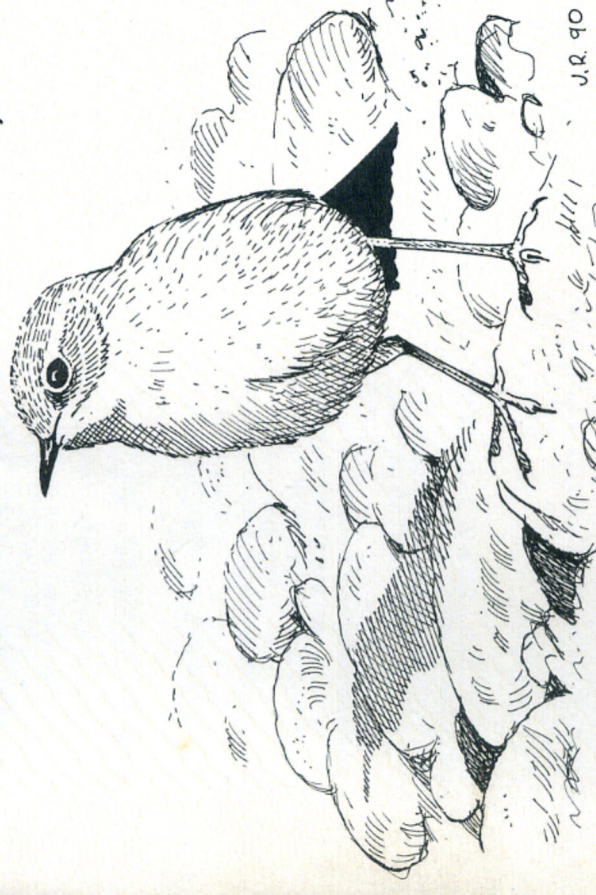


The Sussex Bird Report

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REVIEW OF 1989

by Paul James, Chris Jamman and Roy Sanderson

High pressure over the Continent resulted in a very mild and dry January. In Sussex winds were generally light SW with some night frosts but very little rain. Consequently numbers of some winter visitors were low and few unusual species were recorded.

Rye Bay held up to 130 **Red-throated Divers** and 100 **Great Crested Grebes** during the month. A second adult **Black Brant** was found at Thorney Island on the 8th, along with 6 juvenile birds which appeared to be interbreeds with the normal race. A **Great Grey Shrike** in Ashdown Forest remained into March, while nearby Weir Wood Reservoir was host to up to 16 **Goosanders** and a **Glaucous Gull**; an **Iceland Gull** was reported from Pagham Harbour on 3rd and 3 **Little Gulls** at Worthing on 7th. Pulborough Brooks proved an excellent site for **Short-eared Owls**, up to 13 quartering the grassland during the month, sometimes accompanied by a male **Hen Harrier**. Other long-stayers in January included up to 7 **Red-throated Divers** and 33 **Scaup** on the Crumbles, 2 **Avocets** in Chichester Harbour, 24 **Purple Sandpipers** at Newhaven and 4 **Mediterranean Gulls** at Brighton. In the far west, an **Egyptian Goose** at Cobnor Point on the 6th and 3 **Little Stints** at East Head on the 22nd were unusual.

The fine weather of January continued until mid-February when winds strengthened, bringing rain to southern England. Quiet spring-like weather on 20th-21st was only an interval between lows and more rain. As pressure fell, substantial amounts of rain and sleet occurred in Sussex on the 25th and an unsettled, mainly westerly airstream persisted to the end of the month.

February was generally quiet bird-wise, but not without interest. Very unusual was a **Sooty Shearwater** seen from a boat 8 km off Brighton on the 1st. Other seabirds included an **Arctic Skua** off Worthing on 4th, when a peak of 292 **auks** passed Brighton Marina in a single hour, and a very early **Sandwich Tern** at Widewater on 11th. First-winter **Glaucous Gulls** were recorded at Pagham Harbour, Cuckmere Haven and Pett Level on the 6th, and the regular wintering adult remained on the Selsey peninsula. Early in the month up to 220 **Eiders** and 300 **Common Scoters** were present in Pevensy Bay. **Long-tailed Ducks** featured strongly with up to 20 in Chichester Harbour and from 9 to 15 at Church Norton. The first **Garganey** were a pair at Sidlesham Ferry on the 25th. **Peregrines** were recorded in Chichester and Pagham Harbours and Cuckmere Haven, and 2 **Buzzards** were seen at Firle on the 28th.

Low pressure continued to dominate the weather throughout March, with plenty of rain. Slowly the wind backed to a mild SW on the 4th, with very little change during the following three weeks and daytime temperatures slightly above average. Lows continued to move NE across the country with high pressure over the Continent. At times the wind was very strong in the south and rainfall continuous and heavy, particularly from around mid-month. A very windy Good Friday (24th) gave way to an unexpectedly warm Easter as southerly winds raised temperatures into the low 60s Fahrenheit and brought calm dry conditions, followed by excellent seawatching in SE winds on 26th-27th.

Many summer visitors appeared unusually early, particularly the first **Sand Martin**, at Amberley Wildbrooks on 10th, a **Willow Warbler** trapped at Icklesham on 14th, a **Tree Pipit** at Crawley on 17th, and a **Whinchat** at Cuckmere Haven plus a **Whitethroat** at the Crumbles on 24th. Other 'firsts' included 2 **White Wagtails** at Worthing on 5th and a **Wheatear** there and another at Cuckmere Haven on 6th, 4 **House Martins** at the latter site on 11th, 3 **Swallows** at Winchelsea on 15th, and the first **Yellow Wagtail**, **Redstart**, **Ring Ouzels** and **Sedge Warblers** during 26th-29th. The earliest ever **Hobby** in Sussex appeared on 27th at Broadwater. Rarer birds

were **Hoopoes** at Sidlesham Ferry on 20th and at Streat on 28th-29th, a **Spotted Crane** at Icklesham on 26th-27th and a **Kentish Plover** at Pilsey from 29th to 4th April. As usual in March, **Black Redstarts** and **Firecrests** appeared in small numbers along the coast.

Before the 27th, seabird movements were unexciting, though 16 **Little Gulls** east at Worthing on the 19th were early and a **Great Skua** frequented Pilsey from 15th into April. On 27th, however, seawatchers at Selsey logged 26 **divers**, a **Red-necked Grebe**, 1610 **Common** and 35 **Velvet Scoters**, 71 **Red-breasted Mergansers**, 2 **Long-tailed Ducks**, 2 adult **Mediterranean Gulls**, 3 **Little Gulls**, 70 **Sandwich** and 4 'Commic' Terns, plus the arrival of 80 **Meadow Pipits**, 15 **Wheatcrows** and 11 **Swallows**. At Seaford on the same day, totals included no fewer than 6182 **Common Scoters** and 232 **Sandwich Terns**, with 53 **Velvet Scoters** next day.

The early spring was not to last: on 3rd April the first strong cold easterlies of the year arrived as low pressure over France met the influence of a Scandinavian high. Snow fell on the east coast and reached SE England on 4th and 5th as temperatures hovered just above freezing. Strengthening westerlies with heavy rain occurred over the 7th and 8th but calm conditions returned on the 13th. Winds shifted to the east on the 15th with a breezy NE on the 16th, and cold showery weather continued as occasional fronts moved westward over the North Sea. A south-moving low brought torrential rain and hail to Sussex on the 27th and a ridge formed on the 28th. Atlantic weather resumed next day with a consequent improvement in temperatures.

April opened with very early **Cuckoos** at Church Norton and Climping on the 1st and the spring's first **Pomarine Skua** east at Seaford on the 2nd. A **Lesser Whitethroat** at Moulsecomb on 4th, a **Swift** in the Lower Cuckmere on 10th and a **Pied Flycatcher** at Church Norton on 14th were also exceptionally early. A first-year **Iceland Gull** turned up at Beachy Head on the 8th, and next day the first **Little Tern** appeared at Pilsey; on 15th 2 **Black Terns** flew east at Seaford. Other harbingers during this period included **Garden Warblers** at Pagham and the Cuckmere on 9th, a **Nightingale** at Lullington Heath on 12th and a **Turtle Dove** at Rye Harbour on 16th, when a flock of 22 **Avocets** headed east into the wind off Selsey Bill. An influx of scarcer species occurred later in the month, commencing with a **Green-winged Teal** at Arundel from the 21st to 1st May, and a **Red-rumped Swallow** at Sidlesham Ferry on the 22nd. At the Crumbles 129 **Little Gulls** were counted on the 23rd, and at Beachy Head a male **Ortolan Bunting** appeared on the 27th and a **Black Kite** on the 29th. The month ended with a well-watched **Night Heron** in the Ouse Valley at Newhaven from the 30th to 3rd May.

May was one of the hottest and driest on record, due to a large area of high pressure over southern England and central Europe. Winds were mainly easterly or SE. The high formed by the 2nd, temperatures reaching 21°C. Some respite from the heat occurred when a low moved over northern districts on the 11th, bringing freshening west to SW winds. A series of highs returned from the 14th and temperatures soared again, reaching as high as 29°C in some parts of the country during unbroken sunshine in the third week. Winds turned NE on the 26th and temperatures plummeted, the month finishing cooler than normal.

With the winds in the right quarter, seawatching proved rewarding and at least 390 **Pomarine Skuas** were recorded along the coast. Most large movements of this enigmatic species occurred during afternoons; particularly noteworthy were 45-50 at Seaford on the 4th and 120 there the following day with a remarkable total of 224 **Little Gulls** heading east. Other seawatching highlights included a **Lesser Crested Tern** which passed Seaford and Birling Gap on the 6th (probably the returning Farne Islands bird) and a movement of 320 **Black Terns** past Birling Gap on the 9th. Also at Birling Gap there was a **Puffin** on the 6th and 3 on the 10th, plus a **Great Northern Diver** on the 7th.

Wader arrivals included various **Wood Sandpipers** from the 5th, 7 **Little Stints**, and 2 **Temminck's** at Icklesham on 19th. The last **Purple Sandpiper** was seen at Newhaven on 20th. A fine selection of landbirds began with the first **Nightjars** at Icklesham and Brighton Marina on 6th, then continued with a **Hoopoe** at Fairlight on 10th, a **Scandinavian Rock Pipit** at Belle Tout on 13th, a **Great Reed Warbler** singing at Thorney Deepes on 19th, a **Woodchat Shrike** at Westmeston on 20th, an **Icterine Warbler** at Beachy Head on 23rd, a **Wryneck** at Cuckmere Haven on 25th and a male **Golden Oriole** at Icklesham next day, 6 or possibly 7 **Bee-eaters** at Beachy Head on 28th, and lastly an **Ashy-headed Wagtail** also at Icklesham on 31st. Two sub-adult **Spoonbills** in the Cuckmere on 25th were noteworthy, and even more so a **Black Stork** the following day over Wych Cross in Ashdown Forest, only the second county record.

Raptors in May were also exciting, beginning with a **Black Kite** over Pilsey Island on 6th and an **Osprey** at Icklesham on 7th; another **Osprey** graced the Cuckmere Valley on 21st. **Montagu's Harriers** appeared at Balsdean on 9th and at Beachy Head on 29th, with a **Honey Buzzard** also at Beachy on 15th. A national influx of **Red-footed Falcons** occurred at the end of the month, bringing a female to Newmarket Hill on 29th, remaining to 3rd June, with a first-summer male nearby from 30th to 1st June, on which date another female was seen at Hooe Level.

Unsettled cool weather continued into the first part of June; maximum temperatures fell to 12°C with rain on the 6th and 7th, recovering to nearer normal on the 9th when winds turned southerly. Pressure gradually built to the east and brought humid weather into the mid-20's Celsius by the 11th, high temperatures continuing mainly until the 24th. Unsettled weather returned to all areas on the 26th, bringing the first rainfall for three weeks. Winds backed SW with changeable conditions until the end of the month.

A ring-tail **Montagu's Harrier** paused briefly at Newmarket Hill on the 1st, on which date first-year **Mediterranean Gulls** peaked at 11 on Pilsey Sands. A beautifully plumaged female **Red-necked Phalarope** spun on Sidlesham Ferry Pool on the 2nd, an unseasonal **Peregrine** frequented the Rye area on 3rd-4th, a **Great Skua** was seen off Brighton on 4th and a **Spoonbill** at Church Norton stayed from 4th to 7th. The only really unusual records later in the month were of an adult male **Hen Harrier** in Ashdown Forest on the 19th and a **Kentish Plover** at Shoreham on the 26th. Up to 5 **Roseate Terns** frequented Rye Harbour during the month.

Breeding birds enjoyed mixed success despite the fine weather. **Sand Martins** continued their welcome recovery but **House Martins** seemed down in numbers at some colonies. **Terns** suffered a generally poor breeding season due to several factors including disturbance by predators and high-tide flooding of nests. The **Kittiwake** colony at Newhaven held an estimated record number of 1072 pairs and the small colony at Splash Point, Seaford held 46 occupied nests. A pair (or rather a male with two females) of **Cetti's Warblers** bred in Sussex for the first time since 1975, and at least 4 pairs of **Bearded Tits** reared 30 or more young.

The low present at the end of June moved away and a ridge built to the NE on 2nd July. Hot weather predominated almost everywhere in the country, though the NE winds were quite strong at times in Sussex. On the 6th very humid air spread into southern England, followed by a shallow low bringing torrential rain to many places. Mainly hot dry weather then continued, with low pressure on 21st-22nd raising temperatures to over 32°C in the south, as a high rebuilt from the SW. A cold front moved south on the 29th, and both days and nights became much cooler.

