at Hastings Beach and 475W at Shepcote Valley, Brighton, on 18 Oct; 6W at Littlehampton on 6 Nov; and 600SE at Arlington Res on 14 Nov. [LM]

1563. **ROOK**

Corvus frugilegus

Very common resident.

The highest counts in the first two months were, in January, 500 at Upwaltham on 11th; 100 at the Parham Estate on 16th; 900 at South Stoke on 17th, with 1200 Jackdaws on cattle pasture at dusk; 450 on the refuse tip at Pebsham on 31st; and 150 during a winter census of 67ha at Marsh Farm, Yapton on 12 Feb.

A number of rookery counts were reported, giving useful information which updated the full survey carried out in 1996. Such reports included counts of 177 nests at Marsh Fm, Yapton and 134 nests at Clapham, neither of which appeared in the 'over 100' table in the 1996 *Sussex Bird Report*.

The highest counts in the second half of the year were of 400 at Lidsey on 9 July; 211 at Beddingham on 20 Aug, 127 at Ford on 8 Oct, 95 during a winter census at Marsh Fm, Yapton on 5 Nov; and 50 at Weir Wood Res on 20 Dec.

Movements reported were of single birds flying in off the sea at Brighton Marina on 17 Mar and 13 Apr; 7 'migrants' at Galley Hill, Bexhill on 18 Oct; 14W at Hastings Beach on 20 Oct; and 40SE at Arlington Res on 14 Nov. [LM]

1567. **CARRION CROW**

Corvus corone

Very common resident.

The largest concentrations reported were of 276 on the refuse tip at Pebsham on 31 Jan, 500 at Lower Standean on 20 Feb, 62 at Bewl Water on 1 May, 75 at Forest Mere on 18 Aug, 72 at Felpham on 20 Sept, and 60 at Seaford on 12 Dec. An observer counted 21 in his small garden in Bognor Regis on 24 Jan and there were 33 in the 7ha of Hotham Park, Bognor Regis on 24 Feb.

There were a few records of movements at the coast; most involved small numbers but 18 flew N off the sea on 24 Mar at Brighton Marina and at Hastings Beach there were 23E on 29 Mar, 15E on 10 Oct and 17W on 12 Oct. [LM]

1572. **RAVEN**

Corvus corax

Formerly a breeding resident, now a very scarce visitor

1996: Two of unknown origin at Weir Wood Res on 6 Nov (NAD, JW) took the years total to 4. Eight have been recorded during the 1990s, compared to just 7 during 1950-89. It should be noted that Ravens are kept in captivity at Tilgate Park, Crawley. [RJF]

1582. **STARLING**

Sturnus vulgaris

Abundant resident, passage migrant and winter visitor.

Whilst a significant decline in numbers has been evident over the last few years, it must have seemed like the good old days when a flock estimated to contain up to a million birds was seen in flight at Eastbourne Pier on 12 Jan. However, none of the other records for the year suggest any significant increase in numbers. The largest reported winter roost was of 25,000 at the West Pier, Brighton on 4 Feb. Feeding flocks of between 800 and 1600 birds were seen in several areas of wet meadowland, such as at Pagham Hbr, Glynde Reach and in the lower Adur Valley during the first three months of the year. There was evidence of spring passage at Hastings on 20 Mar when 1141 flew E in 2.2 hrs.

The first breeding report came from Pippingford Park, Ashdown Forest on 1 Apr. At Chichester, a pair raised 5 young in a factory. The small sample of regular breeding surveys in farmland showed a slight increase in density to one pair in every 7ha; details of these breeding surveys are found on page XX. In Marline Wood, Hastings, 6pairs fledged 28 young, but some areas of rural and urban woodland which are subject to long-term breeding surveys, have lost their breeding populations altogether.

A flock of 2500, including one albino, roosted in reed beds at Pett Level Pools in July while at Castle Water, Rye Hbr, 14,000 roosted on 24 Sept. Flocks of 2500 on 24 Aug and of 1000 on 10 Oct shared the Little Egret roost at Thorney Deepes. There was a small westerly passage at Hastings in October, reaching a maximum of 180 on 20th. Notable records at the end of the year were of medium-sized flocks on pasture or wetlands,

including 400 at Amberley Wild Brooks on 10 Nov, 1000 at Beeding Hill on 21st, and 1000 at Glynde Level on 13 Dec. There was also a roosting flock of 1000 birds at Woodingdean on 18 Dec. [RK]

1591. HOUSE SPARROW

Passer domesticus

Abundant but declining resident.

During January and February, the maxima from the winter census counts at Marsh Fm, Yapton and in Hotham Park, Bognor Regis, were 22 (17, 37) and 10 (15, 23) respectively (1997, 1993 figures in brackets). The only large flock reported during the first part of the year was of 100 at a long-standing roost in privet at a nursery in Durrington.

The few breeding survey details are shown on page XX.

The largest flock of the year was only 120, at Galley Hill, Bexhill on 9 Aug while the peak counts at Marsh Fm and in Hotham Park in October-December were 23 and 4 respectively.

Lack of comparative records from earlier *Sussex Bird Reports*, where the species was often omitted completely, highlights the value of regular counts at specific sites, which have revealed a decline in recent years, in line with the nationally observed trend. [VPB]

1598. TREE SPARROW

Passer montanus

Scarce and declining resident, passage migrant and winter visitor. Species of Conservation Concern in Sussex.

There were just 31 records which shows how uncommon this species has now become. Only 4 were from West Sussex and breeding was proved at just three sites, all in the east of the county. The largest concentration was of up to 15 pairs in nest-boxes at Castle Fm, Rye Hbr. Nearby, 3 pairs raised 3 broods each in nest-boxes at Float Fm in the Brede Valley and a pair bred at Manxey Levels, Pevensey. Due to the secrecy of this species during the breeding season, there is a possibility that breeding pairs are being overlooked. However, since the 1988-92 *Atlas* there has been a dramatic decline in breeding range, with the numbers of tetrads occupied decreasing from 116 to 4 and the number with confirmed breeding reduced from 69 to 3. The bias towards the east of the county, and the Rye area in particular, has been further exacerbated, and the importance of the Rye area for the continued breeding of the species in Sussex is obvious.

In the first winter period, the largest flock recorded was 25 at East Guldeford Level on 27 Apr, presumably just prior to breeding dispersal. A flock of 18 was noted at Lower Standean at the end of February. All other flocks in both winter periods numbered 12 or less and were all in the Rye area; figures typical of the low wintering numbers recorded in the 1990s.

One flying N at Selsey Bill on 15 May was presumably an arrival from the continent. Autumn movements, however, were larger. A total of about 60 birds was recorded from Beachy Head eastwards between the 6 and 19 Oct, the largest count being of 25 at Beachy Head on 18th. Apart from the Selsey bird, mentioned above, the only other records from West Sussex were singles at Church Norton on 20 May and at Wisborough Green on 21 Dec. [MD]

1636. **CHAFFINCH***Fringilla coelebs***Abundant resident, passage migrant and winter visitor.**

The largest winter flocks at the start of the year were recorded at West Dean Woods where 400 were counted on 20 Jan and 700 on the 28th, this being the largest flock reported in the county since Jan 1984. Elsewhere there were 220 at Thakeham on 25 Jan, a regular flock at Pulborough Brooks reached a peak of 150 on 12 Feb and 200 were at Amberley Wild Brooks on 1 Mar. Sea-watchers between Bexhill and Hastings reported the only spring movements with 287 of the March total of 346E being seen on 19 Mar.

The results of breeding surveys are shown on page XX. Additional to those shown, observers at Marline Wood, Hastings reported an increase to 28 pairs following coppicing. In Hassocks, a female was seen collecting dog hair put out by a Society member, and at least two individuals, in Hove and Henfield, had mastered the art of feeding from nut holders. The first juvenile was seen with an adult at Chelwood Gate on 15 May.

Autumn movements of note were 280W at Hastings on 12 Oct and 110W in just half an hour at the same site on 20th. Late in the year there were gatherings of 150 at Forest Mere on 12 Nov, 100 feeding in a large chicken run at Stansted Forest on 28 Dec, 118 at Marsh Fm, Yapton and 400 at Stapleash Fm, Chilgrove, both on 16 Dec. [VPB]

1638. **BRAMBLING***Fringilla montifringilla***Fairly common winter visitor and passage migrant.**

The approximate monthly totals were:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
180	255	308	80	-	-	-	-	-	173	44	4

During the first winter period the records were dominated by two large flocks. In the Millbrook area of Ashdown Forest there were birds present until 20 Apr with peak counts of 150 on 26 Jan, 160 on 6 Mar and 110 on 26 Mar. Although 60 were still present on 4 Apr, the numbers declined until the last 3 were recorded on 20th. At Petworth Park there were 180 on 25 Feb, 100 on 3 Mar and finally 20 on 15 Mar. Elsewhere, as indicated by the above table, few were recorded in winter and no more than 12 spring migrants were seen at various coastal sites. Two at Rye Hbr Wood on 20 Apr joined the Ashdown birds as the last of the spring.

Autumn records began on 3 Oct when parties of 4 and 5 were seen at Climping and Hastings respectively. Thereafter, small numbers were recorded from several sites with the largest counts in October being 13 at Beachy Head on the 10th and 20 at Hastings on the 12th. Fewer were recorded in November with 8 at Cissbury on 7th being the highest count. Although observers at Beachy Head reported that 'passage was almost non-existent', the total of 217 for the autumn is above the average recorded for these months during the years 1962-93. Just single birds were recorded at 4 sites in December. [JLH]

1640. **SERIN***Serinus serinus***Very scarce passage migrant. Has bred.**

With just 3 birds recorded, this year was the poorest since 1991. The first record was of a female in the churchyard at Church Norton on 2 May (AH) followed by an adult male singing at Birling Gap on 9 May (TJW *et al*). In the autumn, a female or immature bird was found at Newhaven Tide Mills on 18 Oct (BDJ, PJ). [SJP]

1649. GREENFINCH

Carduelis chloris

Very common resident, passage migrant and winter visitor.

As in 1997, there was a paucity of large winter flocks. Most groups were found at coastal sites with 100 at Newhaven Tide Mills on 11 Jan, 40 at Shoreham Hbr on 29 Jan and 70 around Pagham Hbr on 5 Feb. Apart from 80, attracted to a generous supply of peanuts, at Angmering Park Estate on 28 Feb and 40 at Warnham LNR on 19 Mar there were no other big groups noted.

The details of breeding surveys are shown on page XX. Additionally, at least 6 pairs nested at Rye Hbr.

Early autumn flocks were recorded at Steep Down, Lancing where 40 were feeding on blackberries on 26 Aug, 50 were at Manor Fm, Poling on 6 Sept, 120 around the feeding station in Angmering Park on 16 Sept and 100 at Pagham Hbr on 17 Sept. Autumn movements were not exceptional but noteworthy were 90E at Church Norton on 6 Oct and 100 at Selsey Bill on 20 Oct. Totals of 48E and 119W were recorded at Bexhill and Hastings in September-October.

A flock of 80 was at Thorney Deeps on 20 Oct but the largest numbers in the late autumn were on shingle beaches with 200 at Shoreham in early November and a 225 at Pagham on 9 Nov. [JLH]

1653. GOLDFINCH

Carduelis carduelis

Common summer visitor and passage migrant and fairly common winter visitor.

During the first quarter, about 570 birds were recorded from 27 different sites. Most were small parties but there were 60 at Broadmare Common, near Henfield on 26 Jan, the same number at Nep Town, also near Henfield on 3 Feb, 90 at Burton MP on 5 Feb and 40 feeding on cattle feed at Shopham Bridge near Byworth on 7 Feb. A winter census at Marsh Fm, Yapton, a 67ha mixed farm, found a maximum of 37 on 24 Jan.

Spring passage was poor with the sea-watching logs recording just 28E at Bexhill on 21 Mar and May totals of 44E at Bexhill & Hastings and 30E at Worthing. Breeding information was also scant but details of regular surveys can be found on page XX. Additionally, single pairs were recorded at Rye Hbr and Marline Wood, Hastings, 2 pairs at Lidsey and 6 pairs at Plumpton Agricultural College.

Autumn flocks started to be recorded in August with 60 at Pond Lye on 18 Aug, 50 at both Telscombe and Coombes in mid-August and 130 at Pagham Hbr on 25 Aug. The number of 3-figure flocks increased in September with 100 at Thorney Island on 6 Sept, 220 at Marline Wood on the 12th, 100 at both Falmer Bottom and Fairlight CP on 26 Sept and 150 at Shooter's Bottom, Beachy Head on 27 Sept.

Although some passage was recorded in September, the largest movements were in October as shown in the following table:

	September	October	November	Max movement.
Selsey Bill		1452	72	330 on 15 Oct
Worthing Beach	30E	83E & 160W	-	70E on 4 Oct
Bexhill and Hastings	474E	1727E & 927W	-	890E on 9 Oct

Although not on the scale of 1997, movements in October included, at Climping, 738E and 737E on 3rd and 9th respectively, while at Pagham Hbr, there were 180E on 6th and 300E on 9th. In several instances, it is difficult to be clear from the records whether the numbers recorded were of passing birds or feeding flocks. At Beachy Head, for example, there were 550 on 3 Oct, 350 on the 4th, 500 on the 7th and 450 on 10th. More suggestive of feeding flocks were 150 at Thorney Island on 2 Oct, 150 at Icklesham on 3rd, and 120 at Michelgrove, near Patching and 150 at Rye Hbr, both on 4th.

After 70 at both Goring Gap and Selsey Bill on 4 Nov and 55 at Weavers Down, near Liss on 12 Nov, numbers declined thereafter with 65, on linseed, at Holmbush Fm, near Faygate being the only subsequent large flock. [JLH]

1654. SISKIN

Carduelis spinus

Common winter visitor and passage migrant. Probably now a very scarce breeder.

1997: At Cissbury, a total of 933 was recorded between 31 Aug and 26 Oct with a peak of 482 on 21 Sept; at Thorney Island, 226 were recorded flying N between 6 Sept and 27 Oct with a peak of 85 on 3 Oct, and at Selsey Bill, the 220 recorded on 31 Oct was the total for the whole month, with a maximum of 114 on 11th.

1998: The following table, showing the approximate number of birds recorded in each month, shows the pattern of occurrence:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
No. of birds	505	231	469	109	18	2	1	1	28	569	99	102
No. of sites	36	25	30	17	7	2	1	1	7	23	12	5

The species was most widespread and numerous at the beginning of the year. All the larger flocks were recorded at inland sites with the highest counts being 100 at Weir Wood Res on 10 Jan, 50 at Fernhurst on 15 Jan, 100 at Graffham Common on 8 Mar, 52 at Stanley Common on 21 Mar, and 60 at Hesworth Common on 2 Apr. Throughout the first winter period there were several records involving smaller flocks at different sites on Ashdown Forest. Most of the records for April-May were from this area.

Although there were records of pairs and singing males, there was no evidence of successful breeding, indeed, as shown by the table, records after mid-May were scarce. Singles were seen at West Dean and East Grinstead in late June, at Cripps Manor, Ashdown Forest on 26 July and at Littleworth, Partridge Green on 30 Aug.

Autumn passage was poor by comparison with that in 1997 and was most evident in early October at coastal sites. Most were recorded at Hastings where the peak of 96E was on 9th. The contrast with the previous autumn is clearly demonstrated at this site where the total for September and October was 301, compared with 6329 for the same period in 1997. Likewise at Sheepcote Valley, Brighton none were recorded in this autumn compared with the total for Sept 1997 alone of 3521 birds. The only large flock seen away from the coast was 40 at Chelwood Beacon, Ashdown Forest on 7 Oct.

At the end of the year there were 30 at Church Norton on 1 Dec, and 28 at West Harting Down and 25 at Barns Copse, Binsted, both on 29 Dec. [JLH]

1660. **LINNET**

Carduelis cannabina

Decreasing resident and partial migrant. Species of Conservation Concern in Sussex.

Although there were only a few winter records, they comprised a number of large flocks, most notable being 500 at Tote Hill, Woolbeding on 29 Jan. Smaller gatherings were 120 and 90 at Selsey Bill on 10 and 18 Feb respectively, 50 at both Nep Town, Henfield and Bewl Water during February and 80, feeding in a setaside weedy field at Steep Down, Lancing, on 15 Feb.

Passage became evident at the end of March when several sites recorded small easterly movements and, at Belle Tout, 220 were counted coming in from the sea on 28 Mar. The monthly totals for the main sea-watching sites were as follows:

	Mar	Apr	May	Max movement.
Selsey Bill	36	2030	-	1500 on 8 Apr
Worthing Beach	27E	47E & 22W	148E & 13W	65E on 8 May
Brighton Marina	-	178N	-	90N on 19 Apr
Splash Point Seaford	20E	82E & 3N	27E	51E on 12 Apr
Bexhill and Hastings	27E & 12N	68E & 22W	140E & 13W	65E on 8 May

Other significant counts not shown in the table included 330 at Selsey Bill on 2 Apr, 200 there on 27 Apr and a flock of 150 at Selsey West Fields on 30 Apr. Other large spring flocks were 80 at Newhaven Tide Mills on 29 Mar, 120 at Edburton on 5 Apr and 200 at East Marden on 16 Apr.

Details of breeding surveys can be found on page XX. Additionally, there was a welcome increase in the number of counts during the breeding season. On Ashdown Forest, a detailed set of records suggests that a minimum of 50 pairs bred; 20 pairs were at Plumpton Agricultural College, 8 pairs at Thorney Island and 7 pairs at the Seven Sisters CP. At Rye Hbr, nesting was reported as common and widespread.