July began spectacularly with an immature male **Scarlet Rosefinch** singing at Icklesham on the 2nd, but after that it was quiet apart from the beginning of an influx of **Little Egrets** with 2 at Pagham Harbour and 1 on Thorney Deepes on 16th and 18th respectively. A very early **Golden Plover** appeared at Thorney Deepes on 9th, with 3 at Church Norton on 16th. Returning waders at Sidlesham Ferry included a

family of 4 **Little Ringed Plovers** on 9th, 10 **Ruff** on 13th and a **Temminck's Stint** from 13th to 18th, a **Greenshank** on 16th, a **Little Stint** on 22nd and 11 **Little Ringed Plovers** by 29th. Single **Curlew Sandpipers** appeared at 5 sites from 16th and a juvenile **Kentish Plover** was at Pilsey from 25th to 28th.

August was mainly hot and sunny with very little rain. The drought broke briefly in the south with some rain on the 10th and 11th. In Sussex mainly westerly winds became southerly for a time on the 19th and 20th. Cooler unsettled weather moved away eastwards, high pressure rebuilt to the west behind a weak cold front.

Little Egrets continued their influx with up to 2 on Thorney, 2 or 3 in the Rye/Pett area and singles at Pagham/Selsey and Weir Wood. At Dell Quay in Chichester Harbour, numbers built up to 6 on 30th, staying at this level until early October. Other scarce species during the first half of August included a **Crossbill** at Tilgate Forest on 4th, an **Osprey** at Beachy on 6th, a **Marsh Harrier** at Pagham on 11th and a **Pectoral Sandpiper** ringed at Icklesham on 13th. An **Icterine Warbler** was identified at East Grinstead on 19th and a **Dotterel** stayed in the Swanborough Hill area for a week from 23rd. The 26th saw **Avocet** and **Purple Sandpiper** at Rye and a **Bittern** at Icklesham, and the autumn's first **Wryneck** appeared at Beachy Head on 31st. Passage waders were well down despite low water levels, with just a scattering of **Little Stints** and **Wood Sandpipers** and very few **Curlew Sandpipers**.

September was also mainly settled, though with more cloud and a spell of northerlies from 8th to 10th. The remains of tropical storm Gabriel brought strengthening winds and some rain on the 16th. Most of England then enjoyed a warm south to SW airstream with temperatures around 24°C to the 24th. High pressure then built to the west behind a weak cold front, with cooler light northerlies and mainly cloudy conditions.

The Beachy Head area did very well with an immature **Red-backed Shrike** on 2nd, a **Melodious Warbler** on 3rd, 3 early **Firecrests** on 4th, an adult **Tawny Pipit** on 12th (when another appeared at Littlehampton), an **Aquatic Warbler** on 13th, a **Barred Warbler** and an **Ortolan** on 23rd, an amazing variety of raptors on 24th including at least 4 **Marsh Harriers**, 4 **Hobbies**, 2 **Peregrines**, a **Buzzard**, a **Merlin** and a **Short-eared Owl**, the county's earliest ever **Great Grey Shrike** on 26th-27th, a **Yellow-browed Warbler** also on 27th and a **Red-breasted Flycatcher** trapped on 29th. Other raptors included a **Honey Buzzard** over Sidlesham Ferry on 1st and **Ospreys** at Pett Level and Lancing on 18th; the following day an adult **Crane** flying north-west over Chailey Common was an unusual sight. Two **Jack Snipe** at Icklesham on 1st were early; on 3rd a **Temminck's Stint** was seen at Pett Pools and a **White-winged Black Tern** at the Midrips (also on 4th) while a splendid juvenile **Red-necked Phalarope** frequented Widewater up to the 7th. The only other notable wader was a **Baird's Sandpiper** at Pett on the 17th.

A **Savi's Warbler** briefly at Shoreham on 6th was followed by a long gap in rare passerines, away from Beachy, until 21st when Icklesham trapped a **Red-breasted Flycatcher**. On 23rd a **Tawny Pipit** was found at Newhaven, then again at Icklesham an **Aquatic** was ringed on 25th and a **Barred** on 28th. On a wintry note, the last word goes to an immature **Snow Bunting** seen at Rye Harbour on the 29th.

The first half of October continued settled with a large area of high pressure over the Atlantic blocking the usual rain-bearing depressions normally associated with that month. The long-awaited change took place on the 19th as a deep low moved eastwards, deepening all the while and crossing southern England with SW gales and rain. Another low moved north from Biscay on the 27th, leading to more of the same.

On the 7th a second **Red-breasted Flycatcher** appeared at Beachy Head and the first of 2 **Penduline Tits** was trapped at Icklesham (the other was on 24th); nearby at Pett Level a **Richard's Pipit** was found the following day. Another **Barred Warbler**

was trapped at Beachy on 12th, a **Buff-breasted Sandpiper** appeared unexpectedly at Rye Harbour on 14th, and at Charleston Reedbed a **Yellow-browed Warbler** was found on 18th. Seabirds did not, apparently, feature very highly, except at Worthing on 8th with 309 **Gannets** (some coming over from inland) and 827 **Brents** and on 28th with 393 and 749 respectively, plus a **Guillemot** on Sidlesham Ferry Pond. Earlier, on 22nd, an adult **Iceland Gull** was at Climping. October ended with a **Crane** heading out south-east at Selsey Bill on 29th. A colour-ringed **Spoonbill** first seen at Rye on 5th stayed in the area into the New Year.

Changeable weather with frontal rain continued into November. Colder northerly conditions brought ground frosts to Sussex on 5th and 6th. A low moved up the Channel on 7th-8th bringing cyclonic winds, storm force for a time. On 11th-12th mild south to SE winds raised temperatures again to around 16°C. A high from the 23rd brought the coldest nights for three years to SE England with temperatures down to -5°C and daytime temperatures as low as 3°C on 25th. Some cloud moved in on 28th but it remained cold with light SE winds.

November opened in startling fashion with a female or first-winter **Desert Wheatear** at Selsey Bill from 1st to 6th and also, on the 1st, an adult and a juvenile **Penduline Tit** at Sidlesham Ferry Long Lagoon. **Little Auks** were recorded along the coast from 2nd to 16th with a maximum of 12 at Selsey on the 7th. The final **Yellow-browed Warblers** were singles at Belle Tout on 3rd and **Bognor Regis** on 5th; at Icklesham a **Lapland Bunting** turned up on 12th and 3 **Cranes** were seen on 16th. The county's latest ever **Hobby** lingered at Coldwaltham Brooks on 12th and the last **Redstart** was at Pett Level as late as 29th. Waders and wildfowl included a **Grey Phalarope** at Church Norton on 12th and 3 **Avocets** and a **Knot** at Weir Wood on 14th, Thorney's **Black Brant** from 10th and an adult **Whooper Swan** in the Cuckmere on 24th-25th.

December began very cold and frosty on the 1st, becoming sunny later. The month was generally mild with dull overcast weather. Strong SW winds occurred from 23rd to 25th with some heavy rain, changing to light NE on the 26th. The 29th was cold and overcast with force 3-4 SE winds, the year ending cold and dry.

More **Snow Buntings** were reported in December, with up to 2 at Thorney, 2 at West Wittering, 3 at Shoreham Harbour and 4 in the Rye/Pett area; at Telscombe 2 **Laplands** were seen on 1st and 3rd. The peak count of **Slavonian Grebes** at Church Norton was 52 on the 10th, a Sussex all-time high. Raptors at Pulborough Brooks included a male and 4 ring-tail **Hen Harriers**, 2 **Short-eared Owls** and a **Barn Owl**. Otherwise the month belonged to the seabirds — a juvenile **Sabine's Gull** briefly at Church Norton on 17th, **Arctic** and **Great Skuas** off Worthing and Selsey on 20th and 24th respectively, a **Sooty Shearwater** heading west off Hastings on 24th, **Grey Phalaropes** at Shoreham and Church Norton from 26th, and lastly an influx of **Leach's Petrels** after 3 days of stormy south-westerlies. These began with one at the mouth of the Arun on 24th, followed by 31 off Birling Gap on Christmas Day when, as well as Leach's, an unidentified dark-rumped petrel was also noted off Brighton Marina. Finally, single **Little Egrets** were noted at Pagham on 3rd and in Chichester Harbour all month, the latter remaining until spring 1990, the first known wintering in the county.

CLASSIFIED RECORDS FOR 1989

by T. W. Parmenter

This list covers all species in Categories A and C of the British Ornithologists' Union check list. Records of national rarities have only been included if the Society has been notified of their acceptance by *British Birds*, at the time of going to press. Observers are reminded that all records of unusual species (see list on inside back cover) are considered by the Records Committee and only those fully authenticated will be published.

The following abbreviations are used in the Systematic List as standard practice: E, W, N, S, etc., cardinal points of the compass; GP, gravel pit(s); GC, golf course; LNR, Local Nature Reserve; NR, Nature Reserve; NNR, National Nature Reserve; Res., Reservoir; SSSI, a declared Site of Special Scientific Interest; SF, sewage farm or works; WWT, Wildfowl and Wetlands Trust; Hbr, Harbour; NC, no count; ha, hectares; km, kilometres. (Note that 1 sq. km = 100 ha = 247 acres.) Amberley is used to cover the whole of Amberley Wild Brooks. The reference to the latest standard account of Sussex birds is abbreviated: Shrubbs 1979 (Shrubbs, M., 1979, *The Birds of Sussex, their present status*, Phillimore, Chichester).

Although Pheasant (*Phasianus colchicus*) and Duncock (*Prunella modularis*) occurred commonly in Sussex in 1989, details have not been incorporated into the List. Records of these species are, however, still required.

SWANS, GEESE, DUCKS and WADERS. Readers are reminded that the tables presented for all the main species have been compiled from the monthly 'Wildfowl Counts' for the Wildfowl and Wetlands Trust and the 'Birds of Estuaries Enquiry' for the BTO, RSPB and NCC. The counts were made once per month and therefore the tables do not show the peak monthly figure but present a more meaningful coordinated count. The 'Birds of Estuaries Enquiry' counts were made on 7 Jan., 11 Feb., 11 Mar., 16 Sept., 14 Oct., 11 Nov. and 16 Dec. 1989, and 13 Jan., 10 Feb. and 10 Mar. 1990. The 'Wildfowl Counts' were made on 15 Jan., 12 Feb., 12 Mar., 17 Sept., 15 Oct., 12 Nov. and 17 Dec. 1989, and 14 Jan., 18 Feb. and 18 Mar. 1990.

ESCAPES AND FERAL BIRDS. As in the 1988 Report, a separate list of escaped and/or feral birds other than those species in the British Ornithologists' Union's Category C which appear in the main list, is appended to this report on pages 66-67.

1. **RED-THROATED DIVER (*Gavia stellata*):**—An unexceptional year apart from the usual large winter gathering in Rye Bay. The approximate monthly totals (but see also Diver sp.) were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
196	25	25	65	14	—	—	—	1	5	19	61

Records for Jan-Mar. were widely scattered with up to 130 off Pett and up to 7 at the Crumbles GP throughout. Elsewhere numbers were small except for 5 at sea 7 km SE of Brighton on 7 and 22 Jan., 7 at Normans Bay on 14 Feb. and a total of 33 E at Worthing. Inland, 1 was at Arlington Res. from 15 Jan. to 7 Feb. and a single was regularly seen at Northpoint GP. In Apr-May most records were of birds passing up-channel at the main seawatching localities, the only exceptions being a single again at Northpoint GP until 23 Apr. and 1 at Cuckmere Haven on 6 and 12 May.

The first returning bird was off Worthing on 24 Sept. Numbers then built up slowly with 10 at Pett on 23 Nov. and 30 there on 22 Dec. Elsewhere there were 5 at Church Norton on 19 Dec. and 5 at Cuckmere Haven on 25 Dec., and a total of 14 passed Worthing throughout the period.

2. **BLACK-THROATED DIVER (*G. arctica*):**—An unexceptional year. The approximate monthly totals, including sea passage (but see also Diver sp.), were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	3	11	14	42	—	—	—	—	3	—	6

Records for Jan-Mar. were widespread and included 1 at Pagham Lagoon from 15 Jan. to 21 Feb. and 1 inland at Arlington Res. on 14 Jan. All other records were of singles at the coast except for 2 at Brighton Marina on 27 Mar. and 2 E at Selsey Bill on 28 Mar. Seawatching in Apr-May produced a total of 53 E with a peak of 12 E at Beachy Head on 8 May. The only other spring records were of 1 at Church Norton on 6 Apr. and 2 at Cuckmere Haven on 27 May.

In the latter part of the year there were no records until 14 Oct. when 1 was in Chichester Hbr and another was off Selsey Bill. After 1 at St Leonards on 22 Oct., the only other records came from Worthing with a total of 5 in Dec.

3. **GREAT NORTHERN DIVER (*G. immer*):**—A poor year with only 3 recorded. In spring 1 passed E at Birling Gap on 7 May (BAEM), while in the latter part of the year 1 was in the Pagham Hbr area from 11 to 26 Nov. and 1 was in Chichester Hbr on 17 Dec. (CBC).

DIVER SPECIES (*Gavia* sp.):—Totals of birds passing up-channel during Jan-May at the listed seawatching localities were as follows:

	Coverage	<i>G. stellata</i>	<i>G. arctica</i>	<i>G. immer</i>	<i>G. species*</i>
Selsey Bill	112 hrs	26	8	—	146
Worthing	255 hrs	65	24	—	349
Seaford	434.5 hrs	3	3	—	481

Analysis of the above records reveals the following monthly distribution:

	March	April	May	Total
<i>G. stellata</i>	6	53	8	67
<i>G. arctica</i>	4	9	17	30
<i>G. immer</i>	—	—	—	—
<i>G. species*</i>	328	352	294	974

*includes all specifically identified birds.

In Dec. there were 105 at Worthing in 1.6 hrs watching.

6. **LITTLE GREBE (*Tachybaptus ruficollis*):**—Monthly maxima at the principal wintering sites were:

	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	30	38	39	15	14	7	13
Pagham Hbr	18	12	15	—	17	3	10
Lower Cuckmere	17	25	27	16	21	28	29
Rye Hbr	11	14	9	13	20	29	15

Elsewhere in Jan. and Feb. there were only 11 at the coast, 10 at inland waters, 4 on canals and rifles, and 19 on the tidal reaches of the Rivers Arun, Adur and Ouse. In the spring there were 10 at Icklesham on 26 Mar. and 4 at the Crumbles GP on 3 Apr., while numbers in the Lower Cuckmere declined steadily throughout Apr., the last being seen there on 1 May.

In the breeding season 28-29 pairs were reported from 15 sites. Successful breeding (numbers of young in brackets) was noted as follows: Rye Hbr LNR 3-4 pairs (9), Glynde clay pits 3-4 pairs (9), Thorney Little Deepes 3 pairs (5) and Gravetye Manor 3 pairs (11), and single pairs at Redford Pond (3), Ebermoe (2), Inholmes Copse (3), the Severals (2) and Aldingbourne Rife (2). No detailed breeding information was received for Pagham Hbr, Chichester GP and Icklesham.

Post-breeding dispersal was first noted in the Lower Cuckmere on 20 Aug., by which time numbers at Thorney Little Deepes had increased to 23. At the end of the year notable records were 27 at Northpoint GP on 19 Nov., 8 on the R. Ouse on 27 Nov. and 26 at Dell Quay on 22 Dec.

7. **GREAT CRESTED GREBE** (*Podiceps cristatus*):—Monthly maxima at the principal wintering sites were:

	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.
Weir Wood Res.	74	81	95	1	14	28	40
Bewl Water	30	35	39	32	47	30	13
Darwell Res.	30	46	27	44	42	45	40
Pagham Hbr	8	13	1	40	54	27	11
Chichester Hbr	7	3	39	1	2	7	42
Chichester GP	23	16	16	11	9	23	28
Ardingly Res.	29	36	34	17	18	17	31
Arlington Res.	18	25	3	21	24	26	15

The year started with 100 at sea off Pett, though no large numbers were reported from the coast thereafter. On 4 Apr. there were 18 at Pilsey and 3 remained throughout June and July. At Church Norton 10 were present on 23 May and 7 on 15 June.

A very poor breeding season. Although c.77 pairs were reported from 18 sites, successful breeding was noted at only Rye Hbr LNR where 5 pairs raised 5 young, Ardingly Res. (6 pairs, 3 young) and Burton Pond (1 pair, 2 young). At Weir Wood Res. 12 pairs failed completely, as did c.16 pairs at Bewl Water and 6 pairs at Darwell Res.

At sea off Church Norton 7 had returned by 2 Aug. and numbers there had risen to 40 by 20 Sept. Numbers off Pett had reached 39 by 24 Nov. and rose to a peak of 232 on 12 Dec.

8. **RED-NECKED GREBE** (*P. grisegena*):—The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4	4	4	5	1	—	—	—	1	2	2	4

In Jan. 2 were off Pett on 2nd with 1 at Northpoint GP on the same date, while at Church Norton 1 remained from 8th to 16th. In Feb. 3 were at Church Norton on 5th and 1 was at Pilsey on 11th. March sightings consisted of 2 in Chichester Hbr on 6th, one remaining until 25th, 1 at Selsey Bill from 17th to 19th and another there on 27th. Spring records were more widespread with singles at Worthing on 9 and 30 Apr., Pilsey on 15th, Seaford on 22nd, Selsey on 26th and Birling Gap on 9 May.

In autumn there was 1 at Scotney Court GP on 3 Sept., but then none were recorded until 15 Oct. when 1 was off Church Norton. On 29 Oct. 1 at Church Norton and Selsey Bill was probably that recorded in the area on many dates to the end of the year. Inland 1 was at Barcombe Res. from 11 Nov. to 22 Dec. and 2 were at Bewl Water on 31 Dec.

9. **SLAVONIAN GREBE** (*P. auritus*):—An excellent year with a marked spring passage and large numbers wintering in the West, the approximate monthly totals being:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
18	35	42	7	2	—	—	—	1	43	38	66

In Jan. 2 were recorded at Rye, 4 in Chichester Hbr and up to 10 at Church Norton, with a single at Worthing on 7th possibly being that seen at Shoreham on 8th. In Feb. numbers at Church Norton increased to 31 on 8th but gradually reduced to 10 on 27 Mar. and just 1 by 6 Apr. Elsewhere spring records were widespread, peaking at the end of March with 7 at Beachy Head and 4 at Seaford on 27th, 3 at Brighton Marina on 28th and 2 more at Seaford on 29th. A pair remained at Rye until 25th and 3 in Chichester Hbr stayed until 30th. In Apr. 1 was at Pilsey from 12th to 14th, with another found dead there on the latter date; 1 stayed at the Crumbles GP from 13th to 22nd, and a single was in Cuckmere Haven from 21 Apr. to 12 May.

The first in autumn was a single at Church Norton on 20 Sept. with only small numbers recorded there until 27 Oct. when 43 were present. Numbers fluctuated there in Nov. but on 10 Dec. 52 were counted. This represents the largest flock recorded in Sussex, exceeding the 51 also at Church Norton on 10 Nov. 1981 (SxBR 34: 7). The only records away from Church Norton at the end of the year were of 12 at Pilsey on 26 Dec. and 2 at Worthing on 28th.

10. **BLACK-NECKED GREBE** (*P. nigricollis*):—Typically most records were of passage birds, monthly totals being:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
—	—	4	3	—	—	—	—	—	1	4	—

In Mar. a summer-plumaged individual remained at Rye Hbr from 19th to 29th, 1 was at Seaford on 28th and 2 were in Bosham Channel on 29th. April records consisted of singles at Worthing on 5th, inland at Weir Wood Res. on 7th and at Rye Hbr from 8th to 13th.

In autumn 1 was at St Leonards on 13 Oct., 3 were off Selsey Bill on 10 Nov., and another was off Church Norton on 26 Nov. Finally 1 was reported from Pagham Hbr on 16 Dec.

12. **FULMAR** (*Fulmarus glacialis*):—Observations at the main seawatching localities were as follows:

Selsey Bill	Jan.-Feb.	Mar.-May	June-July	Aug.-Oct.	Nov.-Dec.
Worthing	9	403	707	9	63

Other notable movements were 131 E at Splash Point, Seaford on 2 Apr., and 135 E at Brighton Marina on 16th.

The only breeding record received was of 9 occupied nesting sites at Newhaven on 18 Apr., though 200 birds observed between Newhaven and Peacehaven on 11 June suggests other pairs breeding!

17. **SOOTY SHEARWATER** (*Puffinus griseus*):—Two records: one 8 km S of Brighton Marina on 1 Feb. (NJT) and one W off Hastings Pier on 24 Dec. (ASG, RNH). A normal showing for Sussex although both were on unusual dates.

18. **MANX SHEARWATER** (*P. puffinus*):—A very poor year with only 3 authenticated records, all singles, at Newhaven on 5 Feb., Worthing on 15 Aug. and St Leonards on 22 Oct.

23. **LEACH'S PETREL** (*Oceanodroma leucorhoa*):—An exceptional year for this species with more than treble the previous records since 1960 and all in one month. It was also the first time that the species has been recorded in large numbers in the county. The first was one at the mouth of the R. Arun, Littlehampton, on 24 Dec. (ASC) followed by an extraordinary passage on 25th, providing a welcome Christmas present to the lucky few! At Birling Gap 28 were recorded E in one hour (DC, JFC) followed by 3 E later in the morning (TEC, SP, TWP). In the late afternoon up to 7 were seen from Brighton Marina (DC, JFC) where an unidentified small petrel with an all-dark rump was also observed (DC).

25. **GANNET** (*Sula bassana*):—Observations at the main seawatching localities were as follows:

Selsey Bill	Jan.-Feb.	Mar.-May	June-July	Aug.-Oct.	Nov.-Dec.
Worthing beach	34	316	440	1151	33
Seaford	65	533	447	—	—

The peak spring movements occurred on 25 Mar. when there were 90 E off the Cuckmere, on 9 June with 121 and on 28 June with 102 off Worthing beach.

In the latter part of the year there were 309 past Worthing beach on 8 Oct., some arriving very high from the N, then turning W, 120 W at Birling Gap on 14 Oct., 393 off Worthing on 28 Oct., and finally 200 off St Leonards on 3 Nov.

On 21 Oct. one was observed resting on the grass at Brooklands, Worthing!

26. **CORMORANT** (*Phalacrocorax carbo*):—Monthly maxima at the known nocturnal roosting sites were as follows:

Ivy Lake	Jan.	Feb.	Mar.	Apr.	Sept.	Oct.	Nov.	Dec.
South Stoke	56	135	81	110	—	—	—	—
Wyckham Farm	—	74	—	—	106	—	—	119

In Jan. 137 were noted at Arundel bound for the South Stoke roost, which held 135 birds in Feb. and 110 in Apr. At Wyckham Farm in the Adur Valley 74 were counted in Feb. and 106 in Sept. At the end of the year 186 were seen flighting to the South Stoke roost in Dec. and the count at the Adur was 119. Numbers are increasing at this latter site.

All counts for nocturnal roosting sites would be very welcome.
The maximum monthly counts at inland waters were as follows:

	1989			1989			1990			
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Adur Levels.....	24	2	15	50	8	15	37	17	23	26
Alexandra Park, Hastings.....	1	3	1	1	1	1	1	1	1	1
Amberley (inc. Waltham Brooks).....	24	27	18	1	5	16	19	12	23	11
Ardingly Res.....	25	2	4	1	1	5	16	37	5	1
Arlington Res.....	2	3	1	1	3	5	4	2	—	—
Barcombe Mills.....	—	4	4	1	3	3	3	13	6	1
Bewl Water.....	12	5	1	17	20	24	23	25	28	13
Chichester GP.....	13	12	19	3	2	12	43	35	25	13
Darwell Res.....	17	20	14	1	2	6	2	9	6	13
Glynde Levels.....	3	1	—	—	—	—	—	—	3	1
Knepp.....	—	—	—	—	—	—	—	3	—	1
Lewes Brooks.....	29	23	19	11	15	17	23	25	23	24
Petworth Park.....	2	1	—	—	4	5	2	4	—	—
Pevensay Levels.....	—	—	—	—	3	22	9	27	8	2
Powdermill Res.....	—	1	—	—	—	—	1	1	1	1
Shillinglee.....	—	—	—	—	—	—	—	—	3	3
Streele Lake.....	—	—	—	—	—	—	—	—	2	1
Warnham Mill Pond.....	—	—	1	—	—	3	1	3	3	1
Weir Wood Res.....	40	39	37	3	3	9	28	33	4	26

On the coast up to 113 were seen in Chichester Hbr and 73 at Pagham. The Rye area had 27 in Jan., 49 on the Ternery Pool on 25 June, and a peak count for the year of 58 on 16 Dec. Again, there were no counts for the breeding season at the colony at Fairlight but 35 were noted there in Oct.

27. **SHAG** (*P. aristotelis*):—The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
3	3	3	8	10	1	1	9	3	17	1	12

Some duplication may have occurred but has been avoided where possible and these figures should be treated as the minimum recorded. The only notable concentration was of 13 at Selsey Bill on 22 Oct.

30. **BITTERN** (*Botaurus stellaris*):—Another poor year, with singles at Icklesham on 26 Aug. (SJRR) and 20 Nov. (JW), and possibly the same individual(s) at Pett Pools on 2 Sept., 25 Nov. and 5 Dec. (CBa, CHD, JABG). Despite the poor recent showing, a total of about 63 were seen during the 1980s. The only previous August record was prior to 1960.

33. **NIGHT HERON** (*Nycticorax nycticorax*):—An adult near Newhaven from 30 Apr. to 3 May (PKK *et al.*) has been accepted by *British Birds* and is the 17th to be recorded in the county. Of the 7 seen since 1987, six have been between 30 Apr. and 6 May.