Autumn flocks started to be recorded in late August with 120 feeding on stubble at Telscombe on 23rd and 200 on the shingle spit at Church Norton on 25th, the latter increasing to 250 by 7 Sept. There were 200 at Waterhall, Brighton on 7 Sept and 300 at Selsey West Fields on 25 Sept, prior to a plethora of high counts in October.

Coastal movements, often in association with Goldfinches, were noted in early October. It is unclear, however, whether many of the records at this time were of movements or feeding flocks. At Climping, there were 130E on 3 Oct, 65E on 4th and 65 on 25th while at the main sea-watching localities, totals for September and October were as follows:

	Sept	Oct	Max movement.
Selsey Bill	-	938	450 on 12 Oct
Worthing Beach	-	34E	34E on 4 Oct
Bexhill and Hastings	85E & 2W	430E & 1169W	203E & 450W on 9 Oct

On 4 Oct, 650 were reported from Shooters' Bottom, Beachy Head and on 8 Oct, 600 were at Church Norton, with an additional 200 at Pagham Beach. Smaller parties in October included 200 at Steep Down, Lancing on 6th, 120 feeding in stubble on Thorney Island on 12th, and 200 at the Crumbles on 17th. At Faygate and Ifield, flocks of 130 and 60 respectively, were on linseed stubble in mid-month.

At the end of the year, the largest flocks were 50 at Goring Gap on 10 Nov, 120 at Pulborough Brooks on 15 Nov and 80, feeding on weedy stubble, at Stedham Mill on 16 Dec. [JLH]

1662. TWITE

Carduelis flavirostris

Scarce winter visitor and passage migrant.

Another poor year, with only 3 records, all in the autumn. At Rye Hbr, the first 3 were seen on 16 Nov; thereafter numbers varied from 1 to a maximum of 5 on 27th, with 3 still present on 23 Dec (BJY *et al.*). At Stanbury Point, Thorney Island, 3 were seen on 5 Dec and presumably the same 3 were found on Pilsey Island the following day (CBC). A single bird was identified amongst a flock of Linnets at Newhaven Tide Mills on 17 Dec (JW). [JAH]

1663. REDPOLL

Carduelis flammea

Scarce breeder and fairly common passage migrant and winter visitor.

1997: The 110 recorded at Cissbury on 14 Sept refers to the total of birds seen on 10 dates between 14 Sept and 2 Nov, with a peak of 67 on 28 Sept.

1998: The following table, showing the approximate number of birds recorded in each month, allows comparison with the similar table for Siskin:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
No. of birds	18 3	184	180	24 1	109	23	19	-	21	22 2	162	144
No. of sites	13	10	10	12	13	3	2	-	1	22	18	6

The monthly totals in the first winter period were remarkably constant, with most records referring to inland sites. The largest flocks were of 80 at Stansted Forest on 14 Jan, 45, feeding on cattle feed with Goldfinches, at Shopham Bridge, Byworth on 7 Feb, 60 at Burton MP on 19 Feb, and 45 at Wych Cross, Ashdown Forest on 21 Mar. By late March, and until July, most records came from Ashdown Forest where at least 4 flocks of 40 or more were recorded.

During the spring, several pairs were noted on Ashdown Forest with breeding probable or confirmed in six 1km squares. There were 7 pairs at Bewl Water and displaying males were recorded at Tilgate Park and at West Harting Down.

The table shows that autumn passage peaked in October and, as usual, many of the records were from well-watched coastal sites. There were no large movements recorded, the highest counts being 50 at Icklesham on 18 Oct, 35 at Whitbread Hollow, Beachy Head on 20 Oct, and 30 at Church Norton on 11 Nov. Inland, 30 roosted at Chelwood

Beacon, Ashdown Forest on 6-7 Nov while, in December, there were 50 at Dunsters, Bewl Water on 6th and 55 at Ashurst, near Tunbridge Wells on 28th. [JAH]

1666. COMMON CROSSBILL

Loxia curvirostra

Scarce visitor occurring in large numbers in irruption years. Breeds occasionally.

1997: The 18 recorded flying NE at Shoreham Sanctuary on 5 June were on 5 July and the record of 35 at Cissbury on 2 Aug refers to the total recorded on 7 dates between 2 Aug and 26 Oct, including a maximum of 18 on the last date.

1998: Following possibly the largest irruption recorded into the county in 1997, it is not surprising that numbers remained high during the first half of the year. The following table, shows the approximate numbers recorded in each month:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1997	1	-	6	1	21	127	650	140	114	500	315	210
1998	275	250	307	305	180	21	-	1	-	11	4	-
Sites '98	17	22	26	14	15	5	-	1	-	1	1	-

Most Crossbills, predictably, were seen at sites with mature conifers. The largest flocks were recorded on Ashdown Forest, the West Sussex Commons and Forestry Commission land. Most records came from Ashdown Forest, where parties of 20-30 were regularly seen at several sites, but higher counts were of 42 at Old Lodge NR on 15 Mar and 50 at both this site and at Wych Cross in early April. At Ambersham Common, the maximum count of 57 was on 17 Jan but there were still 35 there at the end of April. Elsewhere, counts exceeding 20 birds were of 25 at Coates Common on 11 Jan, 61 at Stansted Forest on 20 Jan, 30 at Whiteley Hill, Worth Forest on 17 Mar, 40 at Sutton Common on 21 Mar and 20 at Stanley Common on 21 Mar. With the exception of 35 at Blackdown on 25th, the large parties in May were all on Ashdown Forest, with the last flock of 14 recorded at Old Lodge NR on 4 June.

At several of the sites mentioned above, the records implied that breeding may have taken place. More definite evidence was provided by a pair with fledged young at Ambersham Common on 28 Feb and 2 pairs that raised a total of 5 young at West Harting in May.

The last 2 birds were seen at both Ambersham Common and Ashdown Forest on 14 June. Two were seen at West Dean Woods on 21 June but the only subsequent records were of 1W over Marline Wood, Hastings on 16 Aug, 11NE at Hollingdean, Brighton on 17 Sept and 4 at Ambersham Common on 9 Nov. [JLH]

1710. BULLFINCH

Pyrrhula pyrrhula

Status uncertain but formerly a very common resident. Species of Conservation Concern in Sussex.

More records were submitted in 1998 for this species than in previous years, and these revealed a widespread but low density distribution, with few reports in double figures. Early in the year, there were 10 in Stansted Forest on 20 Jan, and 7 at Darwell Res on 15 Feb, the peak count at this site in 1998.

The results of breeding surveys can be found on page XX. Additionally, there were 2 pairs at Thorney Island. The first juveniles were noted on 17 June at Chelwood Beacon

and, on 2 Aug, a family party of 5 was feeding on dog violet seeds at Blackwell, East Grinstead.

A total of 28 was ringed at Cissbury, where numbers returned to normal following the unusually high total of 47 the previous year. The species was noted as being very scarce now at Beachy Head. The maximum count in October at Weir Wood Res was 7, rising to 12 in December. Fifteen were seen at Burgess Hill on 23 Oct, 11 near Nettley's Hide, Pulborough Brooks on 11 Nov, 6 at Thorney Deeps on 1 Dec and 8 at Rye Bay Wood on 11th.

As Bullfinch is on the list of species of High Conservation Concern nationally, it is important that records, especially of breeding pairs, continue to be submitted. [VPB]

1717. HAWFINCH

Coccothraustes coccothraustes

Scarce breeding resident and very scarce passage migrant.

The 17 records were from just 7 sites and possibly involved as few as 18 birds. The monthly totals were as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
7	2	1	-	4	2	2	2	1	1	3	10

The species was recorded more than once at just 4 sites. At West Harting Down, where 4 were seen on 1 Jan, a pair was recorded irregularly throughout the summer, and then a roost of 6 on 29 Dec. At Marline Wood, Hastings, a pair raised 2 young. Up to 2 were seen at West Dean in January-March with up to 3 at nearby Stapleash Fm, Chilgrove in Dec. Single birds were seen at Darwell Res on 20 Jan, at Pagham Hbr on 14 Oct and feeding in a garden near Warnham on 7 Nov. [JLH]

1847. LAPLAND BUNTING

Calcarius lapponicus

Very scarce winter visitor and passage migrant.

The only record was of 4 at Ternery Pool, Rye Hbr on 30 Jan (JRR). [SJP]

1850. SNOW BUNTING

Plectrophenax nivalis

Scarce passage migrant and winter visitor.

The reduction in numbers continues with no more than 17 birds recorded from only 7 sites. The only records in the first winter period were all from East Sussex, once their stronghold, with 3 at the Sovereign Hbr Marina, Eastbourne on 2-3 Jan, 2 at Galley Hill, Bexhill on 16 Jan and one heard on the Downs behind Brighton on 20 Feb.

Late in the year, there were 2 at East Head from 11 to 22 Nov; up to 3 on the shingle spit at Church Norton from 26 Nov to 16 Dec; 4 at Newhaven Tide Mills on 7 Dec, but only one there on 9th; and 2 at Atherington on Christmas Day. [JAH]

1857. YELLOWHAMMER

Emberiza citrinella

Status uncertain but once a very common resident.

There was a large increase in the number of records submitted for this species, partly due to detailed breeding season studies conducted by the Ashdown Bird Group. Large flocks early in the year included 20, with 100 Chaffinches and a dozen Greenfinches, at Springhead Fm, near Parham on 1 Jan, 100, including a flock of 55, at Offham, near Lewes on 31 Jan, 72 at Pagham Hbr on 5 Feb, 50 at North Marden on 20 Feb, and 20 at Upper Beeding on 22 Feb. A winter census at Wicks Fm, Yapton recorded a maximum of 26 in January-February.

During the breeding season, more than 280 records were submitted, mostly of singing males on territories on Ashdown Forest. Details of breeding surveys can be found on page XX. Additionally there were an estimated 9 territories at Woolbeding Common at the end of April. Family parties were seen at Chailey Common and a singing male, carrying food, was noted at Lidsey, near Bognor Regis on 9 July.

During the autumn, 12 were noted near Climping on 5 Sept, 16 were drinking and bathing at a dewpond on Barpham Hill on 16 Sept and 14 were feeding in a weedy field near Barcombe Res on 25 Oct. The largest numbers in the winter were associated with available food: 50 at Lee Fm, Patching on 16 Dec, were in a hedge bordering a maize/millet game crop and 35 at Botolphs, near Bramber were feeding on a weedy and seeded lucerne field. Other sites where birds were observed were on setaside land, stubble fields and land left unploughed.

At both ends of the year, the wintering flock in a private garden at Aldwick built up to around 20 birds, a somewhat lower number than in past years. As before, the majority of birds visiting the garden each day were males.

Looking back through the records, the last time a flock of more than 100 birds was recorded was in 1990 at Flansham. All observers are thus urged to keep a note of Yellowhammers seen in winter flocks or as breeders, probable and actual, and forward them to the *SOS* in the usual way. Although records may not be mentioned in this annual *Report*, all will be added to the *SOS* database for future analysis. [PL]

1874. LITTLE BUNTING

Emberiza pusilla

Very rare vagrant

One at Birling Gap on 20 Sept (DC, JFC, NJT) did not linger. It is the 8th county record and the 4th during the 1990s. It is probably the 1st county record for September, the other records being in January-March (1994), March-April (1996), autumn (1906), October (1964 and 1987) and November (1864 and 1995). [RJF]

1877. REED BUNTING

Emberiza schoeniclus

Fairly common resident, passage migrant and winter visitor. Species of Conservation Concern in Sussex.

1997: An additional breeding record was of 12 pairs at Thorney Island.

1998: During the first quarter, not less than 294 individuals were counted in 32 tetrads, including at least 40 at Old Lodge NR, Ashdown Forest on 24 Jan, 61 at Selsey Bill on 10 Feb and a roost of 21 at Camp Hill, Ashdown Forest on 14 Feb.

In the breeding season, 110 pairs or territories were reported. These included 14 pairs on Thorney Island, a slight increase on 1996 and 1997, but still fewer than in previous years; 37 territories within Rye Hbr SSSI; and at least 39 pairs or territories on Ashdown Forest. Details of other breeding surveys are shown on page XX. The overall breeding counts do not suggest that this species is recovering its former breeding numbers as recorded in *Birds of Sussex*.

In the final quarter, not less than 338 individuals were counted in 26 quadrats, a figure which, following a successful breeding season, suggests that many of the county's birds winter elsewhere as indicated in *Birds of Sussex*. This total included counts of 40 on stubble at Sidlesham SF on 11 Oct and 35 at Four Counties, Ashdown Forest on 18 Nov. [JAH]

1882 CORN BUNTING

Miliaria calandra

Fairly common but decreasing resident. Species of Conservation Concern in Sussex.

1997: An additional breeding record was of 2 singing males at Thorney Island.

1998: There were only 8 January records; 6 of these were in double figures, but the maximum was only 36, at Seaford. On 28 Jan, only 5 roosted at Pagham Mill Pond Marsh, whereas 97 were there on 3 Feb. Numbers from Brighton eastward to the Ouse were low, but the 25 at Steep Down, Lancing, were reported to be a 'larger flock than usual' for that time of year. The variable size and location of flocks in the early months suggests that birds are moving about between temporarily favoured feeding/roosting areas. Migrants coming in over the coast have very rarely been recorded, hence the 4 flying N over Brighton Marina on 9 May represents a record of some significance. It also reminds us how far into the year movement continues.

Breeding season records came mainly from the Downs from Angmering to Alfriston. There were also coastal records of singing males at Thorney Island (5), Earnley (5), Marsh Fm, Yapton (1), Horse Eye Level (1) and Rye Hbr (5-6). Some traditional sites (eg. Highdown, near Worthing) were reoccupied after an absence of several years. This suggests that the population has stabilized since the mid-1990s, but we lack annual totals from regular counts, particularly on the Downs.

Small groups appeared from the end of August, notably, 12 at Oakhurst Fm, Sidlesham on 30 Aug and 20 at Bramber on 17 Sept. One hundred were at Amberley Mount on 19 Dec; otherwise the highest count in the last quarter was 35 at Newmarket Hill on 15 Nov. Birds were reported from only 6 sites in Dec, a disappointing end to the year. [CB]

ESCAPES and FERAL BIRDS

All records of BOU Category C species, of apparently feral individuals of other species and of probable or certain escapes from captivity, will be welcomed by the Hon. Recorder for this annual feature. Notes on age/sex, plumage, behaviour, and, where known, status, will be of particular interest. Such records should be submitted in the normal way but on separate recording forms from the main records.

The following escaped or feral birds, other than those Category C species in the main list, were recorded in the county in 1997. It should be noted that the identity of these birds has not been checked by the Records Committee. List compiled by Lawrence G Holloway, with one species, as indicated, written up by Sarah Patton. Additional information on status supplied by Richard Fairbank.

SACRED IBIS

Threskiornis aethiopicus

Common resident in sub-Saharan Africa.

A male at Warnham LNR on 30 Nov had escaped from Gatwick Zoo.

BLACK SWAN

Cygnus atratus

Common resident throughout much of Australia and New Zealand. Commonly kept in wildfowl collections, full-winged birds are liable to wander. Escaped pairs bred at 2 locations in UK in 1997 (*Brit. Birds* 92: 473).

Singles and pairs turned up on a variety of dates throughout the year at: Benbow Pond, Cowdray Park; Brooklands, East Worthing; Fishbourne Channel, Chichester Hbr; New Salts Fm and Widewater, Lancing; and Swanbourne Lake, Arundel.

WHOOPER SWAN

Cygnus cygnus

Breeds N Europe and Asia. Very scarce winter visitor to Sussex (all records mid-October to early May). Escaped pairs bred in Bedfordshire in 1997 (*Brit. Birds* 92: 473).

A lone bird, considered to be an escape, was recorded at Arlington Res and in the Cuckmere Valley from 28 June to the end of the year.

SNOW GOOSE

Anser caerulescens

Breeds arctic N America, winters southern USA and Mexico. Presumed vagrants in UK most winters but greatly outnumbered by escapes (to which all Sussex records are assumed to refer). Escaped pairs attempted to breed in Berkshire (6 pairs) and Hampshire in 1997 (*Brit. Birds* 92: 473).

In the first part of the year, single birds were reported from Scotney Court GP on 3 Jan (blue phase) and 7 Mar. At Cuckmere Haven, a white phase bird was present from 10 Jan to 28 Mar. Another, or perhaps the same, white phase bird was at Bewl Water from 15 Mar until 22 Apr.

In the latter part of the year, an adult blue phase bird was at Thorney Deeps on 21 Sept and a bird was reported with a large flock of Canada Geese on Amberley Wild Brooks on 1 Nov. [SJP]

EMPEROR GOOSE

Anser canagicus

Breeding mainly confined to Alaska, winters Aleutian Islands. Present in many wildfowl collections.

A single bird at Thorney Island intermittently throughout the year and at Aldsworth Pond from 19 Feb to 27 Mar was almost certainly the same. A different individual was at Scotney Court GP from 17-30 Jan and again from 21 Nov.

BAR-HEADED GOOSE

Anser indicus

Breeds central Asia, migrates S to N India for winter. A favourite bird at wildfowl collections, individuals or even small groups can wander on occasions. An escaped pair bred in Hampshire in 1997 (Brit. Birds 92:473).

Singles were recorded at Brighthams Fm, Partridge Green on 1 and 10 Jan, Swanbourne Lake, Arundel on 20 Feb, Broadhurst, Horsted Keynes from 1-5 May and Kneppmill Pond on 22 July. A party of 4 was seen at Aldsworth Pond on 17 Mar.