37. **LITTLE EGRET** (*Egretta garzetta*):—An unprecedented influx into southern Britain occurred during the second half of the year, an absolute minimum of 10 individuals being recorded in the county: at least 6 in Chichester/Pagham Hbrs, 2 at Icklesham/Pett/Rye and 1 each at Weir Wood Res and Cuckmere Haven. In July, 2 frequented Pagham Hbr from 16-26th (mo), while 1 was seen around Thorney from 18-21st (CBC). One reappeared at Thorney on 2-3 Aug. with 2 there on 4-5th (CBC). One found at Rye Hbr on 2 Aug. was also seen on 8th and 19th (BJY *et al.*), presumably being one of 2 present at Icklesham from 3-31 Aug. (SJRR *et al.*), as was 1 at Pett Level on 5 Aug. (RSK). One was still at Pagham Hbr between 5-28 Aug. (mo) and was probably the individual seen at Selsey Bill on 17th (BJC), while one at Weir Wood Res. on 14 Aug. (NAD *et al.*) was also seen on the Kent side of Bewl Water. One again

put in an appearance at Thorney on 18-19 Aug. (CBC) and on 29th at least 3 were seen at Dell Quay, Chichester Hbr (BJ, CMJ). In Sept. birds were recorded at Dell Quay all month with 5 seen on 4th and 16th (BJ, CMD) and 6 on 30th (RJJF). These possibly included those previously recorded at Pagham and Chichester Hbrs and the singles at West Wittering from 18-22 Sept. (PJB) and at Pagham Hbr on 27th (OM). In the east of the county 1 was present at Cuckmere Haven from 7-27 Sept. (WJMS *et al.*) while singles at Rye Hbr from 10-15th (BJY *et al.*) and Icklesham from 11-21 Sept. (SJRR *et al.*) were probably those seen in Aug. All subsequent records probably related to some of the Dell Quay birds, with 5 there on 3 Oct., 3 from 7-13th and 1 from 22 Oct.-12 Nov. (RJJF, BJ, CMJ *et al.*), 3 at Pagham Hbr on 1 Oct., 1 on 29th and 1 on 3 Dec., 2 on Pilsey Lagoon on 29 Oct., 1 on 11 Nov. and 1 on 16 Dec. (CBC, MAC), singles on Thorney Island on 19 and 25 Nov. and 19 Dec. (RJS *et al.*), and 1 in Chichester Hbr into 1990 (mo). These records have been accepted by *British Birds* and, assuming only 10 individuals were involved, bring the county total to 39. They include the first county records for Oct., Nov. and Dec.

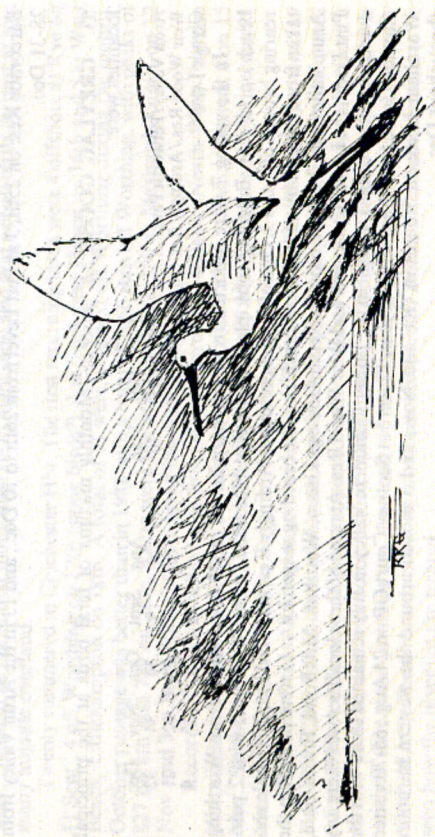
39. **HERON** (*Ardea cinerea*):—All known heronries were counted and nests certainly and probably occupied totalled 210 (208 in 1988). The counts were as follows: Fishbourne 37 (JKC), Pagham 6 (PFBu), Yapton 5 (RK), Parham 19 (AI), Henfield 10 (ABW), Firle 28 (ABW), Knepp 16 (AS, IMS), Eridge 19 (MJS-H), Glymleigh 6 (LG), Priesthaves 1 (LG), Westham 1 (LG), Wartling, now only one site, 12 (LG), Pett Level 0 (CHD), Leasam 50 (SJRR), Rye 0 (BJY). Occupancy of the single nest at Priesthaves was not certain.

Out of the breeding season the species was recorded throughout the county in suitable habitat, with maxima of 46 at Thorney Deepes in Sept. and of 34 at Rye in Dec.

41. **BLACK STORK** (*Ciconia nigra*):—One near Wych Cross on 26 May (IH, MH) has been accepted by *British Birds* and is only the second county record, the first being in autumn 1958.

44. **SPOONBILL** (*Platalea leucorodia*):—Two sub-adults were seen at Cuckmere Haven on 25 May (ARK), an adult was present at Pagham Hbr from 4-7 Jun. (RP *et al.*), and an immature with colour rings (left white 2, right orange 7) was noted at Rye on 5 Oct. and was seen irregularly through to the end of the year (mo). Four represents an average showing in recent years.

In addition, a bird considered to be a hybrid Spoonbill × African Spoonbill (*P. alba*) of captive origin was seen at several localities from Chichester to Pett during the second half of the year. Careful examination of bare part colour and facial pattern is required to eliminate this troublesome individual. Regrettably, this may involve waiting for it to wake up!



46. **MUTE SWAN** (*Cygnus olor*):—During Jan-Mar. the highest counts reported from the principal localities were: Jury's Gap 143, Pulborough-Arundel 94, Lewes Brooks 57, Henfield Brooks 53, and Glynde Levels 49.

Very few breeding data were received, though late May and June counts of non-breeders (and failed breeders) came from Glynde Levels (51), Fishbourne (43), Pett Pools (40), and the Lower Cuckmere (24). Numbers in the Cuckmere had risen to 41 by 26 Aug. and 49 on 21 Oct. There were 34 at Knepp on 18 Oct. and maxima at Chichester GP were 83 in Sept. and 93 in Oct. At the end of the year 65 were resident on Pevensey Levels and also in the Ouse Valley, and 112 between Pulborough and Arundel.

47. **BEWICK'S SWAN** (*C. columbianus*):—At the beginning of the year there were 4 on Lewes Brooks and 29 adults plus 12 juveniles on Henfield Brooks. Numbers in the Arun Valley were often difficult to assess due to the herd splitting into two or more groups, but two well-coordinated counts in Jan. and Feb. produced a total of 123. A maximum count of 128 adults plus 24 juveniles at Amberley on 1 Feb. may have been due to a movement of birds through the county or, more likely, to a local movement of the birds from the Adur Valley. Other records included singles at the Crumbles on 22 Jan. and 2 in Chichester Hbr on 31 Mar.

In the autumn there were 26 at Coldwaltham on 15 Oct.; numbers in the Arun Valley increased to 76 by 14 Nov. and stabilised at this level. At Lewes the first seen were 4 on 20 Nov. and numbers had increased to 9 by 27 Nov. In the Adur Valley 17 (including 4 juveniles) were present on 16 Dec. Elsewhere a pair was present in the Cuckmere Valley on 3 and 25 Nov.; 6 were reported at Pagham Hbr on 19 and 25 Nov.; a juvenile landed in foggy conditions at Warnham Mill Pond on 6 Dec.; 2 were reported from Climping on 26 Dec. and 6 from Ashcombe Bottom on 29 Dec.

48. **WHOOPER SWAN** (*C. cygnus*):—An adult on the southern meanders in the Lower Cuckmere on 24 and 25 Nov. (WJMS) was the only record.

49. **BEAN GOOSE** (*Anser fabalis*):—One showing characteristics of the race *rossicus et al.* was first seen on 10 Dec. 1988 and the possibility remains that it had escaped from captivity. Four were observed near Church Norton on 27 Jan. feeding with 10 Mute Swans (CT).

51. **WHITE-FRONTED GOOSE** (*A. albifrons*):—At the beginning of the year 8 were recorded at Coldwaltham Brooks from 5-21 Feb., 30 at Lancing and 17 at Hooe Level on 5 Mar.

In the latter part of the year 1 occurred on Thorney Island on 17 Nov. followed by 1 at Barcombe Res. on 25th, 3 at Pett Level from 26th to 10 Dec., and 13 in the Arun Valley from 28-31 Dec.

53. **GREYLAG GOOSE** (*A. anser*):—Monthly maxima of feral birds at the principal localities were:

	Jan.	Feb.	Mar.	Aug.	Sept.	Oct.	Nov.	Dec.
Arun Valley/Petworth Park.....	32	33	36	20	9	34	34	32
Weir Wood Res./Ardingly Res.....	9	—	—	15	—	27	22	21
Glynde Levels.....	—	—	11	—	29	21	25	4

In the spring 7 were reported from Pevensey Levels on 23 Mar. and 2 from Worthing beach on 15 Apr. Breeding took place in the Rye Hbr SSSI for the first time, with 2 pairs rearing broods of 2 and 3. One of 2 pairs present at Ardingly Res. also bred but the female was taken from the nest by a fox. Elsewhere during the breeding season up to 15 were present in the Arun Valley and 2-3 were reported from Gossops Green, Warnham Mill Pond, Friars Gate, Pett Level, the Lower Cuckmere and Weir Wood Res. At none of these localities was there any evidence of breeding. Two still in the Lower Cuckmere Valley in July remained there with the Canada Geese until the end of the year; 12 were at Scotney Court GP on 24 Aug.; 66-70 visited Warnham LNR on 3 dates in Oct. and Nov., and 3 moved around the western harbours throughout Dec.

55. **CANADA GOOSE** (*Branta canadensis*):—1988:—The March maximum for Weir Wood Res. should be 105, not 65 (NJD).

1989:—Monthly maxima at the principal autumn and winter sites were:

	Jan.	Feb.	Mar.	Aug.	Sept.	Oct.	Nov.	Dec.
Bewl Water.....	265	316	100	350	1000	206	400	437
Weir Wood Res.....	205	100	58	300	200	4	200	250
Darwell Res.....	77	52	36	200	10	49	58	24
Rye Hbr.....	111	65	52	236	10	6	23	90
Pett Level.....	86	73	19	27	26	81	65	63
Arlington Res.....	1000	820	8	227	383	88	171	109
Lower Cuckmere.....	14	46	36	—	383	88	171	109
Arundel WWT.....	296	304	75	—	117	264	218	300
Amberley/Pulborough.....	300	200	86	250	56	1	300	300
Petworth Park.....	92	82	121	—	238	567	1	—
Warnham LNR.....	60	12	32	47	74	45	34	42
Chichester GP.....	20	32	18	52	86	72	20	59

The largest flocks recorded during the year were c.1000 at Arlington Res. on 1 Jan. and at Bewl Water in Sept. Numbers in the Arun Valley are difficult to assess with any accuracy, but in Jan. these were estimated at c.600. Other large parties recorded were 281 at Scotney Court GP on 24 Aug. and 275 at Burton Pond on 21 Oct. Breeding season records and young reared (in brackets) were: Rye 15 pairs nested (84), Petworth Park 9 pairs nested (57), Weir Wood Res. 4 pairs nested (21), and Gravetye Manor 5 pairs nested (8); elsewhere 8 successful pairs reared 44 young. Thus 41 successful pairs reared an average of 5.2 young per pair, which is considerably above the average of 4.5 (Sx:BR 38: 89).

56. **BARNACLE GOOSE** (*B. leucopsis*):—The only record perhaps relating to a wild bird was of a single with Brent Geese at Rye from 19-22 Jan. See also Escapes and Ferals on page 66.

57. **BRENT GOOSE** (*B. bernicla*):—The estuary counts were as follows:

	1989			1990						
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
County totals.....	12965	12625	4613	78	2760	6786	9195	12615	5012	7865
Chichester Hbr.....	10473	9660	3830	17	1908	5232	6961	9849	4536	1449
Pagham Hbr.....	2476	2965	783	1	215	946	2232	2755	476	412

There were few reports away from the main wintering areas, though 1 at Barcombe Res. on 26 Feb. was unusual.

Analysis of the available data from the main seawatching localities indicates that return passage involved a minimum of 5419 birds, of which 4589 were in Mar., 456 in Apr. and 374 in May. It should be noted that many migrate at night, and also that not all birds fly past at sea; many migrate overland.

Twenty summered in Chichester Hbr. The first returning birds were 4 offshore at Rye on 11 Sept., 4 off Worthing on 12th (same birds?), 3 at Cuckmere Haven on 16th and 5 at West Beach, Littlehampton on 18th. A total of 31 were observed off Worthing during the month. October passage was better than in 1988 with a total of 2066 seen off Worthing, with peaks of 827 on 8th and 749 on 28th. There were few inland records, 150 at Maynards Green on 12 Nov. and 3 at Bewl Water in Dec. being the most noteworthy.

Records of the pale-bellied race *irota* were recorded as follows: North Wall, Pagham Hbr, singles on 5 Jan. and 6 Dec.; Scotney Court GP, 1 on 12 Feb.; Church Norton, 1 on 15 Mar.; Seaford, 2 on 27 Mar.; Shoreham Airport, 1 on 30 Mar.; Cuckmere Haven, 1 on 31 Mar. and 1 Apr.; and finally a single at Nutbourne on 26 Nov.

The Black Brant (*B. b. nigricans*) recorded off Thorney Island in 1988 remained until 19 Feb. 1989 (CBC, MAC). Presumably the same bird reappeared on 10 Nov. and remained until 6 Jan. 1990. A different individual appeared in the Thorney Deep and Prinsted area from 8 Jan. to 18 Mar. and was accompanied by 6 juveniles. Although it cannot be proved, it is thought that these juveniles are the result of interbreeding between *bernicla* and *nigricans* (CBC, MAC). These records of adults have been accepted by *British Birds* but it remains to be seen how the juveniles are treated.

Cat. C. EGYPTIAN GOOSE (Alopochen aegyptiaca):—1 at Cobnor Point, Chichester Hbr. on 6 Jan. and 2 at Icklesham on 2 June.