CANADA GOOSE

Branta canadensis

Breeds across N America. A common introduced resident in UK. Smaller races tend to be more northerly, wintering further S. Presumed vagrants in UK most winters but greatly outnumbered by escapes (to which all Sussex records are assumed to refer).

Single birds showing characteristics of one of the smaller races of this species were at Weir Wood Res on 2 Aug and Pulborough Brooks on 3 Sept.

RED-BREASTED GOOSE

Branta ruficollis

Breeds arctic Siberia, winters SE Europe to Caspian. Very rare vagrant in Sussex (3 records Jan to early Mar). Common in wildfowl collections. Free flying birds have been noted at Arundel WWT in the past.

1997: A single bird with 3 Barnacle Geese at Church Norton on 23 Apr.

1998: One at Pulborough Brooks on 7 Sept.

HAWAIIAN GOOSE

Branta sandvicensis

Resident on Hawaii where established in wild from captive breeding programmes, following near extinction. Common at Arundel WWT.

Because of their value, if for no other reason, Hawaiian Geese are rarely allowed to escape! However, one turned up at Foxhill Village, Haywards Heath on 15 Mar.

AUSTRALIAN WOOD DUCK

Chenonetta jubata

Common resident in Australia.

A single bird on Swanbourne Lake, Arundel on 19 May, no doubt an escape from the nearby WWT Reserve.

WOOD DUCK

Aix sponsa

Breeds N USA, winters S USA. A common member of wildfowl collections. Not recorded in UK as a vagrant although some individuals may be.

Two were on the River Ouse, near Barcombe, on 13 Jan, and another 2 were at Sidlesham on 8 Apr. The behaviour of the latter birds indicated that they were escapes. .

RED-TAILED HAWK

Buteo jamaicensis

Breeds N American, winters S to Panama. One of the commoner raptors to be kept in captivity.

1995: A pale phase adult at Snailham Holt in the Brede Valley on 23 Feb.

1998: One near Broomham School, Guestling, on 9 May.

LANNER FALCON

Falco biarmicus

Mainly resident in SE Europe, African and W Asia.

A single bird, hunting over the mudflats of Pagham Hbr on 21 Nov.

SAKER FALCON

Falco cherrug

Mainly resident central Europe to N India.

One at Manor Fm, Apuldram on 14 Aug.

GYR x PEREGRINE FALCON

Falco rusticolus

A single bird, considered to be a Gyr x Peregrine hybrid, was seen at Scotney Court GP on 10 Nov.

REEVES' PHEASANT

Syrmaticus reevesii

Scarce resident in China.

One at High Hurstwood on 25 Mar.

COCKATIEL

Nymphicus hollandicus

Common Australian nomad. One of the commonest aviary birds.

Individuals were seen on various dates throughout the year at: Blacklands Fm, Sharpthorne; Brighton Marina; Littlehampton GC; Stansted Forest; Thorney Deeps; and at Woodingdean.

SUPERB PARROT

Polytelis swainsonii

Uncommon resident in SE Australia (wild population estimated to be 5000).

A single bird of this aptly named species was seen at The Severals, Church Norton on 14 Feb. It was also reported and photographed at Selsey East Beach on a number of occasions about this time.

BUDGERIGAR

Melopsittacus undulatus

Common Australian nomad. One of the commonest cage birds. Wild birds only come in green.

Two records of this favourite cage bird: one at Brighton Marina on 21 Mar and another at Galley Hill, Bexhill on 2 Aug.

PLUM-HEADED PARAKEET*Psittacula cyanocephala***Fairly common resident in Indian sub-continent.**

An adult at Penland Wood, Bexhill on 12 and 18 Oct was no doubt an escape from a local collection.

MONK PARAKEET*Myiopsitta monachus***Common resident in parts of S South America. Feral populations in USA where regarded as a pest.**

One feeding with Starlings at Burgess Hill on 8 Feb and 21 Mar.

WHITE-EYE *sp.**Zosterops sp.***Over 65 species widely distributed throughout Africa, Asia, Australia and the Pacific.**
Often kept as cage birds.

The *Zosterops* group is complex and specific identification is problematical when the bird is out of context, *i.e.* away from its usual habitat and normal range. A White-Eye of some species was seen at The Mound, Church Norton on 5 May.

CANARY*Serinus canaria***Common resident on N Atlantic Islands, introduced on Bermuda and Puerto Rico.**
One of the commonest cage birds. Not recorded in UK as a vagrant although wild plumage birds have been seen in SW in autumn.

Two records this year: singles at Littlehampton on 22 July and at Shoreham-by-Sea on 20 Oct. The latter was caught and re-homed.

ZEBRA FINCH*Poephila guttata***Common resident or nomad in E Indonesia and Australia.** One of the commonest cage birds, it is a prolific breeder and birds escape from time to time.

A single bird was seen in Alexandra Park, Hastings on 26 July.

RED-BILLED QUELEA*Quelea quelea***Common resident in sub-Saharan Africa.**

A single was seen in a garden at Seaford on New Year's Day.

RED-SHOULDERED WIDOW-BIRD*Euplectes ardens***Fairly common resident in grasslands of sub-Saharan Africa.**

A bird probably this species was seen at Shooters' Bottom, Beachy Head on 22 May.

COMMON MYNA*Acridotheres tristis***Very common resident in central and southern Asia. Introduced and thriving in southern Africa, Australia, New Zealand and many tropical islands.**

One was seen in a garden at Ticehurst on 16 Nov.

LOOKING for that particular bird? The Outline Guide below may help you:

	Pages		Pages
Divers and Grebes		Kingfisher	
Fulmar, Shearwaters & Petrels		Hoopoe	
Gannet		Wryneck	
Cormorant and Shag		The Woodpeckers	
Bitterns, Herons & Egrets		The Larks	
Storks, Ibises and Spoonbill		Martins and Swallows	
Swans		Pipits and Wagtails	
Geese		Waxwing	
Ruddy Shelduck & Shelduck		Wren	
Mandarin		Dunnock	
Surface feeding Ducks		The Thrushes	
Diving Ducks		Warblers and 'crests	
The Sawbills		Flycatchers	
Ruddy Duck		Bearded Tit	
Honey Buzzard and Kites		Long-tailed Tit	
The Harriers		The Parus Tits	
Goshawk & Sparrowhawk		Nuthatch	
The Buzzards		Treecreeper	
Osprey		Penduline Tit	
The Falcons		Golden Oriole	
Gamebirds		The Shrikes	
Rails, Crakes, Moorhen & Coot		Crows	
Crane		Starlings	
Waders		Finches	
Skuas, Gulls & Terns		Buntings	
The Auks		Black and White Warbler	
Doves and Pigeons		Northern Oriole	
Ring-necked Parakeet		Escapes and Feral Birds	
Cuckoo			
The Owls			
Nightjar and Swifts			

SUMMARY OF SOME COMMON BREEDING BIRD COUNTS

Figures relate to pairs or territories unless otherwise stated. The use of a small hyphen (-) does not necessarily mean that the species was absent.

Species	AL	BC	BW	GF	HC	LC	LP	MF	SC	SF
Mallard	14	1	100	2	-	-	-	11	-	-
Sparrowhawk	-	-	2	-	1	-	-	-	-	-
Kestrel	-	-	5	-	-	-	-	1	-	-
Moorhen	17	1	66	7	2	-	-	5	-	-
Pheasant	-	-	6	2	-	-	-	3	-	-
Lapwing	4	-	-	-	-	-	-	1	-	-
Stock Dove	-	-	2	6	2	-	1	-	-	-
Woodpigeon	-	4	67	13	-	-	-	3	-	-
Collared Dove	-	-	-	-	1	-	-	2	-	-
Turtle Dove	-	-	9	-	2	-	-	-	1	1
Cuckoo	-	-	10-	-	-	-	-	-	-	-
Tawny Owl	-	-	5	-	1	-	-	-	-	-
Nightjar	-	-	-	-	-	2	1	-	2	-
Green Woodpecker	-	1	15	2	2	2	1	1	1	-
Gt Sp Woodpecker	-	2	9	1	3	-	-	-	2	-
Skylark	-	-	22	-	-	-	-	4	-	1
Pied Wagtail	-	-	14	1	-	-	-	1	-	1
Wren	-	15	90	22	7	-	-	29	12	7
Dunnock	-	4	59	8	3	-	-	16	1	2
Robin	-	18	88	27	17	-	-	24	19	7
Stonechat	-	-	-	-	-	-	-	-	2	-
Blackbird	-	6	120	17	11	-	-	19	3	5
Song Thrush	-	2	33	4	5	-	-	1	1	1
Mistle Thrush	-	1	13	1	-	-	-	1	-	-
Sedge Warbler	1	-	1	-	-	-	-	2	-	-
Reed Warbler	67	-	-	-	-	-	-	20	-	-
Lesser Whitethroat	-	-	1	-	-	-	-	1	-	1
Whitethroat	3	1	14	1	-	-	-	7	-	2
Garden Warbler	-	1	31	1	1	-	-	-	-	-
Blackcap	-	4	44	5	4	-	-	2	2	2
Chiffchaff	-	2	70	8	7	-	-	1	2	3
Willow Warbler	-	1	58	-	2	-	-	-	3	-
Goldcrest	-	-	6	1	2	-	-	-	1	-
Spotted Flycatcher	-	-	2	-	-	1	-	-	-	-
Long-tailed Tit	-	1	24	1	5	-	-	1	-	-
Marsh Tit	-	2	7	1	3	-	-	-	-	-
Coal Tit	-	3	4	1	1	-	-	-	2	-
Blue Tit	-	14	72	21	14	-	-	10	5	8

Great Tit	-	10	49	13	9	-	-	8	3	4
Nuthatch	-	2	20	2	4	-	-	-	-	-
Treecreeper	-	-	10	3	2	-	1	-	-	-
Jay	-	1	8	1	1	-	-	-	-	-
Magpie	-	-	24	2	-	-	-	5	-	1
Jackdaw	-	-	1	1	-	-	-	-	-	-
Carrion Crow	-	2	31	5	-	-	-	4	2	1
Starling	-	-	39	11	-	-	-	5	-	-
House Sparrow	-	-	22	1	-	-	-	11	-	-
Chaffinch	-	7	122	20	6	-	-	34	12	9
Greenfinch	-	-	32	2	4	-	-	7	-	-
Goldfinch	-	-	11	-	-	-	-	2	-	-
Linnet	-	-	9	1	-	2	1	-	1	-
Bullfinch	-	1	13	2	3	-	-	1	-	-
Yellowhammer	-	1	29	1	-	5	2	4	2	1
Reed Bunting	5	-	15	-	-	-	-	4	-	-

Key to sites:

- AL Aldingbourne and Lidsey Rife. 4.0km of Waterway Bird Survey.
 BC Barns Copse, Binstead. 16.1ha deciduous woodland. Common Bird Census.
 BW Bewl Water. 182ha of mixed habitats but predominantly grassland plus 312ha of water.
 GF Grantleys Farm, Maynards Green. 45.3ha farmland. Common Bird Census.
 HC High Chimneys Estate, Battle. 24ha of deciduous woodland with some grassland.
 LC Lavington Common. 28.8ha lowland heath surrounded by pine & deciduous woods. Common Bird Census.
 LP Lords Piece, Fittleworth. Territory mapping.
 MF Marsh Farm, Binstead. 67.5ha mixed farmland. Common Bird Census.
 SC Stedham Common. 39.7ha heathland with some woodland. Common Bird Census.
 SF Scobells Farm, Barcombe. 10.4ha grass farm with woodland. Territory mapping.

ARRIVAL AND DEPARTURE DATES OF SUMMER VISITORS

	<i>First recorded date</i>		<i>Last recorded date</i>	
	Prior to '98	1998	Prior to '98	1998
Garganey	21 Jan	15 Mar	13 Dec	13 Oct
Osprey	10 Mar	28 Mar	09 Dec	20 Oct
Hobby	12 Apr	20 Apr	31 Oct	29 Oct
Quail	21 Mar	16 May	01 Dec	16 Aug
Little Ringed Plover	06 Mar	22 Mar	08 Oct	22 Sept
Wood Sandpiper	11 Feb	09 May	16 Nov	21 Sept
Pomarine Skua	02 Apr	20 Apr	20 Nov	18 June
Arctic Skua	29 Feb	01 Jan	31 Dec	31 Dec
Roseate Tern	29 Feb	07 May	30 Sept	28 Aug
Common Tern	21 Mar	28 Mar	26 Nov	07 Nov
Arctic Tern	13 Apr	05 Apr	23 Nov	20 Nov
Little Tern	02 Apr	15 Apr	04 Nov	30 Sept
Black Tern	04 Apr	13 Apr	21 Nov	30 Sept
Turtle Dove	22 Mar	08 Apr	12 Nov	11 Oct
Cuckoo	15 Mar	02 Apr	11 Nov	10 Oct
Nightjar	08 Apr	30 Apr	05 Nov	02 Oct
Swift	10 Apr	12 Apr	22 Nov	12 Oct
Wryneck	09 Mar	13 Apr	05 Nov	13 Oct
Sand Martin	05 Mar	21 Mar	05 Dec	31 Oct
Swallow	04 Feb	20 Feb	28 Dec	29 Nov
House Martin	01 Feb	05 Apr	22 Dec	20 Nov
Tree Pipit	17 Mar	31 Mar	09 Nov	26 Oct
Yellow Wagtail	09 Mar	30 Mar	23 Nov	20 Nov
Nightingale	21 Mar	29 Mar	19 Oct	20 Sept
Redstart	13 Mar	30 Mar	29 Nov	26 Oct
Whinchat	18 Feb	14 Mar	02 Dec	04 Nov
Wheatear	13 Feb	08 Mar	31 Dec	10 Nov
Ring Ouzel	02 Feb	28 Mar	27 Dec	08 Nov
Grasshopper Warbler	04 Apr	14 Apr	01 Nov	10 Oct
Sedge Warbler	27 Mar	31 Mar	29 Oct	18 Oct
Reed Warbler	09 Apr	08 Apr	13 Nov	07 Nov
Lesser Whitethroat	04 Apr	07 Apr	21 Nov	18 Nov
Whitethroat	19 Mar	27 Mar	17 Dec	19 Oct
Garden Warbler	01 Apr	17 Apr	16 Nov	07 Oct
Wood Warbler	07 Apr	19 Apr	01 Oct	05 Sept
Willow Warbler	04 Mar	13 Mar	26 Dec	20 Nov
Spotted Flycatcher	08 Apr	30 Apr	18 Nov	10 Oct
Pied Flycatcher	05 Apr	21 Apr	01 Nov	04 Oct

DEPARTURE AND ARRIVAL DATES OF WINTER VISITORS

	<i>First recorded date</i>		<i>Last recorded date</i>	
	Prior to '98	1998	Prior to '98	1998
Black-throated Diver	30 June	03 June	20 Aug	08 Oct
Great Northern Diver	21 June	18 Apr	14 July	07 Nov
Red-necked Grebe	31 May	19 May	19 Aug	18 Aug
Bewick's Swan	26 Apr	12 Mar	16 Oct	08 Nov
White-fronted Goose	01 Apr	11 Apr	20 Oct	12 Sept
Long-tailed Duck	11 June	25 Feb	23 Aug	01 Sept
Velvet Scoter	15 June	09 May	10 July	03 Oct
Goldeneye	23 May	23 May	08 Oct	05 Sept
Smew	23 Apr	24 Apr	03 Nov	23 Nov
Goosander	22 May	15 Feb	12 Sept	29 Oct
Hen Harrier	19 June	06 June	27 July	13 Sept
Purple Sandpiper	26 May	16 May	05 Aug	10 July
Jack Snipe	12 May	01 May	29 Aug	18 Sept
Water Pipit	28 May	No record	01 Sept	No record
Fieldfare	05 June	19 Apr	06 Aug	25 Sept
Redwing	26 May	01 Apr	05 Sept	12 Sept
Great Grey Shrike	14 May	05 May	07 Sept	10 Oct
Brambling	12 May	20 Apr	17 Sept	03 Oct

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J Badley	D Burt	R Davison
J Bagley	AF Burtenshaw	S Dawson
CF Ball	Mrs SJ Burtenshaw	JM Daykin
TG Ball	TN Buttle	CH Dean
PC Bance		M Denness
DG Barber	T Callaway	MJH Denny
J Barfoot	IK Callister	D Dey
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MH Barnard	A Carter	Ms J Dickson
A Barrow	BJ Carter	S Diserens
R Batchelor	GL Champion	P Dorian
AJ Beasley	NJ Champion	NA Driver
A Beattie	Mrs RH Champion	DP Dunk
JSS Beesley	Mrs B Chapman	Mrs NI Dunsmore-Rouse
PR Belchamber	F Clarke	S Dunsmore-Rouse
E Bell	Miss CM Clarkson Webb	C Durrell
Mrs V Bentley	BR Clay	
K Benyon-Taylor	N Cleere	RDM Edgar
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G Binns	Ms S Cocker	P Edwards
LR Bird	Dr JA Cocks	TJ Edwards
RF Bird	DW Codd	Miss M Emberson
Ms J Birdsey	CB Collins	GM Evans
M Blight	M Collins	RD Evans
S Boddington	Mrs MA Collins	Mrs AN Everett
J Bodle	D Connell	CM Everett
S Bolton	M Constantine	P Everett
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DJ Funnell	SR Hilton	JW King
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S Gunn		IT Lewis
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Mrs CH Hamilton	Mrs B James	Lloyd
SG Hamilton	Mrs BD James	AH Lloyd
J Harding	CM James	P Lloyd
R Harman	P James	S Love
Ms E Harris	CR Janman	C Lowmass
N Harris	JP Jones	GH Luck
RG Harris	M Jones	JC Luck
J Hartwright	P Jones	PJ Luffingham
JR Havers	D Julian	C Lutman
MJ Hawkins		
KGB Heinzman	Dr M Kalaher	

A Madgewick	RA Philcox	CJ Sharpe
L Manns	AP Phillips	JP Shaughnessey
Ms PG Marchant	J Phillips	D Shepherd
M Marr	P Philpot	A Simpson
C Marrable	C Piper	Mrs IM Simpson
G Martin	Ms M Platt	Miss AE Skinner
MJ Mason	Ms A de Potier	D Smith
DW Mawford	DA Potter	DI Smith
D Mead	RJ Poulter	R Smith
Mrs V Miles	HDV Prendergast	S Smith
J Miller	MG Prince	Miss M Smith
O Mitchell	R Prior	M Smith
CE Morris	H Pugh	JF Smitherman
R Morris	RN Pulley	A Snelling
Mrs BM Mortlock	Miss J Pullin	Miss BM Spencer
DC Mortlock	B Puttock	DM Spittle
C Mulcock		T Squire
Mrs P Mulcock	JR Rance	B Stacey
B Murray	CJ Raymond	M Stanbridge
TM Murray	EM Raynor	I Standivan
	M Reader	JC Steedman
Mrs S Newell	J Reaney	Mrs J Steedman
Dr. JA Newnham	SI Robathan	Dr MJ Stenning
G Nicholls	GCM Roberts	Mrs V Stevens
A Nixon	Dr BM Rogers	Steyning Ringing Group
J Nobbs	Mrs JG Rogers	K Stouse
K Noble	C Rosebottom	PJ Strangeman
	R Rownsby	E Streeter
J O Driscoll	C Ruffell	Ms J Streeter
G Osborne	J Ruggles	C Sutton
LW Osborne	SJR Rumsey	E Sutton
B Osborne	SR Ruscoe	GA Sutton
RA Owen	M Russell	I Swaine
	Rye Bay Ringing Group	A Swash
CF Page		Mrs J Swash
R Page	D Sadler	
R Parish	RF Sanderson	Miss CA Taylor
EH Parkhurst	RJ Sandison	R Taylor
TW Parmenter	CR Saunders	Miss C Tazzyman
PT Patton	RA Saunders	M Thomas
Mrs SJ Patton	RJ Saunders	NJ Thomas
D Pennington	D Sawyer	Mrs AM Tivey
RT Pepper	Ms G Scholey	R Tofts
A Perry	M Scott-Ham	J Tranter
Mrs N Petrie-hay	J Selater	PM Troake
C Peverett	M Shaft	C Trollope

JE Trowell	Dr AB Watson	J Willsher
WH Truckle	RF Watson	Mrs LJ Wilson
PC Turner	R Welsh	PJ Wilson
SJ Turner	Mrs AJ Wende	TJ Wilson
	B West	A Winchester
ST Underdown	DR West	Miss Windsor
ED Urquhart	AD Whitcomb	Mrs E Woolgar
	IJ Whitcomb	RJ Woollard
JE Wakeling	PJ Whitcomb	C Wright
M Walford	GC White	E Wright
CA Walker	A Whitehead	L Wright
D Walker	Mrs AM Whitman	RB Wynn
P Walter	JH Whitman	
P Ward	Mrs J Wicks	Dr BJ Yates
Ms R Warren	BE Williams	S Yeo
Mrs C Watkins	Mrs P Williams	
P Watkins	K Wills	

SURVEYS:

Society members again gave a great deal of their time during the year to a wide range of national, county and local surveys. Their invaluable support and contributions are acknowledged with grateful thanks. Details of the surveys and the Sussex organisers follow.

Heronry Census: This long-standing census is organised in Sussex by Dr AB Watson, 83 Buckingham Road, Shoreham-by-sea, West Sussex. Counts of known heronries are given in the systematic list, contributors in 1998 were: PC Bance, D Buckingham, R Carver, PB Clarke, JK Cross, CH Dean, N Driver, R Henning, R Knight, DC Lang, PJ Luffingham, Mrs BM Mortlock, Dr JA Newnham, JL Nobbs, GCM Roberts, MJ Scott-Ham, S Sutton, Dr AB Watson.

Wetland Bird Survey (WeBS): This BTO/WWT/RSPB/JNCC survey was carried out between Apr 1998 and Mar 1999. Counts were carried out, those for both the coast and inland being organised by CD Lowmass, 33 Barn Close, Seaford, East Sussex, while those specifically for Chichester Harbour were organised by Ms A de Potier, Harbour Office, Chichester Harbour Conservancy, Itchenor, Chichester, West Sussex. Thanks are due to the two survey organisers and to the following counters: PC Bance, Mrs J Barnard, K Benyon-Tinker, G Binns, GF Boniface, Dr C Brooks, M Buckley, DJ Burges, KF Burn, T Callaway, Mrs E Catlatt, Dr J Chapman, GA Cockburn, Mrs S Cocker, D Codd, CB Collins, C Cook, A Cotton, Ms A de Potier, Ms E Dorling, G Durey, P Durnell, AR Eales, RDM Edgar, P Edwards, M Emery, S Evans, Mrs AN Everett, Dr B Fellows, A Foster, R French, S.Gilbert, J Glover, DJ Golds, Miss H Gordon, J Gowen, A Grace, NM Greenaway, RR Greenhalf, G Griffin, RG Harris, JL Herring, D Heryett, R Hill, DA & Mrs SR Hilton, Mrs PA Hollow, D Julian, A Kirkwood, S Knapp, R Knight, DC Lang, HJA Lee, M Love, CD Lowmass, R Morris, Mrs BM Mortlock, Dr JA Newnham, P Outhwaite, RT Pepper, W Potter, S Prosser, B Puttock, N Roberts, CJ Raymond, RJ Saunders, B Savage, A and Mrs IM Simpson, Miss A Skinner, Ms C Skinner, DJ Smith, M Smith, Miss CA Taylor, P Troake, JE Trowell, PC Turner, ED Urquhart, Mrs P Williams, RLC

Williamson, J Willsher, PJ Wilson, H Wingfield-Hayes, CW and Mrs KI Woodburn, K and Mrs J Wright, Dr BJ Yates, S Young and S Younger.

Summary of Common Breeding Bird Counts: A number of members carry out annual breeding bird censuses on a range of sites throughout the county; those tabulated on pages XX & XX were from R Crane, J Bagley, P Bance, PR Belchamber, RG Harris, R Knight, RT Pepper, J Tranter and PC Turner.

Breeding Bird Survey: This BTO annual national breeding survey, based on selected one km squares, is organised in Sussex by Dr AB Watson.

Co-ordination of Spring Sea-watching records: The annual co-ordination of these records for the Society is carried out by Dr JA Newnham, 61 Grand Avenue, Worthing, West Sussex.

Cormorant roost counts: Simultaneous counts were carried out monthly from Sept 1997 to Mar 1998 at Chichester Gravel Pits and South Stoke, West Sussex, by A Cox and R Knight for the Cormorant Research Group.

We are grateful for summaries of detailed observations at Chichester Harbour from Ms A de Potier; Thorney and Pilsey Islands from CB and Mrs MA Collins; Selsey Bill from BJ Carter; Pagham Harbour from B Williams and Mrs S Patton; Pulborough Brooks from T Callaway and A Cotton; Worthing from Dr JA Newnham; Weir Wood Reservoir from Mrs BM Mortlock; Ashdown Forest from R Harman and D King; Bewl Water from PC Bance; Beachy Head from RDM Edgar; Splash Point, Seaford, from GR Gilmore; Glyne Gap, Bexhill from I Standivan; Icklesham from J Willsher, Pett Level from JAB Gale; and at Rye Harbour from Dr BJ Yates.

Thanks are due to R Sanderson for maintaining detailed records of ringing in the county and to all ringers who contributed.

The Recorder is especially grateful to Dr JA Newnham and the following team of helpers for coding and inputting the records onto the computer: SD Allen, PM Brayshaw, T Callaway, BR Clay, JES Cooper, DE Crawley, MR Crowe, Ms A de Potier, PC Follett, BR Gilmore, J Gowers, AC Gutteridge, JA Hobson, D Holdstock, JR Hollins, R Holtham, CE Hope, A House, RA Ives, D King, R Knight, C Law, L Manns, Mrs BM Mortlock, Mrs P Mulcock, G Osborne, Mrs S Patton, C Piper, C Raymond, GCM Roberts, Mrs IM Simpson, DI Smith, I Standivan, JC Steedman, Dr MJ Stenning, SWT volunteers, Dr AB Watson, Mrs AJ Wende, IJ Whitcomb, J Whitman, BE Williams, J Willsher, R Woollard and Dr BJ Yates.

THE SUSSEX RINGING REPORT FOR 1998

by Roy Sanderson & John Newnham.

Introduction

There are at least 22 registered ringers operating in Sussex and 20 of these contributed records to this report. The total of 49,231 birds ringed during the year was remarkably similar to the total (49,816) for 1997. As usual the number of birds ringed by Rye Bay Ringing Group (RBRG) overshadowed the efforts of other groups and individuals - 35,409 by RBRG and 13,822 by the others, a decrease of 1047 (2.9%) and increase of 467 (3.5%) respectively compared to 1997. Also, as in previous years, the diversity of species trapped by RBRG (117) was considerably greater than the 71 species ringed by the other county ringers. Amongst these were several county rarities which included 13 **Spotted Crakes**, and single **Thrush Nightingale**, **Bluethroat** and **Aquatic Warbler** ringed at Icklesham, and a **Barred Warbler** at Beachy Head. Two **Peregrines**, ringed as nestlings at Brighton, were a new species for the county ringing list.

Ringling Totals

Table 1 lists the 28 species with the highest ringing totals for 1998 in descending order of magnitude. These species comprise 95% of birds ringed in the county for 1998 and 93% for 1997. The table also lists the 1998 total for these species caught by RBRG and shows how overwhelming the work of this group is on the county data; indeed for 5 of these regularly trapped species, Grasshopper Warbler, Sedge Warbler and the 3 *hirundine* spp, the group ringed more than 90% of the county total and only for Chaffinch (18%) and Siskin (3%) did their proportion fall below 20%.

	1997				1998				
	Total	Total	RBRG	% change	Total	Total	RBRG	% change	
Swallow *	5636	7450	7278	32	Garden Warbler	589	562	363	-5
Sedge Warbler	8960	7233	7085	-19	Dunnock *	356	548	211	54
Chiffchaff	2368	4573	2644	93	Song Thrush **	671	537	164	-20
Reed Warbler	5368	4557	4076	-15	Grasshopper Warbler *	561	513	496	-9
Blackcap	3089	4362	2578	41	Greenfinch	776	461	137	-41
Sand Martin *	4452	3113	3113	-30	Goldcrest	946	412	165	-56
Willow Warbler	2533	2938	1562	16	Wren	350	388	136	11
Blue Tit	2836	2501	940	-12	Chaffinch	372	367	64	-2
Great Tit	1236	1107	367	-10	Goldfinch *	535	328	182	-39
Robin	531	987	429	86	Lesser Whitethroat	175	312	205	78
House Martin	690	752	749	9	Reed Bunting **	612	258	200	-58
Whitethroat	797	696	386	-13	Long-tailed Tit	260	247	77	-5
Siskin	432	667	21	54	Bullfinch **	256	155	31	-39
Blackbird *	822	569	288	-31	Dunlin	4	150	150	

Table 1: Sussex Ringing totals for the 28 most ringed species.
Birds of Conservation Concern - ** denotes Red list, * denotes Amber list

In keeping with the data presented in the 1997 report the table also shows the change in numbers ringed compared with 1997. Sanderson (1998) emphasised the pitfalls of drawing hasty conclusions from these data and described several of the variables which affect the figures. During this year, for instance, the notable increase in **Siskins** ringed was entirely due to 401 being trapped in one small mist-net in a Haslemere garden and the decline in **Song Thrush** numbers would have been more startling without 233 nestlings being ringed as part of an intensive study on this species funded by the Royal Society for the Protection of Birds (RSPB). Table 1 does in part, however, reflect the populations of these species in the county. Several ringers commented on the abundance of **Chiffchaffs**

resulting in a record high year. Also on the positive side **Robins**, **Blackcaps** and **Lesser Whitethroats** were ringed in larger numbers and **Dunnock** numbers recovered to those of the mid-1980's. All five of these species showed positive changes in the British Trust for Ornithology's (*BTO*) Common Bird Census for 1998 (Marchant *et al*, 1999) and both Blackcap and Chiffchaff showed statistically significant increases in the number of juveniles captured in the *BTO*'s Constant Effort Site (*CES*) study (Balmer & Wernham, 1999).

On a worrying note all three species in Table 1 which appear on the Red List of Birds of Conservation Concern (RSPB 1996) showed decreases. Table 2 shows all species of high conservation concern which were ringed in Sussex in most years in the 1980s. The table, comparing the mean annual totals for the decade 1979-88 with the 1998 ringing total, reveals 6 species, out of the 9 listed, show a downward trend.

Species	Average annual total 1979-88	Total 1998	Remarks
Turtle Dove	4	4	
S Skylark	8	0	
Song Thrush	349	537	only 304 without RSPB study
Spotted Flycatcher	81	9	
Tree Sparrow	50	0	
Linnet	151	33	
Bullfinch	200	155	
Reed Bunting	143	258	large proportion caught by RBRG.
Corn Bunting	58	0	468 trapped in special study in 1985

Table 2 Ringing Totals of 'Red List' Birds of Conservation Concern.

Whilst year to year changes are interesting, particularly to those involved in the county's ringing, it is the overall long-term pattern of change for each species which is more revealing and important from the conservation viewpoint. Figure 1 shows the annual ringing totals for the two common *Acrocephalus* warblers for the past two decades.

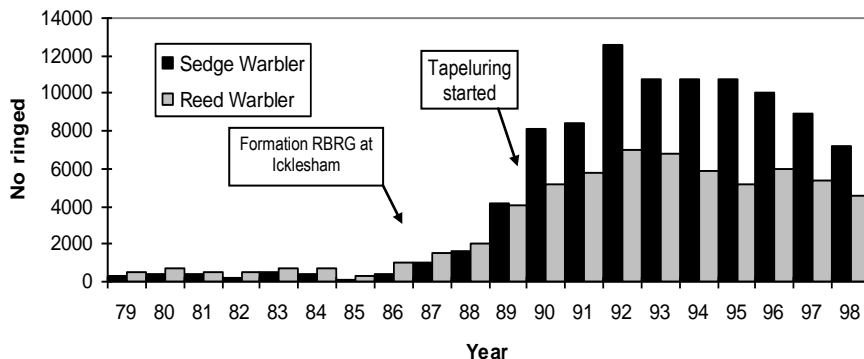


Figure 1. Annual Ringing totals for the two common *Acrocephalus* warblers from 1979 to 1998.

The most compelling message from the graph is the effect that RBRG has on the county data but other points of interest are also demonstrated by the figure. During the first decade, prior to the regular use of tape lures to attract passage warblers in the extensive reed-beds at Icklesham, more **Reed Warblers** were ringed than **Sedge Warblers**. As the Icklesham site developed in the late 1980s so the numbers of both species trapped notably increased but Sedge Warblers became the more numerous. Had

this graph extended into the 1960's a similar, although smaller, pattern would have been seen as the Chichester Ringing Group caught more Sedge Warblers than Reed Warblers in the reed-beds at Ivy Lake, Chichester. Most of the Sedge Warblers were juveniles which stayed for brief periods, usually one day, during autumn passage whereas an unknown proportion of the Reed Warblers were local breeders (Watson and Mead, 1968): this applies to both sites. Finally, despite constant ringing effort at Icklesham, the graph suggests that both species have declined in recent years following the pattern in the BTO's Waterways Bird Survey (Marchant *et al* 1999) and, for Sedge Warbler, the CES survey results.

Many Sussex ringing sites are not suited to winter ringing, a feature highlighted by the dominance of summer visitors in Table 1, but a record catch of 109 **Bramblings** (19 in 1997) resulted from 86 trapped on Ashdown Forest, and 21 in a garden on the Sussex/Surrey border.

Nestlings

Just over 6% (3060) of the total were birds ringed as nestlings, giving a nestlings to full-grown birds ratio of 1:15.1, considerably higher than the BTO national ratio of 1:3.6 (Toms *et al* 1999). The ringing of nestlings provides precise information about the birds age, site of origin, and siblings and is one of the major ways of studying the movement and longevity of some species which are difficult to trap by other means. Table 3 shows the species ringed in 1998 where nestlings comprise more than 40% of the total.

	Total ringed	Total nestlings	% ringed as nestlings		Total ringed	Total nestlings	% ringed as nestlings
Common Tern	66	66	100	Nuthatch	92	74	80
Carrion Crow	3	3	100	Mistle Thrush	7	5	71
Peregrine	2	2	100	Grey Heron	10	7	70
Ruddy Duck	1	1	100	Tawny Owl	10	5	50
Oystercatcher	1	1	100	Turtle Dove	4	2	50
Black-headed Gull	79	78	99	Song Thrush	537	269	50
Barn Owl	145	141	97	Redstart	76	37	49
Lapwing	15	14	93	Jackdaw	23	11	48
Stock Dove	13	11	85	Marsh Tit	43	20	47
Kestrel	42	34	81	Redshank	9	4	44

Table 3: Nestlings ringed in Sussex in 1998.