61. **SHELDUCK (Tadorna tadorna)**:—The estuary counts were as follows:

County totals	1989		1989		1990	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	2861	1763	1603	60	847	1065
Pagham Hbr	2514	1497	1317	43	732	679
Rye Hbr	299	200	220	5	113	376
	15	40	48	12	2	6
						20
						84
						35
						39

Other maxima for the first winter period included 28 in the Lower Cuckmere on 7 Jan. and 15 at Newhaven Tide Mills on 28th.

Birds seen on spring passage included 31 during Mar. at Worthing, 130 there in Apr. and 166 during May.

During the breeding season pairs were noted from 10 sites. A total of 163 young were counted with 80+ at Rye, a very successful season with low mortality, 10 in the Lower Cuckmere, 33 on Thorney Island, 13 at Cobnor Point, 8 at Pett Level, 12 in the Fishbourne Channel, 5 at Boxgrove Common, 1 in the Lower Ouse Valley and 1 at Coldwaltham.

During Oct-Dec. 99 were observed off Worthing in 97 hours of watching. There were 4 at Weir Wood Res. during Dec.

63. **MANDARIN (Aix galericulata)**:—At the beginning of the year the only large party reported was 20 at Shillinglee Mill Pond on 2 Jan. In the breeding season found at 12 sites in West Sussex, the majority being in the NW, and at 4 in East Sussex. Successful breeding was reported from Maynards Green where 3 pairs used nestboxes, and from Weir Wood Res. where 2 pairs raised 7 young. Post-breeding parties included 13 at Swanbourne Lake on 8 Aug. and 11 at Shillinglee on 5 Sept. No large numbers were reported at the end of the year.

64. **WIGEON (Anas penelope)**:—The monthly wildfowl counts at the principal localities were:

County totals	1989		1989		1990	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	3594	2718	1098	226	1351	1053
Pagham Hbr	1363	786	285	69	782	413
Amberley	449	274	199	146	76	261
Cuckmere Haven	600	600	400	1	17	150
Bewl Water	800	672	62	48	177	199
	257	290	111	73	130	130

The Jan. 1989 total was only half the average in recent years and, as in 1988, numbers reduced rapidly in Feb. and Mar. Other counts included 100 at Icklesham on 1 Jan., 250 at Pett Level on 2 Jan., 180 at Arlington Res. on 4 Jan. and 297 at Cuckmere Haven on 20 Mar. The last spring records were of single pairs at Thorney Island on 5 May, Cuckmere Haven on 6 May and Barcombe Res. on 22 May.

In the summer the first to return were 1 at Icklesham on 7 July, 2 at Thorney Island on 12th and singles at Rye on 23rd, 26th and 27th; 3 at Cuckmere Haven on 11 Aug., 3 at Icklesham on 12th and 1 at Weir Wood Res. on 23rd. Wigeon were regular at Rye from 22 Aug. One at Warnham LNR on 24 Sept. was unusual; other inland counts were 13 at Knepp Lake on 13 Nov. and 17 on Henfield Brooks on 6 Dec. Counts at Cuckmere Haven included 291 on 28 Oct., 643 on 25 Nov. and 773 on 27 Dec.

67. **GADWALL (A. strepera)**:—The monthly wildfowl counts at the principal localities were:

County totals	1989		1989		1990	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	89	79	46	72	77	134
Arundel WWT	26	52	27	35	14	18
Burton Pond	11	8	9	20	4	22
Pett Level	24	2	—	1	1	7
Bewl Water	7	—	—	10	14	2
						30
						30
						9
						3
						3

The Jan. 1989 total was the lowest since 1979 and even with an additional 70 reported from Icklesham on 28th the numbers were still well below the average for recent years. Other counts included 62 at Pett Level on 1 Jan., 20 at Swanbourne on 19 Jan. and 60 at Icklesham on 12 Feb. Very few breeding season records were received; the species is thought to have nested at Rye, 6 were at Icklesham on 22 May and a duck was seen at Thorney Island on 26 June. At the end of the year counts included 20 at Burton Pond on 21 Oct., 60 at Pett Level on 27 Nov., 55 at Icklesham on 8 Dec., 48 at Amberley on 24 Dec. and 30 at Chichester GP on 27 Dec. The low numbers at Bewl Water were attributed to the lack of Canadian pondweed.

69. **TEAL (A. crecca)**:—The monthly wildfowl counts at the principal localities were:

County totals	1989		1989		1990	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	2629	1600	534	1887	2458	2328
Pagham Hbr	1425	862	78	753	1231	1093
Arundel WWT	68	124	16	285	66	39
Amberley	248	77	39	122	206	320
Rye Hbr	300	300	300	60	200	300
	20	12	12	355	392	298

The Jan. 1989 total was about average for recent years but numbers in Feb. were above average for the month. Other counts received included 150 at Icklesham on 1 Jan. and 184 in the Lower Cuckmere Valley and 156 at Darwell Res. on 14 Jan. Breeding was proved at one site in East Sussex and one in West Sussex. In addition, pairs were reported in May and June from Thorney Island, Waltham Brooks, Pevensey Levels and Rye. At the end of the year numbers at Icklesham increased from 200 on 14 Nov. to 400 on 11 Dec. and at Sidlesham Ferry from 200 on 22 Nov. to 333 on 31 Dec. Other counts included 210 at Powdermill Res. on 15 Dec., 285 in the Lower Cuckmere on 22 Dec. and a remarkable c.2000 on Pulborough Brooks during the last week of Dec.

A bird showing characteristics of the Green-winged Teal (*A.c. carolinensis*), not belonging to the collection, was found at Arundel WWT from 21 Apr. to 1 May (RJLK et al.). It has been accepted by *British Birds* and is the 3rd county record. Both previous records were in Mar., in 1961 and 1975.

70. **MALLARD (A. platyrhynchos)**:—The monthly wildfowl counts at the principal localities were:

County totals	1989		1989		1990	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	2856	2303	1409	3693	3664	3886
Chichester GP	275	287	95	420	425	573
Pagham Hbr	65	99	83	213	90	145
Arundel WWT	449	274	199	113	266	307
Amberley	614	593	364	452	710	602
Angmering decoy	100	72	62	54	114	120
Darwell Res.	183	103	31	153	124	110
Alexandra Park	192	135	101	182	128	139
Rye Hbr	6	42	21	433	331	300
Bewl Water	272	140	100	356	350	269

The Jan. 1989 total was the lowest for more than 10 years. Other counts received included 185 at Barcombe Res. on 1 Jan., 300 at Cuckmere Haven on 8th and 200 at Arlington Res. on 14th. Few breeding records were received, though there were an estimated 40-50 pairs at Rye. Post-breeding flocks reported included 300 at Scotney Court GP on 6 Aug. and 200 at Icklesham on 11th and 26th. Later counts included 300 at Icklesham on 17 Nov., 160 at Arlington Res. on 21st, and 180 at Warnham LNR and 362 at Barcombe Mills on 28th.

72. **PINTAIL (A. acuta)**:—The monthly wildfowl counts at the principal localities were:

County totals	1989		1989		1990	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	326	184	25	28	133	338
Pagham Hbr	62	40	8	2	65	164
Amberley	245	114	—	24	64	173
	19	28	17	—	—	—
						61
						149
						210

The Jan. 1989 total was less than the average for recent years and the lowest for 5 years. Other records included 48 on Henfield Brooks on 26 Feb. and 43 there on 5 Mar.; unusual were 1 at Warnham LNR on 1 Jan. and 2 at Chingford Pond on 11 Jan. Coastal passage records included 93 E at Worthing in 5.2 hours. Two were at Fishbourne on 1 May and 3 at Bewl Water and 1 at Seaford on 3rd. Lastly, the origin of 2 at Falmer Pond on 6 June must be doubtful.

Return movement was first noted on 23 Aug. with 1 at Barcombe Res. At Rye Hbr LNR there were 1-3 from 1-24 Aug., 7-8 from 26-28th and 12 on 29-30th; elsewhere 21 flew E at Worthing on 8 Oct. At the end of the year there were 65 at Waltham Brooks on 26 Nov., 80 in the Arun Valley on 28 Dec. and 83 at Pagham Hbr on 31st.

73. **GARGANEY** (*A. querquedula*):—An early pair at Sidlesham Ferry on 25 Feb.; thereafter not seen until 20 Mar. when 1 was at Arlington Res. Singles were reported from Icklesham on 25 Mar. and 8 Apr. and from Piddinghoe on 2 Apr. Two flew past Seaford on 9 Apr. but the main arrival took place after 19 Apr.

During the breeding season 10 pairs were seen at 6 sites; at least 4 pairs bred successfully, 3 of these being at the same site. On 5 Aug. there were 23 at Icklesham and 1 was still there on 3 Sept. The last seen were singles at Bewl Water on 10 Sept. and at Weir Wood Res. on 24th.



75. **SHOVELER** (*A. clypeata*):—The monthly wildfowl counts at the principal localities were:

County totals	1989			1989			1990			
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester GP	202	229	172	137	124	195	204	292	326	63
Pagham Hbr	9	13	1	—	8	16	13	7	10	2
Arundel WWT	6	4	12	4	3	22	9	1	3	5
Amberley	17	31	15	18	21	13	10	15	33	6
Arlington Res.	100	100	90	—	5	42	18	118	150	4
Pett Level*	42	53	44	—	9	18	5	58	80	8
Rye Hbr	17	22	10	3	4	8	15	18	—	2
	—	4	—	72	56	55	110	54	34	8

*note also counts on different dates at nearby Icklesham, detailed below.

The Jan. 1989 total was slightly above the average in recent years but far below the numbers reported 6-10 years ago. Other counts included 60 at Icklesham on 3 Jan., 80 on 12 Feb. and 40 on 8 Mar., 55 at Chichester GP on 22 Jan. and 56 at Arlington Res. on 4 Mar. Movements at the coast peaked on 9 Apr. when there were 77 W at Seaford. In the breeding season 5 broods were seen at Icklesham; 1 drake and 2 ducks were present at Thorney Island where a brood of 4 was seen on 25 June; and breeding probably occurred at Rye Hbr LNR as 1 pair and 2-3 drakes were present throughout May. Other May and June records came from Sidlesham Ferry, Warnham LNR, Waltham Brooks, Ardingly Res., the Lower Cuckmere and Pevensey Levels, but in none was there any evidence of breeding.

At Rye numbers had increased to 35 by 26 July and 90 on 2 Aug., 10 were at Pagham Lagoon on 14 July. At Icklesham there were 50 on 22 Sept., 100 on 21 Oct., 55 on 4 Nov. and 85 on 26 Dec. Other records included 21 at Pett on 1 Nov., 30 at Pagham on 26 Nov., and 24 at the Crumbles GP and 68 at Scotney Court GP on 31 Dec.

76. **RED-CRESTED POCHARD** (*Netta rufina*):—A female or immature male at Rye Hbr on 20 Aug. (AFB, SJB, MJD), a female at Chichester GP on 3 Sept. (JVS), and a male in eclipse plumage at Pagham Hbr on 1 Oct. (RJB, MGP). See also Escapes and Ferals on page 66.

77. **POCHARD** (*Aythya ferina*):—The monthly wildfowl counts at the principal localities were:

County totals	1989			1989			1990			
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester GP	1008	850	358	111	271	461	838	806	741	282
Arundel WWT	170	84	17	19	19	53	109	91	31	7
Warnham LNR	359	362	211	67	151	266	462	433	364	138
Barcombe Res.	27	41	32	2	37	10	2	33	23	—
Darwell Res.	67	56	—	—	—	—	—	30	20	17
Rye Hbr	18	5	31	3	13	30	99	80	76	72
Weir Wood Res.	115	112	19	1	12	3	4	24	19	7
Bewl Water	94	75	3	2	12	43	20	28	4	9

The Jan. 1989 total was considerably above the average for recent years. Other counts included 159 at Northpoint GP, Rye on 28 Jan., 91 at Barcombe Res. on 8 Jan., and 97 at the Crumbles GP on 19 Jan. and 56 there on 2 Feb. At Rye a duck and up to 3 drakes were present during Apr-June but breeding within the SSSI was considered unlikely. Eight were still at Warnham on 22 Apr. and 1-2 were reported from the Lower Cuckmere Valley, Icklesham and the Crumbles GP in May and June. At the end of the year numbers at the Crumbles GP increased steadily from 43 on 28 Sept. to 215 on 2 Dec. Other counts included 29 at Darwell Res. on 29 Oct., 56 at Warnham on 15 Nov. and 76 at Barcombe Res. on 27 Nov.

80. **TUFTED DUCK** (*A. fuligula*):—The monthly wildfowl counts at the principal localities were:

County totals	1989			1989			1990			
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester GP	1202	982	864	446	333	725	827	863	780	715
Arundel WWT	268	362	273	247	205	235	193	217	150	156
Burton Pond	29	24	19	16	29	49	11	57	40	56
Barcombe Res.	53	22	—	—	—	—	—	45	32	2
Rye Hbr	121	125	100	20	40	35	60	98	66	40
Bewl Water	128	63	50	31	17	42	43	23	15	16

The Jan. 1989 total was considerably above the average in recent years. Other counts included 105 at Barcombe Res. on 8 Jan., 72 at the Crumbles GP on 19 Jan. and 74 there on 6 Feb., and 75 at Swanbourne on 27 Mar. At Rye Hbr SSSI breeding was poor, only 6 broods being seen, though chick survival was good as 35 fledged. Elsewhere there were 3 pairs at Thorney Island and summer birds reported from 9 other sites, including 27 at the Crumbles GP on 6 July, but with no reports of successful breeding. Post-breeding flocks included 60 at Bewl Water on 17 Aug. and 209 at Chichester GP on 22nd. Subsequent counts included 71 at the Crumbles GP on 19 Oct. with 141 there on 23 Nov. and 145 on 11 Dec.