Birds of prey feature within this group and there appears to have been a revival of interest in ringing raptors with 42 **Kestrels**, including 34 nestlings, being a total not seen for a decade. Twenty-eight **Sparrowhawks** were ringed, 4 at Weir Wood Reservoir and 18 by RBRG, and 2 **Hobbies**. Two **Peregrine** chicks were ringed from a nestbox installed on Sussex Heights, an apartment block in the centre of Brighton (Roberts, 1998).

More information was available this year for owl ringing with totals of 7 **Little Owls**, 10 **Tawny Owls**, and a record 145 **Barn Owls**. Indeed details for the last remain incomplete as liaison between Barn Owl Projects in Sussex suggest that approximately 180 **Barn Owls** were ringed in the county in 1998 (G.Roberts *pers comm*). This total included 21 ringed by the Hawk and Owl Trust, monitoring a highly successful nest box scheme in East Sussex where, in the absence of trees, boxes are placed on poles. Three adults and 31 nestlings were ringed by the Farlington Ringing Group which included several broods of 4, and one of five. A nest box study in the northwest of the county reported 20 occupied boxes, from which 57 young were ringed and most of the adults too were either ringed or retrapped.

Recoveries

Details of only a fraction of the recoveries and controls (birds trapped already carrying a ring from elsewhere) reported during 1998 were received, especially from RBRG who during the year recorded over 920 movements. The following, therefore, is a small sample rather than a complete picture.

The majority of **Heron** ringing is of nestlings, and the long term recovery rate is 11% (Toms *et al* 1999). Thirty-one were ringed in 1995 at Flansham and the first recovery was three years later in April 1998, a bird found dead under power lines near the heronry. Another, ringed on 18 Apr 1998 at Sidlesham, travelled further and was found freshly dead at Exbridge (193 km), Somerset on 31 July 1998.

Ringling of wildfowl in Sussex has, until the past decade, been confined to Mute Swans and Canada Geese but RBRG have successfully ringed several species of duck; the recovery of a **Teal** on 1 Jan 1997 at Ovieda, Spain and a **Tufted Duck** on 3 Jan 1997 at Finistere, France were the first movements from Sussex to these regions.

Extensive studies of **Black-headed Gulls** have shown that wintering birds originate from the Low Countries, the Baltic States and Fenno-Scandinavia (Newnham 1986). Reports this year conform to this pattern with movements recorded between Sussex and the Netherlands (5), Germany, Denmark (2), Sweden (2), Norway (2), Finland (5) and Lithuania. Two birds, with multiple sightings, were particularly interesting; a second year gull ringed at Washington on 31 July 1993 was subsequently seen at a colony in Finland between May and July 1994, in May 1995, in April 1996 and in May 1998 and one ringed at Sompting in February 1986 was seen in Denmark in March 1987 and 1988 before being captured in Sweden in June 1998.

A **Common Gull** ringed in January 1980 at Sompting was found 1447 km away on 15 Oct 1997 in Norway. Although the location of this recovery is not unusual (Newnham & Watson 1994) this bird was approaching the age record of 21 years for a BTO-ringed Common Gull (Toms & Clark 1998). The recoveries of Sussex ringed **Herring Gulls** were plotted by Newnham (1988) and showed most were found on the English South coast, with a few from the Severn estuary, Northern Britain and the coast of Northern France; in this context the single recoveries from the Netherlands and Belgium this year were slightly unusual. A **Great Black-backed Gull** ringed after rehabilitation on 21 Sept 1996 clearly returned to normal, being found in Norway during May 1997.

The known fate of 5 Barn Owls ringed as chicks was two road casualties, one local and the other in Hampshire 19km from its Sussex ringing site and two months later. One was found dead against wire netting, one drowned in a sewage treatment tank and one in a horse trough. A Tawny Owl ringed at Fairlight on 13 Sept 1988 and found at Guestling, Hastings over 10 years later on 5 Dec 1998 shows the sedentary nature of this species.

Perhaps the most widely known fact of migration is that British **Swallows** spend the winter in South Africa. Although 388 BTO ringed birds had been recovered in South Africa prior to 1996 (Toms & Clark 1998) one, ringed at Icklesham on 1 Oct 1996 and found in South Africa on 13 Mar 1997, was only the 6th from Sussex to have been found there (Parmenter 1996a, Crawley 1997).

A **Robin** ringed on 18 Oct 1997 at Beachy Head was caught by a cat on 29 Apr 1998, 937 km away, on Orkney.

Small warblers, with skulking habits, are seldom recovered, indeed nearly 550 **Grasshopper Warblers** need to be ringed to expect a single recovery (Toms *et al* 1999). As RBRG catch approximately 50% of the national total for this species it is not surprising that the few movements recorded involve Icklesham. A juvenile ringed at Icklesham on 22

Sept 1997 was controlled 728km S in France just 7 days later, this being the only BTO recovery for 1997 and the fourth BTO ringed bird to be found in France (Toms *et al* 1999)

Among the recoveries of other summer migrants were 2 **Reed Warblers** ringed at Litlington; one ringed on 21 Aug 1997, was controlled on 27 Apr 1998 at Wetteren (263 km), Belgium, and the other, ringed on 10 Sept 1995 was controlled in 1996, 1997, and 1998 at Rutland Water. Amongst the plethora of Reed Warbler movements involving Icklesham were birds ringed at Bydgoszcz, Poland on 11 July 1997 and Vest Agder, Norway on 31 July 1997 being controlled in Sussex on 15 Aug 1997 and 12 Sept 1998 respectively.

Lesser Whitethroats follow a south-easterly route in autumn passing through Italy to their wintering areas in East Africa with their return passage in spring showing a different route, passing through or around the eastern Mediterranean (Mead 1974). A recovery of a bird, ringed at Icklesham on 20 Aug 1994, retrapped on 31 Aug 1996 and controlled on the Akamas Peninsular, Cyprus on 11 Apr 1997 follows the pattern and is the second Sussex ringed bird to be found in spring on Cyprus (Edgar 1996).

Two **Blackcaps** ringed during the autumn at Beachy Head were found in Morocco and Algeria respectively and **Chiffchaffs** ringed at Cissbury appeared to go in several directions although all were ringed in the autumn and reported in spring. One ringed on 23 Sept 1995 was controlled on 24 Apr 1998 in Merseyside, a second ringed on 21 Sept 1997 was controlled on 7 Apr 1998 at Languard Point, Suffolk and finally, one ringed on 3 Oct 1997 flew into a window on 31 Mar 1998 at Oviedo (895 km), Spain.

A first year male **Goldcrest** ringed on 12 Oct 1997 at Steyning was controlled 2 days later in Jersey (220 km), Channel Islands and a trapped bird at Ringmer was of Norwegian origin; both involve areas new to Sussex ringing (Parmenter 1996b).

Movements of **Blue Tits** beyond 100 km are unusual and have been described by Cooper (1996). One nestling ringed on 6 June 1996 at Hardham was found dead on 12 Apr 1998 near Wareham (115 km), Dorset.

With falling **Linnet** numbers, recovery data becomes more valuable. One ringed as a nestling on 22 May 1997 at Plumpton flew into a window on 23 June 1998 at Aldeburgh (181 km), Suffolk.

An adult **Greenfinch** ringed in November 1996 in an East Grinstead garden, was controlled on 11 Feb 1998 near Exeter (249 km), Devon. Sanderson (1996) noted a paucity of recoveries to the south and west from extensive ringing of this species in East Grinstead and a plot of Greenfinch recoveries from the Shoreham area (Newnham 1988) also showed all, bar one, to be in a north or east direction. The exception was similar to that reported here suggesting some Greenfinches move westward in winter.

There were several recoveries of **Siskins**, all from birds ringed between January and March 1998 and reported later in the spring from northern Britain, included Merseyside (3 Apr 1998), Strathclyde (4 Apr 1998), Northumberland (8 Apr 1998), and the Highlands (6 May 1998). A Siskin ringed on 21 July 1995 at Kalingrad, Russia was trapped on 29 Mar 1998 at Marley Common and was the third Russian ringed Siskin to be found in Britain.

Two **Redpolls**, ringed at Icklesham were recovered abroad; one ringed on 20 Oct 1991 was found in Belgium on 15 Nov 1997 over 6 years later and the other ringed on 15 Nov 1996 was recovered at Bergamo, Italy on 22 Dec 1997. Whilst most foreign recoveries of Redpolls come from Belgium the Italian movement is the 6th recorded from BTO ringing (Toms & Clark 1998) and the first to involve a Sussex ringed bird (Scott-Ham, 1996).

Finally, and perhaps most unexpected, a **Reed Bunting** ringed at Icklesham was recovered at Aranjuez, near Madrid on 6 Dec 1998, the first British recovery of this species in Spain (Toms & Clark 1998).

Colour Ringing

Brightly coloured, durable plastic (Darvic) rings with bold inscriptions can often be read in the field given a reasonable view and good optics. Members are urged to report details of colour ringed birds to the Society; details of several of the studies can be found on the World-Wide Web and the BTO keep a register of British colour ringing programmes. During the year more colour-ringed **Cormorants** were identified as shown in the table 3.

Ring	Sighting details		Ringing details	
RU1	29.08.98	Weir Wood Reservoir	04.06.97	Oostvaardersplassen, Netherlands.
JV	02.01.99	Weir Wood Reservoir	24.05.98	Abberton Reservoir, Essex.
BAY	29.09.98	near Emsworth	20.06.98	Kirkcudbright, Dumfries & Galloway.
AU	04.05.98	Rye Harbour	03.05.97	Abberton Reservoir, Essex.

Table 3 Ringing and sighting details of colour ringed Cormorants in Sussex.

An **Oystercatcher** seen at Pilsey Island on 2 Sept 1998 was 9 years old, originally ringed on 29 Sept 1989 as a juvenile at Dawlish Warren, Devon. Several sightings of **Greenshanks** and **Black-tailed Godwits** ringed as part of the Farlington colour-ringing project were seen in Thorney Deepes and across the county boundary in Emsworth, Hampshire. One **Black-tailed Godwit** ringed on 5 Sept 1993 at Farlington, had been sighted 64 times by 22 Aug 1998, when it was seen roosting at Thorney Deepes.

Several gull studies use colour rings and notes about 4 **Mediterranean Gulls** and 2 **Great Black-backed Gulls**, seen at Brighton Marina, appear in the systematic list. A **Black-headed Gull** bearing 'KCR Black', was sighted from a car window at Southwick Beach on 28 Oct 1998. It was traced through the Internet on the European Colour-Ring Website, to be ringed on 10 June 1998 at a site in the Pas de Calais, France.

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References

- Balmer, D and Wernham, C 1999. Many long-term declines continue on Constant Effort Sites, *BTO News* 221: 10-11.
- Cooper, J E S 1996 Blue Tit in *Birds of Sussex*, pp 489-490. Ed P. James. Sussex Ornithological Society.
- Crawley, D 1997. Ringing in Sussex, 1996, *Sussex Bird Report* 49: 173-177.
- Edgar, RDM 1996. Lesser Whitethroat in *Birds of Sussex*, pp 455-456. Ed P. James. Sussex Ornithological Society.

Marchant, J, Sanderson, F and Glue D 1999. Changes in breeding bird populations, 1997-98, *BTO News* 222; 10-14.

Mead, C 1974. *Bird Ringing BTO Guide 16*. British Trust for Ornithology

Newnham, J A and Watson, A B 1994. Wing measurements and movements of Common Gulls ringed in Sussex in relation to the addition of the subspecies *Larus canus heinei* to the British List. *Sussex Bird Report* 46: 120-122.

Newnham, J A, 1986. The origin and movements of Black-headed Gulls which have wintered in Sussex. *Sussex Bird Report* 38: 59-65.

Newnham, J A (Ed) 1988. *The Birds of Shoreham and surrounding areas including Brighton, Steyning and Worthing*. Shoreham District Ornithological Society.

Parmenter, TW, 1996a. Swallow in *Birds of Sussex*, pp 388-390. Ed P.James. Sussex Ornithological Society.

Parmenter, TW, 1996b. Goldcrest in *Birds of Sussex*, pp 472-475. Ed P.James. Sussex Ornithological Society.

Roberts, G, 1998. Sussex's First Urban Peregrines, a Joint SOS/RSPB Project. *Sussex Ornithological Society Newsletter* 146: 5

RSPB, 1996. Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man.

Sanderson, R 1996. Greenfinch in *Birds of Sussex*, pp 523-525. Ed P.James. Sussex Ornithological Society.

Sanderson, R 1998. The Sussex Ringing Report for 1997, *Sussex Bird Report* 50: 199-204.

Scott-Ham, M 1996. Redpoll in *Birds of Sussex*, pp 534-535. Ed P.James. Sussex Ornithological Society.

Toms, M P and Clark, J A 1998. Bird Ringing in Britain and Ireland in 1996, *Ringling & Migration* 19: 95-168.

Toms, M P, Clark, J A, and Balmer, D E 1999. Bird Ringing in Britain and Ireland in 1997. *Ringling & Migration* 19: 215-255.

Watson, A B and Mead, C J 1968. Chichester Ringing Group, *Sussex Bird Report* 20: 66-67.

Addenda to the 1997 Report.

Page 199, the total number of birds ringed in Sussex was 49,816 and not 51,336 as quoted. The Rye Bay Ringing Group ringed 36,456 (73%) of these.

Page 200, second table, should read,

	1988	1993	1997
Blue Tit	3297	1721	2836
Great Tit	1436	988	1236

For the full national ringing report for 1997 see Toms, M P, Clark, J A, and Balmer, D E. Bird Ringing in Britain and Ireland in 1997. *Ringling & Migration* 1999 19: 215-255.

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PEREGRINES BREED IN NESTBOX IN BRIGHTON

by Graham Roberts

Peregrines have been a familiar sight in Brighton since early 1994 when a male was regularly seen hunting Starlings going to roost on the West Pier and roosting on the nearby Bedford Hotel. This or another male was still present in the winter of 1995/96 when it was joined by a female. The pair took up residence on the derelict West Pier where they were often to be seen hunting Feral Rock Doves and Starlings. It is thought that they may have attempted to breed on the pier in 1996.

In early 1997 the female disappeared but was soon replaced by a very large immature female. However, by spring 1997 the West Pier no longer offered a potential nest site since it had been reconnected to the shore and opened to the West Pier Trust's tours. Regular disturbance on the pier forced the Peregrines to perch on other buildings, in particular Sussex Heights.

They still lacked a suitable nest site, and their favourite place, the West Pier, was likely to be restored with a grant from the Heritage Lottery Fund. Thus, I thought it would be worth providing them with a nestbox on a tall building nearby and so evolved a joint SOS/RSPB project.

After much effort, permission was eventually obtained to install a nestbox on the roof of Sussex Heights, the tallest building in Sussex. At 102 m (336 feet), this 24-storey apartment block in the centre of Brighton, between the main shopping area and the West Pier, offered an ideal location.

On 23rd March 1998, a large aluminium nestbox measuring 860 mm long x 630 mm deep x 670 mm high (approximately 3 ft x 2 ft x 2 ft) was installed on the roof of Sussex Heights. The base of the nestbox was filled with gravel to a depth of about 80 mm. Although it is thought that southeast facing is the preferred orientation for Peregrine nestboxes, permission was only obtained to site the nestbox on the north side of the building. Thus it faces north, overlooking Brighton's main shopping centre. A reasonable view of the nestbox can be obtained from outside Marks & Spencer in Western Road.

Amazingly, the Peregrines took to the nestbox immediately. The female was seen sitting inside the nestbox only three days after it had been put up. On 2nd April, only ten days after the nestbox had been installed, a building surveyor checking that the box had been properly secured was surprised to find one mottled brown egg inside. Access to the roof was immediately closed. Incubation commenced about 8th April. Both sexes shared in the incubation. When the female was incubating, the male was often to be seen perched on the roof several metres from the nestbox. Whenever she left the male would enter the nestbox almost immediately. The male was often seen bringing food in to the female.

By 12th May two eggs had hatched. A nest inspection later revealed that a third egg had failed to hatch. It was thought to be infertile. As the young grew they became more active in the nestbox and by about three weeks old two white, downy young were sometimes visible from the square below. At about four weeks old they began to venture out of the nestbox onto the roof parapet. By five weeks old the two young spent most of the day on the roof, returning to the nestbox to roost. They were now becoming well feathered and spent much time developing their wing muscles by wing flapping. Being large, both young were clearly female.

The adults were often to be seen hunting over the sea. On several occasions they were seen taking Feral Rock Doves over the town centre, clearly a major part of their diet. Another high rise apartment block, Chartwell Court, was used as a larder. Inspection of this larder revealed that whilst Feral Rock Doves formed the main quarry, a wide range of

other prey species were also taken, including Starling, Woodpigeon, Collared Dove, Turtle Dove, Moorhen and Woodcock.

The two young fledged successfully, the first making its maiden flight on 28th June and the other leaving the following day. Both remained in the area for about two months.

Many birders and local residents enjoyed watching all the activity at the nestbox, good vantage points being Clarence Square and the main shopping area in Western Road. I am grateful to many of these observers, in particular Brian Easlea, Chris Phillips and John Reaney who provided me with regular progress reports.

The SOS and RSPB are particularly grateful to the Directors of Sussex Heights for permission to install the nestbox on their building and for all their help. Brighton & Hove Council were supportive in awarding the project a small grant. Gamble Cook of Worthing, who are responsible for building and maintenance works to the property, were extremely helpful and agreed to delay various building works and the removal of scaffolding so as not to disturb the Peregrines during the critical periods, notably hatching and fledging.