81. **SCAUP** (*A. marila*):—At the beginning of the year the flock of 30 within the Rye Hbr SSSI declined steadily to 28 on 8 Jan., 19 on 14th and 1 on 25th, with 15 offshore on 22nd. In addition on 2 Jan. there were 12 at Northpoint GP, 23 at the Crumbles GP, 1 at Barcombe Res. and 2 at Church Norton. The last remained until 8 Jan., whilst the Crumbles flock had increased to 33 by 21 Jan. and remained at this level until 23 Mar.; only 2 were present there the following day. Elsewhere 1 stayed in the Pagham area from 18 Jan. to 12 Feb., 2 were at Princedon 26 Feb., 1 at Rye on 15 Mar. and 2 in Thorney Channel on 19 Mar. On 26 Mar. 11 flew E at Seaford and the last reported in spring was a single at Swanbourne on 23 Apr.

In the autumn there were only singles, at Cuckmere Haven on 15 Sept., 10 Nov. and 22 Dec. and at Rye from 4 to 9 Oct.

82. **EIDER** (*Somateria mollissima*):—The approximate monthly totals and peak counts at the main localities were as follows:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
County totals*	370	316	216	61	14	55	110	51	78	69	66	8
Chichester Hbr	120	91	146	91	14	34	70	—	49	55	15	3
Pagham Hbr	7	1	—	—	—	14	40	39	24	14	17	1
Pevensy Bay	160	220	50	—	—	5	—	12	5	—	—	30

*these exclude birds seen migrating along the coast.

Spring passage during Mar.-May at the main seawatching localities totalled 76 in Mar., 321 in Apr. and 13 in May. Some duplication may be involved in the totals. In addition 85 were noted passing Worthing in Jan. There were no inland records.

86. **LONG-TAILED DUCK** (*Clangula hyemalis*):—The approximate monthly totals were:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	25	38	27	23	7	—	—	—	—	1	—	—

The birds present at Darwell Res. and Bewl Water in Dec. 1988 (SxBR 1988) remained into the New Year, the 2 at Darwell being joined by a third from 12 Feb. until 12 Mar., and the female at Bewl remaining until 1 Feb. Elsewhere, at Rye Hbr 6 were recorded on 18 Jan., 4 on 29th and 13 on 30th. Eleven recorded off Pett beach on 7 Jan. could relate to the Rye birds. In Chichester Hbr 12 were recorded in Jan. and 20 in Feb., falling to 12 on 7 Mar. and 10 on 25th, 9 on 8 Apr. and 1 on 12th, and lastly 1 on 2 May. A minimum total of 27 birds were observed on seawatches, the last being 1 at Selsey Bill on 13 May.

In Oct. singles were seen off Worthing beach and at Bewl Water on 4th. Lastly 1 was recorded in Chichester Hbr on 13 and 25 Nov.

87. **COMMON SCOTER** (*Melanitta nigra*):—Observations at the main seawatching localities were as follows:

	Jan.-Feb.	Mar.-May	June-July	Aug.-Sept.	Oct.-Dec.
Worthing	61	6121	219	186	75
Seaford	—	14557	—	—	—
Selsey Bill	—	5138	—	—	—
Beauchy Head	—	4715	—	—	—

Analysis of the Mar-May period indicates that spring passage involved a minimum of 18703 birds. Of these 6131 were in Mar., 5007 in Apr. and 7565 in May. The peak movement occurred on 27 Mar., when there were 6182 E at Seaford.

At Rye Bay, the regular wintering flock was 400+ on 2 Jan., declining to 300+ on 8th and 25+ on 18th. Seventy were there on 26 Feb. In Apr. only 2 were recorded but 250 were present in May and 400 in July.

There were no inland records.

89. **VELVET SCOTER** (*M. fusca*):—The approximate monthly totals were:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	7	3	124	225	99	—	—	—	16	2	35	8

Analysis of the Mar-May period indicates that spring passage involved a minimum of 230 birds.

On 1 Jan. there were 5 with a flock of 65 Common Scoter offshore at Church Norton. Spring passage was noted from 27 Mar., with 35 E at Selsey Bill. The peak movement was of 53 E at Seaford on 28 Mar.

The first of the autumn were 16 off Worthing beach on 4 Sept. and 2 more there on 8 Oct.—the only records for these months. In Nov. there were 3 at St Leonards on 3rd, 1 at Pilsley on 10th, 5 at Selsey on 17th with 12 there on 18th, and 4 off Brighton Marina on the same date. Finally in Dec. there were 2 off Church Norton on 8th and 6 off Pett beach on 29th.

91. **GOLDENEYE** (*Bucephala clangula*):—The approximate monthly totals and peak counts at the main localities were as follows:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
County totals*	48	32	27	5	—	—	—	—	7	7	23	35
Bewl Water	2	3	1	3	—	—	—	—	1	—	—	20
Chichester Hbr	28	15	23	—	—	—	—	—	—	—	15	2
Pagham Hbr	2	1	—	—	—	—	—	—	—	—	—	1
Rye Hbr	4	5	1	—	—	—	—	—	—	—	—	3
Weir Wood Res.	7	5	1	—	—	—	—	—	—	—	—	5

*these exclude birds seen migrating along the coast.

93. **SMEW** (*Mergus albellus*):—The only records were in Feb. at Rye Hbr with 2 males on 10th and 15th, 3 males from 11th to 14th and 1 male until 20th; and in Dec. at Pagham 1 male from 17th to 27th.

94. **RED-BREADED MERGANSER** (*M. serrator*):—In the early part of the year the largest flocks were 21 off Worthing beach on 25 Jan., 24 in Pagham Hbr on 22 Feb., 70 off Pilsley Island on 3 Mar. and 20 off Selsey Bill on 5 Mar. These are rather low totals. However, in Feb. 140 were counted passing off Worthing in 14 hours of observation. Figures for the main seawatching sites were:

	Mar.	Apr.	May
Selsey Bill	165	176	19
Worthing	171	244	15
Seaford	56	115	10

The largest movement was on 27 Mar. with 71 E off Selsey Bill and 47 E off Worthing. The only summer records were 2 off Thorney Island which remained from May to Aug., although in Aug. 1 was off Worthing on 5th when 1, possibly injured, was in the Lower Cuckmere Valley. Birds passing Worthing in Oct. totalled 57 (in 53 hours), in Nov. 29 (19 hours), and in Dec. 73 (25 hours). The most notable Dec. flocks were 30 at Climping, 37 at Pagham Hbr. and 63 at Worthing. There were no inland records.

95. **GOOSANDER** (*M. merganser*):—1988.—In addition to the published records there were 7 at Barcombe Res. on 27 Nov. and 1 there on 18 Dec., and 4 red-heads at Weir Wood Res. on 30 Dec.

1989.—On New Year's Day 3 were at Barcombe Res. with 3 also at Darwell Res. On 7 Jan. 5 were at Weir Wood Res. and on the following day 15 were at Cuckmere Haven with 1 at Arlington Res. At Pagham Hbr there were 2 on the 10th. On 13th 6 were at Arlington Res., dropping to 3 the following day. Four were seen at Darwell Res. on the 15th. The largest flock of the year of 16 (2 males) was at Weir Wood Res. on 16th, falling to 12 (1 male) on 18th with only 1 remaining on the 22nd, when there were 11 at Arlington Res. This latter group fluctuated between 9 and 12 up to 3 Feb. with a maximum of 2 males declining to 6 on 5 Feb. Bewl Water also had 2 males in its flock of 5 during Jan. but only 3 (1 male) in Feb. Northpoint GP had a single male on 11 Feb. Four were again at Darwell Res. on 12th and Barcombe Res had 2 on 26th. The only Mar. records were 5 off Worthing beach on 6th and 1 at Church Norton on 19th. The sole Apr. bird was a male, again off Worthing Beach, on 15th. Considering the mild weather and the as-expected low numbers of the closely related Smew, this good run of records is surprising.

The first winter bird, a male, appeared in the Lower Cuckmere on 3 Nov. and 1 was at Arlington Res. on 5th. During Nov., 2 were at Bewl Water with 1 at Barcombe Res. on the 19th and on 2 Dec. Three were at Arlington Res. on 3 Dec. when 2 flew over the Downs at Telcombe. By 8 Dec. the number at Arlington had risen to 6 (2 males) but fell to 2 by 15th. Meanwhile there were 2 at Ardingly Res. on 9th. The only Weir Wood record for the latter part of the year was a male on 29th, and the year ended with 2 at Barcombe Res.

Cat. C. **RUDDY DUCK** (*Oxyura jamaicensis*):—1988:—Weir Wood max. 3 drakes on 31 Jan.

1989:—During Jan.-Mar. recorded at 5 sites (max. in brackets) as follows: Thorney Island (2), Chichester GP (9), Barcombe Res. (2), Crumbles GP (2) and Bewl Water (2). In the breeding season a pair was at Swanbourne Lake on 12 May, 3 pairs bred at another site in West Sussex with 3 broods totalling 18 young seen on 19 Aug., and 1 was seen with 2 young at Chichester GP on 22 Aug. At the end of the year there were 2 at Thorney Island on 13 Nov.

97. **HONEY BUZZARD** (*Pernis apivorus*):—Just 2 passage records: 1 flew in from the sea over Hodcombe, Beachy Head, on 15 May (RHC) and 1 drifted over Sidlesham Ferry on 1 Sept. (BJ, CMJ).

98. **BLACK KITE** (*Milvus migrans*):—One was seen at Beachy Head on 29 Apr. (RJT, IRT) while another flew over Chichester Hbr on 6 May (CBC). Both have been accepted by *British Birds*, bringing the total number seen in the county to 13. Eleven have occurred between 26 Apr. and 14 May, including all 10 recorded in the 1980s.

103. **MARSH HARRIER** (*Circus aeruginosus*):—A good year with a minimum of 22 birds reported. The approximate monthly totals were:

Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	8	1	—	4	7

The first of the year, an immature, frequented Pulborough Brooks during 2-5 Mar. In Apr. a female visited Thorney Deepes on 18-19th. During May a much-watched immature flew past Seaford and Beachy Head on 6th, and a female hunted over Pevensey Levels the following day. Rye Hbr recorded an immature on 17th, also a male and female on 20th. The 21st produced a male over Arlington and an immature at both Rye and Pett, with another there on 28th. An immature passed through the Cuckmere Valley on 31st. Spring concluded with a single bird reported from Rye and Pett on 2-3 June.

Autumn passage commenced with an immature over Pagham on 11 Aug. and another at Thorney on 19th. There followed singles at Lewes, 22 Aug., Rye, 23 Aug., Pett, 3 Sept. and Icklesham, 22 Sept. Sightings ended on 24 Sept. with a passage of 4 immatures at Beachy Head and an adult male at Pett.

104. **HEN HARRIER** (*C. cyaneus*):—Despite mild weather conditions at either end of the year, this was a good year for the species, involving approximately 46 birds. Allowing for duplication of records, the monthly maxima were:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Adult males	3	3	2	2	2	1	—	1	3	1	2	2
Others	6	3	1	2	1	—	—	1	3	3	9	3

Several of the traditional wintering areas were again frequented and the majority of records can be grouped and summarised as follows:

Selsey Peninsula. The only record in the early months involved 2 birds near Bognor on 25 Jan. A ringtail was seen at Pagham on 21 Aug. and 2 more between 30 Sept. and 8 Oct. Single ringtails at West Itchenor on 14 Nov. and Selsey on 19 Nov. were followed by another at Pagham from 5-12 Dec.

Arun Valley. An adult male frequented Pulborough Brooks between 11 Jan. and 1 Apr., accompanied by a ringtail on 1 Mar. Two birds flew over Wepham Down on 21 Nov. and up to 5, including an adult male, were present at Pulborough Brooks from 17 Dec. to the end of the year.

Seaford, Cuckmere Valley and Beachy Head. Late migrant ringtails flew over Seaford on 6 May and Beachy Head on 13 May. Autumn passage saw ringtails at Beachy Head on 2 Sept. and 12 Nov., at Cuckmere Haven on 14 Oct. and at Lullington Heath from 4-22 Nov. On 25 Dec. a male was recorded at West Dean.

Pevensey Levels. A male on 15 Jan. was joined by a ringtail on 22nd, with possibly the same male still present on 10 Feb. A ringtail from 2-9 Apr. In autumn a male was seen over Horse Eye on 4 Nov., a ringtail was there on 17 Dec. and another was over Hooe Level on 27 Dec.

Pett Level and Rye Harbour. A poor year for this traditional wintering area. Two ringtails appeared at Icklesham on 4 Jan. with another there on 24 Feb. At Rye Hbr a ringtail was present on 4 dates during 10-26 Jan. and another on 2 Apr. Autumn produced a male at Icklesham on 25 Sept., a ringtail at Pett on 22 Nov. and single ringtails on 5 dates at Rye Hbr during 5-31 Dec. with a male there on 14th.

Ashdown Forest. A male first seen on 1 Jan. may well have been the same bird as that widely reported between 5-19 Mar. An unseasonal record involved a male passing through Duddleswell on 19 June.

In addition, records were received of a ringtail over Ditchling Beacon on 5 Feb., a male at Jury's Gap on 11 Feb. and another male at Coolham on 6 Oct.

105. **MONTAGU'S HARRIER** (*C. pygargus*):—There were 3 spring records. An immature male quartered fields at Balsdean on 9 May (GAS); a much-watched adult female soared over Beachy Head on 29 May (PJB), JFC, DRC, SL *et al.*; and another female was seen over Newmarket Hill on 1 June (PJ, BDJ).

107. **GOSHAWK** (*Accipiter gentilis*):—The only records came from the east of the county where 2 males were displaying on 13 Oct. and a female was recorded nearby on 15 Oct. (names of observers withheld).

108. **SPARROWHAWK** (*A. nisus*):—Widely reported throughout the year, showing just how well this raptor has recovered in the last few years. Despite this, breeding was proved at only 4 sites.

109. **BUZZARD** (*Buteo buteo*):—The year began with 2 over Firle on 28 Feb. On 12 Mar. a single bird flying over Beachy Head was later reported at East Dean. In April, singles were seen at Grevitts Copsse on 7th and over Pulborough Brooks on 19th. May produced singles at Amberley on 13th and 17th and lastly a migrant in off the sea at Seaford on 24th. There were no June records.

Autumn began with singles over Arundel Park on 13 July, at Powdermill Res. on 21st and at Iping Common on 8 Aug. One flew across the A27 at Selmeaton on 17 Aug. and another over Highdole Hill on 28 Aug. In Sept., 2 were seen over Weir Wood Res. on 1st followed by singles at Birling Gap on 6th and Glynde Levels on 16th, the latter staying until 11 Nov. On 24 Sept. a single accompanied 4 Marsh Harriers at Beachy Head, with another there on 30 Sept. Subsequently, singles were recorded from Cissbury on 3 Oct., Bignor on 17th, Cuckmere on 28th and Pulborough Brooks on 12 Nov. On 21 Nov. 2 were seen at Wepham Down, and 1 at Warringcamp Hill which stayed until 29 Dec.

113. **OSPREY** (*Pandion haliaetus*):—Singles at Icklesham on 7 May (SJRR) and over the Cuckmere Valley on 21 May (WJMS). Autumn passage commenced with 1 drifting over Beachy Head on 6 Aug. (MK) followed by singles at Darwell Res. on 17 Aug. (RGH) and Thorney on 1 Sept. (CT); an adult and an immature at Weir Wood Res. on 15 Sept. (NAD, DCM, BMM) and 1 at Dell Quay on 16th (PJ, BDJ). Passage concluded on 18 Sept. with singles over Pett Level (ASC) and Lancing (BFF).

115. **KESTREL** (*Falco tinnunculus*):—Many reports throughout the year with at least 22 pairs proved to breed. The maximum recorded together was 6 at Thorney Island on 30 Sept. One was watched flying out to sea from Pagham Hbr on 26 Sept. All records of proved breeding will be warmly welcomed.

117. **RED-FOOTED FALCON** (*F. vespertinus*):—During an impressive national influx in late May a female was seen at Newmarket Hill from 29 May to 3 June (DPD *et al.*) with a first-summer male there from 30 May to 1 June (JC, JPS), and another female was seen at Hooe Level, Pevensey on 1 June (MW). These records have been accepted by *British Birds*. A female at Bullock Hill on 3 July 1987 is the only other record in the 1980s, although 18 were recorded in the county up to 1979.

118. **MERLIN** (*F. columbarius*):—Recorded until 25 Apr. and from 27 Aug. The approximate monthly totals, allowing for likely duplication between adjacent sites, were as follows:

Jan.	Feb.	Mar.	Apr.	Aug.	Sept.	Oct.	Nov.	Dec.
9	4	10	6	2	8	16	12	7

In the early months most records were of single birds on the coast at Chichester and Pagham Hbrs, Climping, Newhaven and Cuckmere Valleys, Beachy Head and Pevensey Levels and the low wetlands of Icklesham, Pett and Rye. Inland reports came from the Downs around Lewes, and from Bewl Water. The last was a male at Icklesham on 25 Apr.

During autumn and early winter there were numerous reports of single birds hunting both coastal and downland localities. At Beachy Head there were 2 on 12 Oct., at Thorney 3 were seen on 13 Oct., 2 of which remained until the month end. In Dec. birds were seen daily at Rye Hbr, with 2 together on 9th.

119. **HOBBY** (*F. subbuteo*):—The first for the year was at Broadwater, Worthing, on 27 Mar. (RAI), the earliest county record. The next were 3 reported on 23 Apr. Spring migrants totalled 37 and included 3 singles watched flying in off the sea at Splash Point, Seaford.

Breeding season records again suggested around 20 territories in the county. Autumn records totalled 41 birds, the last being at Coldwaltham Brooks on 12 Nov. (BMS), the latest county record.



123. **PEREGRINE** (*F. peregrinus*):—Recorded in every month. Duplication of records, especially with hunting birds at coastal localities, is unavoidable. At least 26 were recorded with approximate monthly maxima as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
7	5	4	2	5	3	2	3	8	7	3	3

The majority of records can be grouped and summarised as follows:

Chichester and Pagham Harbours. In the early months, single unaged birds at Pagham on 8 Jan. and 21 Feb. An adult flew over Pilsley on 2 May. In autumn, an immature was widely reported at Church Norton between 24 Sept. and 12 Oct.; an unaged bird was at Thorney on 29 Oct., another at Pagham on 14 Nov. and finally a male also at Pagham on 24 Nov.

Beachy Head, Cuckmere Valley and Seaford. Two immatures were present at Beachy Head from early Jan. to at least 5 Oct. and were regularly seen hunting along the cliffs as far west as Seaford. At Cuckmere Haven an adult female was recorded on 16 Sept. and 21 Oct.

Pett Level and Rye Harbour. At Rye Hbr an unaged bird was reported on 6 and 26 Jan.; possibly the same individual visited Pett on 15th. A female hunted over Icklesham from 28 Jan. to 1 Feb. An unseasonal record involved sightings of an unaged bird at Rye on 3 and 4 June. Autumn passage produced an unaged bird at Pett on 31 Aug., another at Rye on 26 Sept., a male at Pett on 4 Oct., an unaged bird wandering between Rye and Icklesham on 14-15 Oct. and 1 at Icklesham from 11 Nov. to 4 Dec. Finally a male was at Pett from 12-23 Dec.

Elswhere singles were reported as follows: Bewl Water, 15 Jan., Pulborough Brooks, 25 Mar., Balsdean, 8-12 Sept., Iford, 20 Sept. and Telscombe, 3 Dec.

129. **RED-LEGGED PARTRIDGE** (*Alectoris rufa*):—The largest coveys reported were 28 on the Knepp Estate and 19 at Pagham Hbr. The species seems to be declining in some areas but this is difficult to prove as very few records were received. Owing to the release of Chukars (*A. chukar*), Rock Partridges (*A. graeca*) and Chukar × Red-legged hybrids for shooting purposes, the true status remains obscured and all records have to be treated with some caution.

130. **GREY PARTRIDGE** (*Perdix perdix*):—The largest coveys reported were 15 at Denton, Newhaven; 14 at Goring Gap, and 12 at Cissbury, Bines Bridge and Rye Hbr. A pair were seen with 15 chicks on Pilsley, the first breeding record for the island. Most areas seem to have had a good breeding season again, but little information was received.

131. **QUAIL** (*Coturnix coturnix*):—1968:—2 at Heyshott Down on 23 June withdrawn at the observer's request.

1989:—An excellent year, with the most recorded since the Society was formed. A total of 46 were seen or heard in 31 localities. Whilst some of these were undoubtedly migrants, many were in suitable breeding habitat during the summer although breeding was not proved. Single birds were flushed near Thorney Deepes on 18 Aug., at Icklesham on 19 Sept. and at Beachy Head on 22 Sept.

Cat. C. **GOLDEN PHEASANT** (*Chrysolophus pictus*):—Six were seen in West Dean Woods on 25 Mar., and 4 females and 1 male were recorded from Kingley Vale. No details of breeding season territories were received.

136. **WATER RAIL** (*Rallus aquaticus*):—Approximate monthly totals of non-breeding birds were:

Number of sites	Jan.	Feb.	Mar.	Apr.	July	Aug.	Sept.	Oct.	Nov.	Dec.
Number of birds	9	10	8	6	3	5	5	4	6	9
	23	27	23	13	10	15	8	36	39	34

Numbers were small at most sites but an area in the east of the county had up to 30 present towards the end of the year.

In the breeding season there were reports from 5 localities but no evidence of breeding success was received.

137. **SPOTTED CRAKE** (*Porzana porzana*):—One seen at Icklesham on 26-27 Mar. (SJRR) was the only record.

142. **MOORHEN** (*Gallinula chloropus*):—In the early part of the year the largest numbers recorded were 81 at Rye Hbr and 50 near Westhamnett GP.

During the breeding season 24 pairs bred on Thorney Deep and many young were seen, 4 pairs raised at least 10 young in the Lower Cuckmere Valley, 10+ pairs bred at Pagham Hbr, and although breeding was widespread at Rye numbers were unknown and success was not thought to be good. Other breeding records were received from Warnham Mill Pond and Darwell Res.

Counts for the latter part of the year included 45 at Knepp Lake and 55 at Rye Hbr.

145. **COOT** (*Fulica atra*):—The monthly wildfowl counts at the principal localities were:

County totals	1989			1990						
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester GP	1808	1370	846	1344	1612	1490	1785	1757	1284	891
Pagham Hbr	721	528	318	815	1118	861	955	932	458	213
Arundel WWT	62	59	48	—	39	39	62	57	64	72
Ardingly Res.	64	45	42	36	38	48	60	56	73	49
Pett Level	36	51	25	17	28	23	43	38	66	38
Rye Hbr	81	61	19	2	—	2	29	26	26	20
Bewl Water	282	184	76	59	95	235	365	253	195	140
	320	215	134	248	128	55	130	128	162	100

The Jan. 1989 count was less than half the average for recent years. The numbers at Bewl Water were particularly low, probably due to a combination of the mild winter and the loss of Canadian pondweed following the rapid drawdown to repair hurricane damage. Counts elsewhere included 59 at Brooklands on 26 Jan., 100 at Scotney Court GP on 5 Mar., 50 at Icklesham on 1 Apr. and 80 at Thorney Deep on 7 Apr.

During the breeding season there were 8 pairs plus 16 non-breeders in the Rye Hbr LNR (though less than 10 young were raised), 24 pairs at Thorney Island and 25 pairs at Icklesham. Post-breeding counts included 170 at Thorney Island on 28 July, 53 at the Crumbles GP on 14 Aug. and 802 at Chichester GP on 22 Aug. Later in the year c.100 were at Icklesham on 27 Sept., 52 at Burton Pond on 4 Nov., 71 at Brooklands on 17 Nov. and 165 at Scotney Court GP on 31 Dec.

146. **CRANE** (*Grus grus*):—Single adults flew NW over Chailey Common on 19 Sept. (JSG) and SE past Selsey Bill on 29 Oct. (PJB, MD, JDW). Three adults were seen at Icklesham on 16 Nov. (JW). The best showing since 1984. These are the first Oct. and Nov. records since the 1963 invasion.

151. **OYSTERCATCHER** (*Haematopus ostralegus*):—The estuary counts were as follows:

County totals	1989			1990						
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester Hbr	1301	1430	945	564	1451	1622	1344	1602	1345	939
Pagham Hbr	831	819	450	2	903	988	695	901	615	396
Pett Level	205	241	162	195	143	250	240	105	167	347
Rye Hbr	—	6	—	8	10	—	3	8	52	—
	265	370	327	355	280	280	400	338	358	168

Breeding records were again very incomplete and counts from localities were as follows: Rye Hbr, maximum of 26 pairs, nest losses very high and only 2-3 young were thought to have been raised; 1 pair failed on Pilsley, probably due to predation by Carrion Crow; 1 pair near Thorney Deep in wheat field; Chichester Hbr 10 pairs, at least 2 on raft.

A partial albino first seen on 1 Jan. returned to Pilsley Island on 30 July and was present throughout Aug.

The only inland records were of singles at Bewl Water on 21 May and at Weir Wood Res. on 1 Aug.

153. **AVOCET** (*Recurvirostra avosetta*):—The monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
3	5	2	32	15	2	—	18	2	5	6	3

In the early months there were 2 wintering in Chichester Hbr, 1 at Pagham Hbr from 1-18 Jan. and 3 at Sidlesham Ferry on 19 Feb.

During Apr. 2 were in the Lower Cuckmere on 1st; 3 were on Thorney on 9th before flying E and these, or perhaps 3 different birds, were observed heading E at Brighton Marina and Newhaven Pier. At Selsey Bill 22 flew E on 16th and a single was at Newhaven Tide Mills on 17th. In May 2 flew E at Worthing on 5th, 5 E at Birling Gap on 9th, 2 E at Brighton Marina on 20th, 2 were on Pilsley on 24th, a single at Rye from 20-26th joined by another on 25th and 2 there on 28th, and 2 at Cuckmere Haven on 25th. The last reported were singles at Rye on 3 June and Sidlesham on 20th.