This is the first time that Peregrines have bred in a nestbox in Sussex. They are also the first Peregrines to nest in an urban environment in Sussex.

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Footnote: The Peregrines bred again successfully in the nestbox in 1999, raising three young, all female.

SEMPALMATED SANDPIPER AT PORTFIELD GRAVEL PIT

by Alan Kitson

On the outskirts of Chichester lies Portfield Gravel Pit, willow clad on the east and screened from a causeway by a thistle-clad bank on the west. The northern third or so is exposed sand-coloured silt while the remainder is open water. The star of the show and supporting cast of Little Stints frequented the water-silt interface, where, by virtue of the cloying tenacity of the yellow silt, their beaks and legs were seen to be ludicrously sand-yellow, when not washed clean. At times, against this yellow silt substrate, all the stints were hard to see, let alone identify, and on other occasions they achieved complete vanishing tricks before equally mysteriously reappearing! They were at their best when actually in the water, 50 yards from the bank. At 80 yards or more, against the silt substrate, the Semipalmated Sandpiper could easily lose its identity and become just another Little Stint, at least until you got your eye in.

Sunday 13th September 1998

Three stints were found, two of which were straight forward juvenile Littles; the third one, however, was different for sure. For one thing it had no mantle braces, for another the scapular edgings made less stripes, and overall the upperparts were colder and greyer. I did think of Semipalmated Sandpiper but, being rare and hard to identify, I didn't want to get it wrong. I drove home to Steyning and phoned Chris Janman (CRJ), a local birder, asking if he would check the stints. The odd one I put forward as perhaps an adult winter Little Stint, but a check of Cramp (1983) and Ferguson-Lees, Willis & Sharrock (1983) showed me to be wrong straight away. Could it be a first-winter Little Stint? A photograph in *Birding World* (1993) of a juvenile Semipalmated Sandpiper did however look quite a lot like the Portfield bird – dark backed without pale lines, scapulars with black centres and coverts all evenly fringed.

In the ensuing week nothing happened and the bird might so easily have slipped away. On the Tuesday I had gone to work with John Cooper's (JFC) phone number in my back pocket but I was unsure at this stage whether to call. Furthermore, CRJ failed to connect with the stints despite two trips to Portfield. Saturday, by contrast, was to be action-packed, full of good luck and bonhomie, a roller-coaster ride into the back of the net!

Saturday 19th September 1998

I 'did' the coast first and got to Portfield about midday. There were lots of Black-headed Gulls and Lapwings on the silt, which rose en masse whenever my head appeared over the causeway bank. I saw no stints at first but then picked one out flying with the Lapwings. Suddenly, out of nowhere, there were 6 stints wading, say 50 yards off. I inched into position with my on-knees draw-tube Broadhurst Clarkson telescope and, bingo, the mystery bird was there! In comparison with the accompanying 5 juvenile Little Stints, it differed mainly in the more uniform upperpart colouration and generally colder, greyer plumage tones. It lacked the brightly marked mantle 'v' of the Little Stints and was more pot-bellied. Realising that I must get help in clinching the identification, I drove the mile or two to Ivy Lake where lots of birders were watching the White-winged Black Tern. CRJ appeared and we went back in convoy to Portfield. Chris had his 'scope and, at last, after some mysterious disappearing and reappearing, the sextet presented themselves to a second observer. Clearly worth pursuing, CRJ then left to fetch some books; Vinicombe & Cottridge (1997) contained a photograph of a juvenile Semipalmated Sandpiper on Scilly, that did look a lot like our bird. Bernie Forbes and Owen Mitchell then arrived and, with the light perhaps better angled than before, the putative Semipalmated Sandpiper could be picked out consistently with binoculars, even at 80 yards range. I left at 15:15 BST, drove home and phoned JFC. He, together with his wife Doreen and son David

(DC), would go down straight away. At 18:43 he rang back. A mobile phone is not on my kit list and I pictured him at home bemoaning a wild goose chase. He informed me, however, that they were pretty happy that it was a Semipalmated Sandpiper, having watched it down to 20 yards. He said that the bill was good for that species, mentioned the 'big rear end' which I hadn't noticed and highlighted the white supercilium bulging behind the eye. The news was then phoned in to Birdline. The bird was still present the following morning (Sunday 20th September) when over 400 birders visited the site. It was last seen on Monday 21st September when it flew off high to the east.

The following composite description is based on notes taken by various observers, primarily, DC, JFC and ARK:

A small wader slightly larger and more pot-bellied than the accompanying juvenile Little Stints and, when facing away, noticeably broader at the rear. The plumage was very fresh with no signs of any wear. The colder, greyer plumage tones, without any hint of rufous, and the absence of an obvious mantle 'v' enabled it to be picked out easily from the Little Stints, even at 80 yards range. The feeding action was similar but, on occasions, it would stray from the Little Stints (which remained in a close, compact group) before running to rejoin them.

The bill was short and black, virtually straight, with a broad base and swollen tip. The legs were black but, like the bill, were often covered with yellow silt. As the bird was standing in water or on wet silt, it was not possible to examine the feet closely, so the palmations were not noted.

The crown was streaked dark brown and grey, contrasting with an obvious white supercilium that extended from the base of the bill to behind the eye, where it bulged and was broadest. A thin dark loreal stripe extended from the base of the bill to the ear coverts.

The mantle feathers had distinctive blackish centres and pale fringes giving a scaly effect. The upper scapulars were also dark-centred and pale-fringed while the lower scapulars had pale grey bases, some with a dark shaft-streak broadening towards the tip, creating an anchor-shaped effect. The coverts and tertials appeared grey with narrow white fringes, the tertials contrasting with the blackish primaries.

The whole of the underparts were white except for a large greyish smudge with darker streaking on the sides of the breast.

It was not heard to call.

This record has been accepted by *British Birds* and is the 2nd for Sussex, the previous being at Ternery Pool, Rye Harbour from 2nd-4th August 1986.

References

Birding World 1993 6(9): 345.

Cramp, S (ed.) 1983. *The Handbook of the Birds of Europe, The Middle East and North Africa: The Birds of the Western Palearctic*. Vol. 3. Oxford University Press. Oxford.

Ferguson-Lees, J, Willis, I and Sharrock, JTR 1983. *The Shell Guide to the Birds of Britain and Ireland*. Michael Joseph. London.

Vinicombe, K and Cottridge, D 1997. *Rare Birds in Britain and Ireland: A Photographic Record*. Collins & Birding World.

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THE CURRENT STATUS OF THE BUZZARD IN SUSSEX

by Martin Kalaher

The county Buzzard (*Buteo buteo*) population has increased dramatically since 1997 and the purpose of this paper is to review the past and current situation, and discuss the possible reasons why this has happened.

Data from the SOS archives suggests that in the mid-1990s the county population was approximately 8-10 pairs, possibly underestimating the true number. With few pairs thinly spread the occasional pair may have been missed. All suitable areas may not have been closely watched and some observers may have been hesitant to reveal a breeding site, anxious to prevent unwelcome attention or interference. However, this species is very visible during spring display and the juveniles are very noisy in late summer, therefore it is probable that most if not all breeding pairs were reported at that time. Why so few pairs when there is no apparent shortage of good habitat and a plentiful supply of prey?

Territorial Pair Activity

Buzzard pairs claim ownership or occupancy of a territory by displaying repeatedly in late winter and early spring. Locating these pairs was integral to this report, and counting them allowed for year to year comparison.

Usually, display takes place in the last week of February, throughout the whole of March, and the first half of April. A sunny day in mid-March is the best time to look for Buzzards. By mid-April the female should be 'sitting', but the male will continue to advertise itself especially if other Buzzards stray close to the nesting area. Any display between mid-May and mid-June will probably indicate non-breeding or failed-breeding birds. Breeding pairs resume displaying in late June or early July.

Spring display by a pair of Buzzards strongly suggests territorial behaviour, very often over the nesting wood itself, and certainly with the more energetic forms of display, the nesting tree will not be far away. If several pairs are in a relatively small area, positive feedback appears to significantly increase display activity. This behaviour makes counting pairs easier as the population density increases.

The Release Programme 1994 to 1998

This project was conducted by the Institute of Terrestrial Ecology under the auspices of English Nature, lead by Dr Robert Kenward. The primary aim of the research was to monitor juvenile dispersal using radio-tagged birds to ascertain whether they would return to their natal Dorset or colonise their release area in Sussex. The original tags were viable for 2-3 years and were later superseded by tags viable for 4 years.

Young birds from unspecified nests in Dorset were brought to Sussex and reared taking every effort to avoid human imprinting, and released at one site in West Sussex and two sites in East Sussex. In total 34 birds were released; in West Sussex 7 birds in 1994 and 3 birds in 1995, and, in East Sussex, 5 birds in 1995, 7 birds in 1996 and 1997, and 5 birds in 1998. Typical mortality figures for this species are 30% for the first year and 10% annually thereafter suggesting 6 survivors in the west and 13-15 survivors in the east.

In 1998 there were 44-47 pairs in the county but only 3 pairs (all in East Sussex) categorically linked to the release programme. Since many of the radio-tags are no longer active it is clear that the whole story will never be known.

Buzzard Activity in the Storrington Area from 1983 to 1998

Between 1983 and 1989 there were two records of single displaying birds (May 1985, 1987) and most likely both birds were non-breeding migrants. Singles were recorded on

three different dates in 1990 and the following year on 31 August the first evidence of pairing was seen when two birds flew off together from a copse. With hindsight, 1991 proved to be a watershed.

On 27 February 1992 this pair displayed, soaring gently at approximately 4,000 ft. The following day the display was spectacular, culminating in a free-fall with talons firmly locked. In late May there was further display and on one occasion they were joined by another Buzzard, the presence of which caused no obvious distress. There was no evidence of breeding that year.

The number of sightings increased during the next two years and by the end of the summer 1994 three young were raised. Since then, two young have been successfully fledged each year.

In 1997 and 1998 there was good evidence of three pairs in the area with two pairs successfully breeding. If this was taking place in the Storrington area, what was happening elsewhere? In the spring of 1997 the search for other territorial pairs began.

Buzzard Activity in the County from 1997 to 1999

Based on casual reports sent to the SOS in 1997, there were probably 17 pairs in West Sussex (all associated with downland) and 8 pairs in East Sussex. From Harting Down and Stanstead Forest in the west to Storrington and Angmering Park in the east, the South Downs was thinly populated. There were 5 pairs located within 8 km of Storrington and all bred successfully, raising two young each. The situation in East Sussex was less clear with a core population in Ashdown Forest and scattered pairs to the south and west. At least 3 pairs successfully raised young, 1-2 pairs being associated with downland.

There was another significant increase in the Buzzard population in 1998 based on submitted records of territorial pairs in late winter and early spring. The county total had increased to 44-47 pairs, 32-34 pairs in the west and 12-13 pairs in the east. Two to three pairs in the west were north of the South Downs and clearly too far north to be dependent upon downland. In the east, an additional 2-3 non-breeding pairs were holding territory in downland localities, otherwise the situation was similar to 1997. Breeding was confirmed in 9 pairs but re-visits to nesting woods were few, suggesting an underestimate of the true number.

A minimum of 38 pairs, but quite possibly more than 50 pairs, were present in West Sussex in 1999, based upon personal observations of spring territorial pairs. Although still predominately associated with the South Downs, there are now at least 6 pairs to the north and independent of the Downs and this trend is likely to continue. At the time of writing there is minimal information for East Sussex but further expansion seems likely.

Tetrad maps showing the distribution of territorial pairs of Buzzards in the county in 1985, 1995 and 1999 are shown in figs. 1-3.

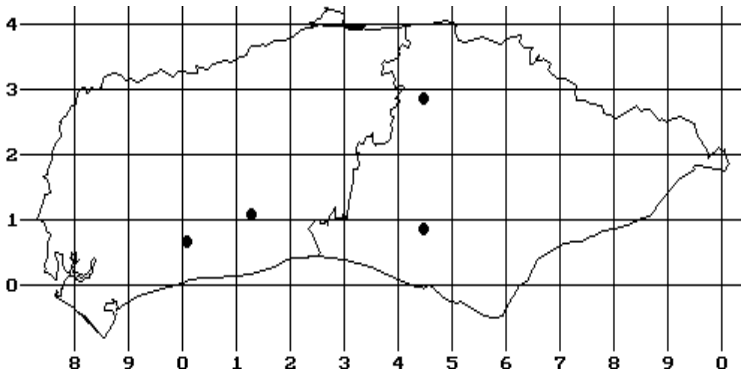


Fig. 1. Tetrad distribution map of territorial pairs of Buzzards in Sussex, Spring 1985.

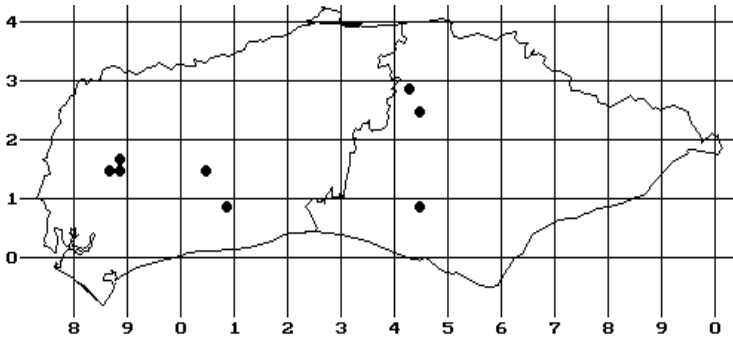


Fig. 2. Tetrad distribution map of territorial pairs of Buzzards in Sussex, Spring 1995.

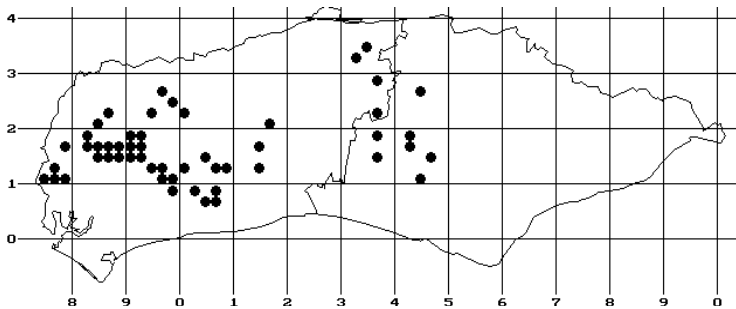


Fig. 3. Tetrad distribution map of territorial pairs of Buzzards in Sussex, Spring 1999.

The Low Buzzard Population prior to 1997

Population estimates for the 1980s and early 1990s suggests there may have been as few as 4-6 pairs. There was a modest increase to 8-10 pairs in the mid-1990s. With so few pairs, widely spaced, it has not been particularly easy locating Buzzards in Sussex.

With a large rabbit population and extensive available woodland for secure nesting sites this consistently low breeding population has always been difficult to explain. Poor breeding success has presumably been one factor. An analysis of the computerised records between 1976 and 1995 reveals just seven records detailing fledging success.

Persecution has undoubtedly been a major influence in the past, however none of the released Buzzards have been deliberately killed, as far as known. There is no doubt that the modern gamekeeper has a much more tolerant attitude.

The Rapid Expansion of the Buzzard Population since 1997

There has been a large increase in the Buzzard population to the east and northeast of Hampshire in the past decade. This expansion has resulted in the natural re-colonisation of most of the downland in West Sussex, with a few pairs colonising the countryside to the north of the Downs.

In East Sussex, with a small breeding population of 3-5 pairs geographically isolated and no breeding pairs to the east or north, the situation has been different. Since the breeding population was small, the individuals from the release programme probably made a significant contribution to the breeding pool.

There is no reason why the population should not continue to increase and expand further. Ten years ago the downland between West Dean Woods in the west and Storrington and Angmering in the east held just 3-4 pairs, and now there is a minimum of 25 pairs. Unhindered, this breeding population should expand into other suitable areas and the apparent dependence on downland become less evident. In East Sussex, there are several isolated pairs centred around Ashdown Forest. These pairs should form a nucleus and gradually expand into surrounding areas. In the absence of any adverse factors, the future of the Buzzard population of Sussex looks very promising.

Acknowledgements

I am most grateful to the estate offices of Cowdray, Parham and West Dean for allowing me access to carry out this survey. My thanks also to Dr Robert Kenward for providing information on the release programme. I appreciate the comments made by John Clark, county recorder for the Hampshire Ornithological Society. John Newnham very kindly provided the distribution maps, for which I am grateful. Finally my special thanks to Phil Everitt and Rob Clemence for their critical comments on the text but more importantly their help and encouragement with the survey work itself.

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A SURVEY OF SUSSEX GAMEBIRDS DURING THE 1998/99 SEASON

by Tony Cocks

Summary

One hundred and thirty shoots were identified in the survey accounting for at least 20% of those operating. One hundred and nine of these shoots covered 124,431ha equivalent in area to 33% of Sussex, 41% of the countryside. The average area of these shoots was 1141ha indicating that many small shoots were unidentified.

One hundred and three shoots released 523,200 Pheasants, 8 shoots released 26,540 partridges, and 8 shoots released 25,250 Mallard, during the summer of 1998. One gamefarm however, confirmed the supply of 40,000 Mallard ducklings to Sussex clients for release in 1998.

Estimates calculated by relating the survey findings to data from elsewhere suggested that between 0.89 and 1.18 million Pheasants, between 26,500 and 52,000 partridges, and in excess of 40,000 Mallard, were probably released in the summer of 1998 for sporting purposes in Sussex.

1. Introduction

Shooting is a popular pastime in Britain involving at least 50% of the 22 million hectares of countryside. Eighty-eight percent is managed by farmers and landowners, and less than 2% is directly managed as nature reserves (Green 1999). The rights to shoot gamebirds rests with the landowner and these shooting rights are frequently rented to a third party. Sussex has a good reputation for gamebird shooting both for downland partridges, and Pheasants, Mallard, and Woodcock in the wooded farmland which forms part of the predominant rural landscape. All these species, except Woodcock, are captive-bred and released annually in mid-summer in large numbers. These birds obviously augment wild populations, but to what degree, is unknown. Individual shoots, depending on size, release between a few hundred and many thousands of gamebirds each season. Numbers of gamebird species recorded in bird census surveys should reflect this situation, but in practice this does not appear to be the case.

Records for gamebirds in Sussex up to 1992 summarised in *Birds of Sussex (1996)* showed low recorded numbers and few sightings. Private enquiries to the British Trust for Ornithology (*BTO*) confirmed this situation. County breeding surveys and population counts were said to be difficult to interpret due to the unknown contribution made by captive-bred gamebirds known to be released annually in large numbers in Britain for sporting purposes. Annual species records in recent *Sussex Bird Reports (1995-97)* indicated similar findings stating that the true situation was unclear. On one estate in East Sussex, 6500 Pheasant poults were released on 600ha for sporting purposes (*Sussex Bird Report 1995*), and at Clapham Wood 14,000 Pheasant poults were released for the same purpose (*Sussex Bird Report 1996*). Gamebirds are released and contained on private land where public access is very limited. This restriction, plus the fact that gamebirds are very secretive and hide in thick cover making their presence difficult to detect, may partially explain under recording by observers.

The total number of gamebirds released in Sussex is unknown but must be many thousands considering that at least 20 million Pheasant poults are currently released annually during the summer in Britain for sporting purposes (Game Conservancy Trust 1997). Sussex is predominantly rural, and according to Potts (1999), 65% of this countryside could be involved in gameshooting. The current decline in farm incomes, and the rapid expansion in the demand for corporate shooting since the early 1980's, has put pressure on all suitable land for shooting to be utilised. Privately owned and financed

shoots have been essentially replaced by the syndicate system, whereby the running costs are borne by the members.

A survey of gamebird shooting in Sussex was undertaken by the author to identify as many shoots as possible known to be operating, the area of land managed by those shoots, and the number of captive-bred gamebirds released on that managed land. Absolute numbers were unattainable due to the lack of intimate local knowledge for the whole of Sussex. However, any information obtained, would provide a useful baseline for further investigation.

The information collected, presented, and discussed here, was compared to other parameters in Sussex, and, calculations of population density and the contribution released gamebirds should make to indigenous stocks were made. Some background ecology of the Pheasant, and the occurrence of coloured strains, and ornamental species, was also discussed within the context of the overall findings.

2. Methods

The survey was conducted throughout the 1998/99 shooting season, and is referred to in this paper by the initials *SSGB* abbreviated from the title.

A large number of shoots and sporting estates are known to operate in Sussex. Landowners, their agents, managers, or tenants operating some of these shoots were contacted and invited to provide information for the *SSGB*. They were asked to provide details of the area of land they used for sporting purposes and the number of each captive-bred gamebird species they released on it. Initially most of those approached were reluctant to participate due to the general adverse publicity and public opposition to country sports in recent years. However, complete confidentiality of all information was promised with the guarantee that no estate would be identified by either name or location and all information provided would be untraceable to any individual shoot. With this agreement and a promised low-key neutral approach, all the people contacted cooperated and provided information.

The numbers of captive-bred Red-legged Partridges (*Alectoris rufa*), Grey Partridges (*Perdix perdix*), Common Pheasants (*Phasianus colchicus*), and Mallard (*Anas platyrhynchos*) released for sporting purposes were recorded from a number of shoots, and, sightings of Woodcock (*Scolopax rusticola*) were noted.

The information collected was unsuitable for statistical analysis, therefore basic accumulated numbers were used to express the findings. Overall, five sets of data were obtained. An estimate of a proportion of land used for shooting purposes, the number of Pheasants, partridges, and Mallard released, and, some information on winter Woodcock numbers. The area of land used for shooting purposes was related to the area of Sussex, the area of countryside, and the area of land managed by other organisations. Gamebird numbers were compared where possible to population surveys from other sources.

3. Results and Discussion

3.1. Reference Areas for Sussex

The area of Sussex was calculated by averaging the estimates from the four following sources,

Sussex Wildlife Trust (1993)	400,000ha
Edgar (1996)	383,333ha
Sussex Police (1995)	378,465ha
Sussex Farming and Wildlife Advisory Group (1990)	350,000ha

giving the value of 377,949ha which was used as the *SSGB* reference area for Sussex.

Twenty percent of Sussex (75,590ha) is urbanised, concentrated along the coastline and inland in large conurbations. The remaining 80% is rural, and covers approximately 302,359ha. This correlated (97%) with the 231,461ha of farmland registered in Sussex with the Ministry of Agriculture, Fisheries and Food (*MAFF*) in 1997 plus the 62,568ha of woodland according to Whitbread (1996).

Areas of land in Sussex have been designated for their special significance for flora and fauna with some of them attaining national and international status. A summary of 423 of these areas abstracted from Edgar (1996) are compiled below.

131 Sites of Special Scientific Interest	23,000ha
220 Sites of Nature Conservation Interest (West Sussex only)	8000ha
26 Local Nature Reserves	2500ha
37 Sussex Wildlife Trust Reserves	1050ha
5 National Nature Reserves	363ha
4 RSPB Reserves	335ha

These sites collectively cover an area of 35,248ha, 9% of the area of Sussex, 12% of the rural area. Complimenting these 423 sites are areas of undesignated land which are managed to reconcile commercial and economic restraints to the interests of wildlife and the environment. Land in this category includes areas of local authority public amenity land, golf courses, private and tenanted farmland, and, country estates. The land agents Strutt & Parker managed 40,469ha of this type of land (*pers. comm.*) for Sussex clients during 1998. There are 79 golf courses in Sussex (*pers. comm.*) and their potential for wildlife was indicated by Gower (1998) in a recent article surveying one of them, typically covering 445ha.

3.2. Land Managed for Sporting Purposes

Sussex is predominately rural, has well established designated and undesignated wildlife habitats, and a considerable diverse mixed farming base. These factors which are very favourable for wildlife are equally favourable for gamebirds and hence one of the reasons why Sussex is a shooting county.

For sporting purposes, land needs to be managed as a patchwork of diverse habitats in a variable mixture. The sympathetic management of land is crucial to maintain a healthy viable gamebird population and must be compatible with good farming practice and consequently good for the indigenous wildlife, especially birds, which are very sensitive indicators of the quality of their environment. The covercrops grown for shelter and food for gamebirds are a haven for finches, buntings and other birds during the winter months. These covercrops have been monitored for several years by the Game Conservancy Trust (*GCT*) and now this research attracts grant aid from *MAFF*. More recently their conservation importance for overwintering small birds has been recognised, stimulating collaborative studies between the *GCT* and the *BTO* (Stoate 1999). Covercrops also attract larger birds. For example, on a 525ha downland shoot with a resident population of approximately 200 Magpies, Magpie flocks were consistently flushed on a weekly basis during the autumn and winter months from a 2ha mixture of maize and kale with a maximum count of 50 birds in October 1998.

Pheasants are easy birds to rear in captive-breeding programmes, and prosper in broken wooded farmland. They are birds of woodland edge and do not favour large areas of open ground nor large areas of dense woodland, preferring woods adjacent to arable

land rather than grassland. Generally, woods greater in area than 5ha are less attractive to Pheasants because as the wood increases in size the perimeter to area ratio decreases. Ideally, land managed for shooting purposes to hold large numbers of Pheasants aims to develop a patchwork of small irregular shaped woods covering about 30% of the total shoot area. This is achieved by either planting new woodland, or, dividing up large woods by cutting rides at least 30m wide through them to increase the perimeter to area ratio. This technique allows sunlight to penetrate into the wood which encourages regrowth of dormant ground vegetation. This in turn attracts many invertebrates, especially insects, which are supplementary food items for growing gamebirds. Other species of birds including Willow Warbler, Chiffchaff, Spotted Flycatcher, Song Thrush, Blackcap, Garden Warbler, and Nightingale benefit from woodland management for Pheasants. Butterfly numbers, and species diversity, have also been shown to increase in these widened rides (Game Conservancy Trust 1997).

Information collected in the *SSGB* identified 130 areas of land managed for shooting purposes, an unknown proportion of the total number of shoots operating in Sussex. One hundred and nine of these ranged in area from 40 to 8000ha (mean area 1141ha), and collectively covered an area of 124,431ha. This area equated to 33% of Sussex, 41% of the countryside. In comparative management terms, this area was 3.5 times the 35,428ha covered by the 423 Sussex sites under direct conservation management listed earlier, almost twice the area of common land owned by the National Trust in Britain (Drury 1998), and 24% larger than the 147 nature reserves covering 100,000ha owned or managed under lease in Britain (1998) by the Royal Society for the Protection of Birds.

National figures from the Game Conservancy Trust (1997) indicated that 58% of the total number of agricultural holdings and 88% of those over 400ha maintained Pheasant shooting. The annual census figures published by the Ministry of Agriculture, Fisheries and Food (1997) recorded the total number of agricultural holdings registered in Sussex was 4354 and of these 649 were over 100ha. Assuming the *GCT* national figures apply to Sussex, then 2525 holdings (58% of total) could be involved in Pheasant shooting. The cut off area in both estimates was unfortunately not the same (100 & 400ha) and since the mean shoot area of 1141ha in *SSGB* was at least three times larger, a direct estimate for the proportion of the total number of shoots identified could not be calculated from this data. However, the 130 *SSGB* shoots did represent 20% of the 649 holdings over 100ha, but realistically, could be approximately 40% of the holdings, considering the gross area covered, recorded above. Further information will be required to calculate a more accurate figure for the proportion of shoots identified.

3.3. The Number of Pheasants Released for Sporting Purposes

The national figure for the number of captive-bred Pheasant poults released annually was 10 to 15 million in the early 1980's (Martin 1984a) increasing to 18 to 20 million by the early 1990's (Game Conservancy Trust 1997), and is currently (1998), approximately 20 million increasing by 1 to 3% annually. A large proportion of these birds are released in the more favourable environment associated with the south and southeast of England, especially Sussex. The number of Pheasants released annually in the neighbouring counties of Kent, Surrey, and Hampshire was estimated by The Game Conservancy Trust (1994) to be between 400 and 600 birds per 100ha, and for Sussex itself in excess of 600 birds per 100ha.

Information collected in the *SSGB* for 103 shoots showed that they individually released between 300 and 40,000 Pheasants, and collectively released 523,200 Pheasant poults on 115,055ha during the summer of 1998 prior to the 1998/99 shooting season. A release density of 455 birds per 100ha was calculated from these two figures. The release

area involved in Pheasant shooting was 30% of the area of Sussex, 38% of the countryside. The actual number of Pheasant poults released annually in Sussex will always be a theoretical value derived from best practice estimates. Assuming that 65% of the Sussex countryside supports shooting (Potts 1999), then the *SSGB* figure extrapolates to a minimum release of 0.89 million birds, and the *GCT* figure of >600 birds per 100ha, extrapolates to a maximum of 1.18 million birds. In the absence of more accurate data, this range gives an indication of the number of Pheasants released in the summer of 1998 and is probably indicative of annual releases in previous years.

3.4. The Mortality of Released Pheasants

Pheasants are not long lived birds. The average life expectancy when not subject to shooting pressures is one year, and birds three or four years old are considered to be very old, and certainly of low fertility. In the wild, the average brood of 10 chicks has a survival rate of between 10 to 20%. Early losses from starvation, chilling, and predation, soon reduce the brood to less than 4 chicks, and, further losses after 8 to 10 weeks of age when independent from the hen bird can still be substantial. Even after maturity, the survival rate is between 30 to 60% indicating that only one or two birds mature from the original brood (Game Conservancy Trust 1997). Rearing large numbers of wild birds by habitat management techniques is virtually impossible, hence the introduction of captive-breeding programmes. Captive-bred birds however are poor colonisers and breeders in the wild, and do not readily establish themselves as self-supporting feral populations. Consequently, annual releasing is necessary to provide the large numbers required each season for shooting purposes.

Calculations relating to the 20 million poults currently released annually indicate that 10 million (50%) poults die from many causes including bacterial and viral diseases, internal and external parasites, and, predation by animals and birds, by the end of their first winter. Six million of these die within three months of being released, primarily due to predation, and do not survive to the beginning of the shooting season. At least two million (10%), survive all hazards and disperse over the surrounding countryside. Correlating this national pattern to the *SSGB* figure suggests that if 10% of the released poults survived, then 52,320 Pheasants could have dispersed over the Sussex countryside by the spring of 1999. Their survival rate thereafter would be poor with only a few percent making two year old birds. The number of survivors can be much higher than these estimates depending on local management skills and environmental factors. For example, in the 1994/95 season, a shoot covering 170ha released 5500 poults in July 1994 and within six weeks at least 3000 poults (54%) had dispersed. The following season (1995/96) was generally mild with an abundance of natural food (acorns, chestnuts, berries) causing widespread straying. The survey season (1998/99) was an endless period of mild, wet and windy weather, which encouraged Pheasants to disperse, especially after Christmas, because they were not dependent on artificial feeding. The resultant excessive depletion of numbers forced some Sussex shoots to cancel shooting days in January 1999 due to the low number of Pheasants in their coverts.

3.5. Pheasant Population Estimates

The wild population of Pheasants in Britain is estimated to be 3 million, supplemented by an annual release of 20 million captive-bred birds. Pheasants undergo large population fluctuations both within years and between years. Spring counts indicate breeding population and autumn counts indicate brood survival and overall population productivity. Data from the long-term Pheasant monitoring system involving more than 20 estates using different management regimes (Game Conservancy Trust 1996), estimated the spring population on 6 estates using captive-breeding programmes to be in the range of 8 to 26

territorial males per 100ha, 2 to 33 non-territorial males per 100ha, and, 11 to 39 females per 100ha. Pooling all three estimates gave a value of 21 to 98 birds per 100ha. Applying this data to Sussex would suggest a potential spring population of between 63,495 and 296,312 Pheasants, assuming the whole of the Sussex countryside was involved, which in practice should be the case. The estimated minimum value from the *SSGB* of 52,320 birds (10% survivors of released birds) which were likely to disperse over the Sussex countryside during the 1998/99 season was 18% below this range.

Data summarised and discussed by Cook (1996a) indicated a breeding density in Britain of 4 territorial males per 100ha and 7 females per 100ha, collectively 11 birds per 100ha. Extrapolation of these national estimates to the 593 occupied tetrads in the county where breeding was confirmed, suggested a county population of 9251 males and 17,316 females, a total spring population of 26,567 Pheasants. This proposed figure was 51% of the number of Pheasants which the *SSGB* estimated dispersed over the Sussex countryside in 1998/99, and was 58% below the potential spring population range calculated from the *GCT* data referred to above.

The number of Pheasants involved in gameshooting dramatically increased in the early 1980's and appears to have stabilised since 1990 (Game Conservancy Trust 1997). Therefore a similar minimal number to the 0.52 million released in 1998 was likely to have been released annually since the early 1990's. This annual release of large numbers of captive-bred Pheasants over the past decade must have made a considerable contribution to the indigenous Pheasant population in Sussex during those years. These estimates strongly indicate that the Pheasant population recorded in Sussex at the present time is the result of considerable modification by the large number of captive-bred birds released annually for gameshooting during the past decade, and to a lesser extent during the decade prior to that. The current Pheasant population in Sussex is conceivably captive-bred based rather than from wild stocks, which are likely to be genetically impure and rare.

3.6. White Pheasants

These are true white birds and not albinos. Albinism in birds and animals is a congenital lack of the pigment melanin in the body resulting in white hair or feathers, non-pigmented skin, and pink eyes. Many experienced people were questioned through the *SSGB* and none recollected seeing a free-living albino Pheasant. Neither did any game farmer recollect hatching albino chicks from the many thousands of eggs incubated annually. True albino birds are presumably very rare, especially in the wild.

The Common Pheasant is one of 47 species of pheasants within the globally distributed order of Galliformes. There are 32 sub-species of the Common Pheasant which are defined mostly by geographical isolation and the colouration of the male plumage. Sub-species introduced outside their native ranges freely interbreed, as in captive-breeding programmes, and are the main contributory factor to the mongrel nature of the Common Pheasant currently seen in most of Britain. Within the Galliformes, the Pheasant has hybridised with Blackgrouse, Capercaillie, Guinea Fowl, and the domestic bantam, the latter hybrid known as a phantom (Martin 1984b).

Mutant strains of both sexes derived from captive-breeding programmes can vary in colour from pure white to almost jet black, the melanistic form. Selective breeding of these strains by game farmers can increase their numbers considerably, but they are poor survivors in the wild, and generally have lower survival rates than normal coloured birds.

Information collated from game farmers indicated that white birds are genetically linked to the melanistic strain, and the numbers produced are related to the number of melanistic hens in the laying flock. With less than 1% melanistic hens in the flock

approximately 0.02% of the chicks are white, with 10% melanistic hens in the laying flock approximately 1% of the chicks are white, and, with 20% melanistic hens in the laying flock, approximately 10% of the chicks are white.

White chicks, which are very unlikely to occur in wild stocks due to low numbers of naturally occurring melanistic hens, would be very short lived due to a much higher predation rate. Captive-bred white poults are released with each batch of Pheasants to act as markers for the movement of the whole group. The number of white poults released varies according to the policy dictates of each shoot, being none if disliked, to several hundred where they are thought to be useful. Most shoots include a few in each covert amounting to 5 to 10 white poults in every 1000 poults released. This implies that probably 2616 to 5232 white poults were included in the 523,200 poults released in the summer of 1998.

Many landowners, especially of the larger estates, frequently have semi-tame ornamental birds living freely in the adjacent gardens to the house. These birds include various species of ornamental pheasants, guinea fowls, and peacocks. White strains occur in ornamentals, and some owners selectively maintain them. All free living ornamentals can and do escape further afield, and usually attempt to breed, but their ability to establish feral populations is poor due essentially to being unable to adapt to living completely wild. Their numbers are artificially maintained by captive-breeding.

3.7. The Number of Partridges Released for Sporting Purposes.

The habitat requirements for partridges, especially Greys, is quite different to that favoured by Pheasants. Partridges are birds of large open spaces like the southdowns. Grey Partridges are extremely difficult to rear in captive-breeding programmes partly due to their requirement for live insect food, or a suitable substitute, in their early days post-hatching. This is also a major contributory factor to poor chick survival in the wild. In captive-breeding programmes they are easily stressed causing high mortality rates. However nationally, thousands are successfully reared annually but not on the same scale as Pheasants.

Wild partridges, both Grey and Red-legged, have dramatically declined since the 1960's by 80 to 85% from their original numbers (Game Conservancy Trust 1995). These wild coveys have been comprehensively studied and documented by the GCT since 1968 on 6200ha of downland between the rivers Arun and Adur in West Sussex. Captive-breeding programmes were initiated to relieve the pressure on these wild coveys.

Red-legged Partridges respond more favourably to captive-breeding programmes than Greys, and have been released since 1963, especially on the downs. Red-legged Partridges have certain similarities to Pheasants and consequently small numbers are released with them on some non-downland shoots.

Red-legged Partridges and Chukar Partridges (*Alectoris chukar*) freely interbreed producing ogridge hybrids. The release of Chukar Partridges and ogridge hybrids was banned in the 1992/93 season, and it is very unlikely that any of these birds or their progeny have survived in the wild to 1998. It was therefore of interest that 40 Chukars were recorded (Sussex Bird Report 1997) at Lower Standean on 20 Jan 1997. Some Chukar genes are thought to persist in current stocks and any indication of a second black bar across the flank feather is indicative of Chukar ancestry.

Data summarised and discussed by Cook (1996b) suggested 3 to 4 pairs of Red-legged Partridges per 100ha, with a preponderance of the 285 occupied tetrads in West Sussex, indicating a spring population of 6840 to 9120 birds. Data from the Game Conservancy Trust (1996) recorded autumn estimates in the south of England to be 13 birds per 100ha.

Information collected in the *SSGB* for 8 shoots showed that they individually released between 500 and 10,000 partridges, and, collectively released 26,540 partridges, of which 1000 were possibly Greys, on 4634ha during the summer of 1998. A release density of 573 partridges per 100ha was calculated from this data. The 8 shoots collectively covered less than 2% of Sussex countryside, overall a small representative sample.

The number of partridges released annually in Britain is not accurately documented but is thought to be about 10% of the number of Pheasants released. Therefore, an estimated 52,000 birds were probably released in Sussex during the summer of 1998. This figure is likely to be more realistic than the *SSGB* figure, bearing in mind the poor cover of West Sussex by the *SSGB*.

Survival rates of released partridges are not as well documented as those for Pheasants but it would not be unreasonable to assume they were similar. Therefore, 10% of the partridges released in 1998 (2,654) were likely to have survived and dispersed by the spring of 1999, or, 5,200 from the theoretical estimate. In wooded farmland, Grey Partridges are almost impossible to contain and Red-legged Partridges although more tolerant are still difficult to contain. Therefore, in these areas the number that disperse is much higher than the suggested 10% for downland shoots.

Partridge shooting predominates in West Sussex, especially on the downs. The South Downs stretch from Beachy Head to the Hampshire border covering 1,400 square miles (36,261ha) of potential partridge shooting countryside. This represents 12% of rural Sussex, and is eight times larger than the area covered by the 8 shoots identified in the *SSGB*.

The sample number of shoots recorded in the *SSGB* releasing partridges was small due to few contacts in, and poor local knowledge of, West Sussex. Further information will be required to define more accurately the parameters of partridge shooting in Sussex.

3.8. The Number of Mallard Released for Sporting Purposes.

Indigenous Mallard are widely distributed in Sussex (Kalahar 1996) with a probable breeding population of 2500 to 5000 pairs, and peak numbers during the winter months of 3000 to 5000 birds. More recent data from the Wetland Bird Survey monthly counts for 1996 (Sussex Bird Report 1997) gave a mean of 3937 birds for the months of September to December.

Information collected in the *SSGB* showed that 8 shoots individually released between 300 and 20,000 ducklings, and collectively released 25,250 ducklings on 2517ha during the summer of 1998. A release density of 1003 birds per 100ha was calculated from these two figures. Ducks, unless disturbed, usually stay close to their release area of water and do not disperse over the surrounding countryside in a similar manner to Pheasants and partridges, making release densities related to the area of countryside academic.

The number of Mallard released annually in Britain is not accurately documented but is thought to be slightly less than 10% of the number of Pheasants released. Several gamefarms supply Mallard ducklings to Sussex shoots. One gamefarm hatched 3000 ducklings per day, producing over 200,000 ducklings during 1998 for national distribution, and supplied 40,000 of these ducklings to Sussex clients. At least 40,000 Mallard, and probably in excess of 80,000, were released by Sussex shoots in the summer of 1998. Ten percent survivors from these releases would make significant contributions to the breeding population and Wetland Bird Survey counts referred to above.

For shooting purposes, Mallard are released on suitable areas of water in wooded farmland as 4 to 6 weeks old ducklings. Very few if any are released on the downs due to the lack of suitable wooded areas of water. Captive-bred Mallard ducklings are generally

very hardy, usually have a high survival rate, and are able to escape from most predators by swimming away. Some however, do succumb to predation by foxes, mink, rats, and feral cats, if caught too far away from water, because in their early stages they are flightless flappers. At least 10% could survive all hazards, and like other gamebirds, a considerably larger proportion could disperse, depending on local management techniques and pond disturbance.

3.9. Sightings of Woodcock

The sightings of Woodcock during winter daylight hours collected in the *SSGB* were the result of flushing birds from open woods. It was quite common to flush birds from the same place on consecutive visits to a wood over several weeks. At night, Woodcock were seen in the beam of a spotlight feeding on grassland adjacent to woodland.

During the 2nd winter period of 1998, 1 to 11 Woodcock were regularly seen on 7 shoots with a maximum of 25 on 30 Dec 1998. Up to 20 birds were regularly seen at night by spotlight on 9 small farms of about 20ha in the Rotherfield and Brede areas of East Sussex. An area of woodland covering 400ha regularly recorded 15 to 20 Woodcock flushed in the winter months on any single day during recent years.

Acknowledgements

Country sports in general and gameshooting in particular are very sensitive and emotional subjects within the general population making details of their organisation and deployment extremely difficult to obtain. I am therefore indebted to the many shoot owners who gave me unrestricted access to their private land and freely divulged sensitive information of their game management programmes. Without their cooperation, this survey and the data collected would not have been possible.

References

- Birds of Sussex* 1996. Ed. P. James. Sussex Ornithological Society.
- Cook, A 1996a. Systematic List of the Birds of Sussex. In: *Birds of Sussex*, p 214. Ed. P. James. Sussex Ornithological Society.
- Cook, A 1996b. Systematic List of the Birds of Sussex. In: *Birds of Sussex*, pp 210-211. Ed. P. James. Sussex Ornithological Society.
- Drury, M 1998. Providing Access to Open Country. *National Trust Magazine* 85: 3. The National Trust: London.
- Edgar, R D M 1996. Conservation. In: *Birds of Sussex*, pp 72-80. Ed. P. James. Sussex Ornithological Society.
- Game Conservancy Trust 1994. *Game Conservancy Review* 26: 44-46.
- Game Conservancy Trust 1995. *Game Conservancy Review* 27: 18-20.
- Game Conservancy Trust 1996. *Game Conservancy Review* 28: 18-20.
- Game Conservancy Trust 1997. *The Pheasant*, pp 32. GCT: Fordingbridge.
- Gower, J 1998. *SOS Newsletter* 147: 9.
- Green, P 1999. Our Rich Pattern of Life. *Shooting and Conservation* 1: 27-29. BASC: Wrexham.
- Kalaher, M 1996. Systematic List of the Birds of Sussex. In: *Birds of Sussex*, pp 160-161. Ed. P. James. Sussex Ornithological Society.
- Martin, B P 1984a. *Sporting Birds of the British Isles* p 15. David & Charles: Newton Abbot.
- Martin, B P 1984b. *Sporting Birds of the British Isles* p 19. David & Charles: Newton Abbot.
- Ministry of Agriculture, Fisheries and Food 1997. *The Digest of Agricultural Census Statistics for the United Kingdom 1997*, section 4 p 22. HMSO: London.

Potts, G R 1999. *Gamewise*, spring/summer p 3. GCT: Fordingbridge.
Royal Society for the Protection of Birds 1998 RSPB Pocket Guide 1997/98.
Stoate, C 1999. Sowing for a Song. *Shooting Gazette* 90: 62-64.
Sussex Bird Report 1995 48:53.
Sussex Bird Report 1996 49:64.
Sussex Bird Report 1997a 50: 160-162.
Sussex Bird Report 1997b 50: 42-43.
Sussex Farming and Wildlife Advisory Group 1990. *Report of Sussex Farm Conservation Advisor* 1984-90, p 12. FWAG: Plumpton College.
Sussex Police 1995. *Police and Constabulary Almanac*, pp 247-250. Hazell: Henley-on-Thames.
Sussex Wildlife Trust 1993. *The Wild Places of Sussex*. SWT: Henfield.
Wetland Bird Survey 1996. *Sussex Bird Report* 1997 50: 42.
Whitbread, A 1996. Woodland. In: *Birds of Sussex*, pp 268-270. Ed. P. James. Sussex Ornithological Society.

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All the records of the unusual species in the list below are considered by the Records Committee and it may be assumed that those published have been fully authenticated. Such reports should be submitted on special forms available from the Recorder. Reports of rarities as defined by *British Birds* should be submitted on, or in the same format as, the forms available from the Secretary of the Rarities Committee.

The following list is of those unusual species in Sussex for which descriptions are required:

Great Northern Diver	Kentish Plover	Dipper
Black-necked Grebe	Dotterel	Bluethroat
All shearwaters (except Manx)	Temminck's Stint	Savi's Warbler
All petrels (except Fulmar)	Pectoral Sandpiper	Aquatic Warbler
Purple Heron	Buff-breasted Sandpiper	Marsh Warbler
White Stork	Grey Phalarope	Icterine Warbler
Spoonbill	Red-necked Phalarope	Melodious Warbler
Whooper Swan	Pomarine Skua (except in spring)	Barred Warbler
Bean Goose	Long-tailed Skua	Pallas's Leaf Warbler
Pink-footed Goose	Sabine's Gull	Yellow-browed Warbler
Ring-necked Duck	Ring-billed Gull	Red-breasted Flycatcher
Ferruginous Duck	Iceland Gull	Golden Oriole
Surf Scoter	Glaucous Gull	Red-backed Shrike
Honey Buzzard	Roseate Tern	Woodchat Shrike
Red Kite	Black Guillemot	Raven
Montagu's Harrier	Little Auk	Serin
Goshawk	Puffin	Twite
Rough-legged Buzzard	Bee-eater	Common Rosefinch
Spotted Crake	Shorelark	Lapland Bunting
Corncrake	Richard's Pipit	Cirl Bunting
Crane	Tawny Pipit	Ortolan Bunting
Stone Curlew	Water Pipit	

In addition, **all** races other than the normally occurring one, except for Pale-Bellied Brent Goose, *intermedius* Lesser Black-backed Gull, *michahellis* Yellow-legged (Herring Gull), White Wagtail and Greenland Wheatear, and any species seen on an unusual date (outside the accepted range of first and last dates for migrants [See pages XXX & XXX]).

It should be noted, however, that the following species, or any other species seen in unusual circumstances or on an unusual date, may, at the discretion of the Recorder, require a description:

Inland divers, Red-necked Grebe, Manx Shearwater, Shag (inland records), Bittern, Red-crested Pochard, Hoopoe, Wryneck, Waxwing, Cetti's Warbler and Great Grey Shrike.

GAZETTEER:

Hastings	TQ8010	Charleston Reedbed	TQ5100	Henfield Levels	TQ1914	Northpoint Pit, Rye	TQ9319	Sidlesham Ferry & Field
Brooks	TQ0314	Chelwood Vachery	TQ4330	Hollies, Ashdown	TQ4528	Old Airstrip, Ashdown	TQ4231	Sompting Brooks
Common	SU9119	Chichester Gravel Pits	SU8703	Hollingbury Camp	TQ3207	Old Lodge Reserve	TQ4630	South Stoke
State	TQ0506	Chichester Harbour	SU7600	Horse Eye Level	TQ6208	Pagham Harbour	SZ8596	Sovereign Hbr Marina
Fm	SU8301	Church Norton	SZ8795	Horseshoe Plantation	TV5695	Pagham Lagoon	SZ8896	Splash Point, Seaford
Voiv	TQ3229	Cissbury Ring	TQ1408	Hotham Park, Bognor	SZ9399	Pannel Sewer	TQ8715	St Leonards Forest
	TQ5307	Climping	TQ0001	Hurstpierpoint	TQ2716	Parham Estate	TQ0614	Stakes Island
	TQ0108	Cobnor Point & Farm	SU7902	Ifield Mill Pond	TQ2436	Partridge Green	TQ1919	Stansted Forest
	TQ0208	Combe Haven	TQ7609	Iping Common	SU8421	Pett Level Pools	TQ9014	Stedham Common
	TQ4332	Crows Nest, Ashdown	TQ4728	Ivy Lake, Chichester	SU8703	Petworth Park	SU9721	Streele Farm Billingshurst
	TQ0000	Cuckmere Haven	TV5197	Kingley Vale	SU8110	Pevensay Bay	TQ6503	Swanbourne Lake
	TQ3704	Darwell Reservoir	TQ7121	Kneppmill Pond	TQ1521	Pevensay Bridge Level	TQ6504	The Goat, Ashdown
Voiv	TQ4314	East Guldeford Level	TQ9421	Lancing Clump	TQ1806	Pevensay Levels	TQ6605	The Mens
	TV5895	East Head	SZ7698	Langney Point	TQ6401	Pilsey Island & Sands	SU7600	The Severals
	TV5695	Ebernoe Common	SU9726	Lavington Common	SU9418	Pippingford Park	TQ4430	Thorney Deepes
	TQ6733	Elms Farm, Icklesham	TQ8815	Lewes Brooks	TQ4207	Portfield Gravel Pit	SU8805	Thorney Island
	TQ0825	Eridge Park	TQ5635	Littlehampton G.C.	TQ0101	Powdermill Reservoir	TQ9199	Tilgate Park
	TV5596	Fairlight	TQ8611	Long/Narrow Pits, Rye	TQ9217	Pulborough Brooks	TQ0516	Union Canal, E. Guldeford
	TQ4023	Fishbourne Channel	SU8303	Lullington Heath	TQ5401	Rackham Woods	TQ0414	Upper Adur Levels
	TQ8417	Fore Wood, Crowhurst	TQ7513	Lurgashall Mill Pond	SU9325	Roman Road, Ashdown	TQ4729	Wakehurst Place
	SZ8798	Forest Mere	SU8129	Manxey Levels	TQ6306	Rye Bay Wood	TQ9217	Walland Marsh
	TQ3302	Four Counties, Ashdown	TQ4631	Marline Wood	TQ7812	Rye Harbour LNR	TQ9216	Waltham Brooks
ark	TQ3207	Friston Forest	TV 5499	Marsh Farm, Yapton	SU9804	Scotney Court Gravel Pit	TR0119	Warnham L.N.R. & M.P.
thing	TQ1404	Gills Lap, Ashdown	TQ4632	Maynards Green	TQ5818	Seaford Head	TV4997	Weir Wood Reservoir
thing	TQ1703	Glynde Levels	TQ4609	Mill Hill, Shoreham	TQ2107	Selsey Bill	SZ8592	West Beach Littlehampton
	TQ9818	Glyne Gap, Bexhill	TQ7607	Millbrook, Ashdown	TQ4428	Selsey West Fields	SZ8394	Westdean Woods
	TQ2434	Goring Gap	TQ1001	New Salts Farm	TQ2004	Seven Sisters Country Park	TV5197	Whitbread Hollow
own	SU9617	Gossops Green	TQ2535	Newhaven Harbour	TV4499	Sheepcote Valley	TQ3404	Widewater, Lancing
Farm	TQ4629	Gravetye Lakes	TQ3634	Newhaven Tidemills	TQ4500	Shillinglee Lake	SU9631	Willingdon
n	TQ9118	Greenwood Clump	TQ4731	Nook Meadows, Rye	TQ9217	Shooters Bottom	TV5795	Woods Mill
n	TQ1020	Halsey's Farm	SZ8697	Normans Bay	TQ6805	Shoreham Airport	TQ2005	Woolbeding Common
	TQ3821	Harbour Farm, Rye	TQ9317	North Wall Pagham Hbr	SZ8797	Shoreham Harbour	TQ2304	Worth Forest

The grid references given are intended as a guide only to finding the sites and are not necessarily where a species was observed.