Autumn records were 18 W at Rye on 26 Aug., a single there on 1-8 Oct. plus 2 on 4th; 1 at Pett Pools on 19 Sept. with 3 there on 1 Oct.; 1 at Pilsley on 30 Sept. and 2 there from 10 Nov. until the end of the year; 3 at Weir Wood Res. on 14 Nov.; and finally a single at Pagham on 16 and 25 Nov. and 2-3 Dec.

158. **LITTLE RINGED PLOVER** (*Charadrius dubius*):—The approximate monthly totals away from known breeding sites were as follows:

Mar.	Apr.	May	June	July	Aug.	Sept.
6	4	12	2	40	43	8

The first for the year was a single at an inland site on 12 Mar. and 2 there on 25th. Single birds were at Newhaven Tide Mills on 8 Apr., at an inland site on 9th and at Sidlesham Ferry on 17th.

In the breeding season only 7 pairs were reported, and a total of 8 young were reared.

In the autumn 17 were noted at Icklesham in July and 22 in Aug.; the only other large group was 11 at Sidlesham Ferry on 29 July. In Aug. single birds were at Thorney on 2nd (with 3 on 5th), at Rye on several dates, at Darwell Res. on 12th and at Bewl Water on 17th and 28th. The last for the year were singles at Pett Level and Rye Hbr on 22 Sept.

159. **RINGED PLOVER** (*C. hiaticula*):—The estuary counts were as follows:

County totals	1989			1990						
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester Hbr	936	1088	201	512	1326	753	654	2449	891	274
Pagham Hbr	187	239	61	9	674	555	396	2083	647	123
R. Adur	—	96	—	50	395	125	160	66	158	92
Cuckmere Haven	14	27	4	58	32	27	87	232	28	11
Rye Hbr	16	13	71	122	2	—	6	19	13	2

Breeding records were again very incomplete with 67-68 pairs reported as follows: Rye Hbr c.40, Pilsley 8-9, Chichester Hbr 8, Widewater 4, opposite Brooklands 3, Cuckmere Haven 2, and single pairs at Newhaven and Thorney. At Rye Hbr breeding success was poor because of extensive predation, but repeated re-nesting enabled just 12 young to be raised. However, the birds on Pilsley fared better and some 40 chicks were hatched, although some of these are thought to have died due to the very hot weather.

Autumn passage was heaviest in late Aug. with counts of 78 at Cuckmere Haven on 19th, 156 on the Adur at Shoreham and 800 on Thorney Island on 22nd, 145 feeding on the beach at Worthing on 26th and 249 at Goring Gap on 28th.

161. **KENTISH PLOVER** (*C. alexandrinus*):—At Pilsley there was a single from 29 Mar. to 4 Apr. (CBC, MAC) and then a juvenile on 25-28 July (CBC). A third was at Shoreham on 26 June (KN *et al.*).

163. **DOTTEREL** (*C. morinellus*):—One at Swanborough Hill on 23-26 Aug. was presumably that seen nearby at the Bostal on 29th (GAS). This species has now been recorded on the Downs around Balsdean in late Aug. in each of the last 5 years.

165. **GOLDEN PLOVER** (*Pluvialis apricaria*):—The estuary counts were as follows:

	1989		1989		1990		1990			
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester Hbr	1850	1043	—	80	77	1641	1365	2303	2239	286
Pagham Hbr	140	363	—	17	50	226	186	610	26	161
Rye Hbr	70	2	—	3	115	343	—	—	—	—

The peak count for Jan-Mar., away from the sites listed above, was only 200 on Pevensy Bridge Levels. The only April records were 361 on Thorney Island on 5th, 1 at Worthing beach on 9th and 32 on Pilsley on 25th. The last was 1 at the latter site on 5th May.

The first birds to return were 1 at Thorney Deepes on the early date of 9 July and 3 at Church Norton on 16th. On 17 Sept. there were 500 at Scotney Court GP but there were no other large flocks until Nov., when 78 were at the Lower Cuckmere, an unusually large gathering for the site, 200 on Pevensy Levels and 200 on the Brede Levels.

166. **GREY PLOVER** (*P. squatarola*):—The estuary counts were as follows:

	1989		1989		1990		1990			
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
County totals	2434	3509	3473	2360	2171	1493	2093	1129	1557	—
Chichester Hbr	1314	2791	2451	1767	1530	1263	790	1472	508	937
Pagham Hbr	1100	673	984	580	812	886	697	613	554	613
Rye Hbr	4	44	30	—	4	22	—	8	35	—

The Jan. peaks away from the sites listed above were 65 at Pett Level, 114 at Goring Gap and 17 at Cuckmere Haven.

Spring passage was heavier than in 1988. A brief analysis shows that a minimum of 463 birds were involved, with 29 in Mar., 32 in Apr. and 402 in May. The peak movement occurred on 6-7 May with 124 and 121 birds respectively E off Worthing beach.

Pilsley Island, where a leucistic individual was noted on 8 Jan. and 5 Apr., held monthly maxima of 792 in Apr., 386 in May, 235 in June and 750 in July, indicating the importance of this valuable site.

The only inland record was of 2 flying NE over Bewl Water on 12 Mar.

169. **LAPWING** (*Vanellus vanellus*):—Monthly maxima at the main sites were as follows:

	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	1831	487	25	165	715	2938	—
Pagham Hbr	244	708	12	57	76	322	964
Amberley	—	500	—	—	—	—	5000
Shoreham	2094	710	—	—	450	228	—
Newhaven	3000	900	—	250	600	400	2000
Lower Cuckmere	1800	728	475	460	711	3363	2169
Pevensy Levels	—	—	—	—	940	2148	3235
Pett Level	1200	130	5	10	136	525	51
Rye Hbr	1595	1378	64	464	1020	1248	3076

A leucistic individual was recorded amongst a flock of 800 at Newhaven on 2 Jan. and another in a similar-sized flock at East Guldeford on 26 Dec.

A flock of 70 was observed flying in off the sea at Normans Bay on 14 Feb. Very few breeding records were received. Thorney Island had a better year with 15 pairs and at least 21 chicks seen, whilst Rye had a poor year with only 9 pairs and only 2 young known to have survived. Icklesham had 25 pairs, fewer than in 1988 due to increased vegetation; at Amberley breeding success was poor due to dry conditions.

The first returning birds were 17 at the Lower Cuckmere on 27 May and 6 on Pilsley on 1 June. The largest flock reported in Aug. was 2000 at Northpoint GP on 24th.

No cold weather movements were reported during the year.

170. **KNOT** (*Calidris canutus*):—The estuary counts were as follows:

	1989		1989		1990		1990			
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
County totals	1543	650	257	8	10	838	753	525	478	354
Chichester Hbr	1543	650	257	0	10	838	753	525	478	284
Pagham Hbr	—	—	—	—	—	—	—	—	—	70

Spring passage was heavier than in 1988 with a minimum of 405 recorded at the main seawatching localities. The peak was 113 E on 8 May at Worthing.

The first returning birds appeared at Pilsley with a single on 28 June, at Church Norton with 7 on 16 July, and at Rye with singles on 20 June and 13, 19, 21 and 25 July.

One at Weir Wood Res. on 14 Nov. was unusual but no significant numbers were recorded away from the western harbours during the rest of the year.

171. **SANDERLING** (*C. alba*):—The estuary counts were as follows:

	1989		1989		1990		1990			
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
County totals	248	344	367	5	248	328	186	219	262	492
Chichester Hbr	192	270	300	0	248	328	135	187	92	432
Pagham Hbr	—	—	—	0	0	0	45	4	0	0
Rye Hbr	55	70	66	5	0	0	6	28	170	60

Few were reported away from the main sites in the early part of the year, but 85 at West Beach, Littlehampton on 3 Jan. and 149 there on 24 Feb., and 54 at Goring Gap on 22 Jan. and 68 there on 18 Feb., were noteworthy.

Spring passage was remarkably similar to 1988 with a minimum of 514 birds recorded at the main seawatching localities. The peak movements were earlier, however, with 31 E on 27 Mar. at Worthing and 51 E on 4 May at Seaford. Pilsley held 415 on 8 Apr., declining to 300 on 1 May and 96 on 26th; numbers declined rapidly through June with 8 on 29th but built rapidly in July with 314 there on 31st. At Rye there were 2-4 all June, 1 on 2 July, then none until 1 on 22nd and 40+ on 26th; at Shoreham there was 1 on 19 July.

A colour-ringed bird observed at Pilsley on 26 July and (presumably the same) 1 Aug. had been ringed at Sandgerdi, Gullbringusysla, SW Iceland between 21-28 May (CBC).

The only notable concentration away from the main sites was 284 at Goring Gap on 15 Dec.

175. **LITTLE STINT** (*C. minuta*):—The approximate minimum monthly totals were as follows:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Jan.	3-4	—	3	—	7	8	4	29	35	8	3	3

In January there was 1 on Pilsley Island and 3 at East Head, and probably the same 3 at West Wittering during March.

May records relate to 3 on Pilsley on 4-5th, and singles at Seaford, Sidlesham Ferry, Coldwaltham Brooks and Rye.

In Aug. there was 1 at Pett Pools on 20th rising to 11 on 29th, the largest gathering of the autumn. Elsewhere Sidlesham held up to 6 in Sept.; there were 2 at Widewater, 2 at Weir Wood Res., 4 on Pilsley and 1 at Coldwaltham. In Dec. there were up to 3 at East Head, West Wittering with a single still there on 30th.

176. **TEMINCK'S STINT** (*C. temminckii*):—Authenticated records were 2 at Icklesham on 19 May (DB), then singles at Sidlesham Ferry on 13-18 July (TJE, BFF, CEM *et al.*) and at Pett Pools on 3 Sept. (JABG, DFGK).

179. **BAIRD'S SANDPIPER** (*C. bairdii*):—A juvenile at Pett Pools on 17 Sept. (CHD *et al.*) was the 6th for the county, and has been accepted by *British Birds*. The last was in 1981.

180. **PECTORAL SANDPIPER** (*C. melanotos*):—A male ringed at Icklesham on 13 Aug. (SJRR, JW *et al.*) was the only record.

182. **CURLEW SANDPIPER** (*C. ferruginea*):—A very poor year, especially after the high numbers seen in 1988. The approximate monthly totals are as follows:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Jan.	—	—	—	1	3	—	5	5	3	—	—	—

Spring passage commenced with singles at Pagham on 18 Apr., Rye Hbr on 14 May and Fishbourne Channel on 20th. The autumn was not much better; July records were singles at Pagham on 16th, Rye on 22-31st, Lower Cuckmere on 27th, Icklesham on 28th and Pett Pools on 30th. In Aug. there was 1 at Rye on 5th, 2 on 20th and singles at Pagham and Worthing on 17th and 22nd respectively. September also only produced singles, at Pett Pools on 8th and Cuckmere Haven on 10th and 23rd, the latter being the last for the year. Unusually Rye did not record any juveniles and it is suspected that all records apply to adults, indicating a poor breeding season.

183. **PURPLE SANDPIPER** (*C. maritima*):—The peak monthly counts were as follows:

County totals	Jan.	Feb.	Mar.	Apr.	May	Aug.	Sept.	Oct.	Nov.	Dec.	
Brighton Marina	38	6	36	3	2	—	—	—	6	28	24
Glyne Gap	—	—	—	—	—	—	—	—	—	—	—
Littlehampton	2	2	2	3	1	—	—	—	1	26	10
Newhaven	24	—	30	—	—	—	—	—	—	2	2
Others	1	4	—	—	—	—	—	—	3	—	9

As can be seen, records are far from complete, and all records are requested. The last recorded in spring was a single on 20 May at Newhaven. The first for the autumn was 1 at Rye on 26 Aug., the same early date as in 1988.

184. **DUNLIN** (*C. alpina*):—The estuary counts were as follows:

County totals	1989	1989	1990
	Jan.	Feb.	Mar.
Chichester Hbr	15212	15987	8475
Pagham Hbr	12000	12794	7305
Adur	3000	2725	708
Rye Hbr	80	44	414

Peaks for the early months away from the main sites listed included 372 at Goring, 150 at Shoreham Airport, 125 at Pett Level and 89 in the Lower Cuckmere.

Spring passage was again light, but better than in 1988 with a minimum of 876 recorded at the main seawatching localities. Of these 309 were in March, 110 in April and 457 in May. Peaks were on 5 Mar. with 105 E and 5 May with 91 E at Worthing. In early May, Pilsey held 1500 birds, dropping rapidly to 300 by 24th and only 5 by 15 June; numbers then rose to 22 by 21st with a steady increase to 2500 by 24 July. At Rye 5-7 were present in June until at least the 16th, increasing similarly through July with returning migrants until 100+ from 17th onwards. The peak autumn count in the Lower Cuckmere was 126 on 19 Aug. Inland migrants included singles at Darwell Res. on 12 and 17 Aug. and 3 Sept., possibly the same bird.

187. **BUFF-BREASTED SANDPIPER** (*Tryngites subruficollis*):—One at Rye Hbr on 14 Oct. (FC, PL, RPT, BJY) was the 7th county record, the last being as long ago as 1974.

188. **RUFF** (*Philomachus pugnax*):—The approximate monthly totals were as follows:

County totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	60	37	38	13	43	21	30	50	40	63	47	29
Pagham Hbr	—	—	—	—	2	2	10	11	24	45	8	13
Amberley	30	21	30	1	—	—	—	—	—	—	—	10
Pevensley Levels	—	—	—	8	—	—	—	—	—	—	—	—
Rye Hbr	—	—	1	2	13	2	4	16	9	2	—	—

At the beginning of the year the only large flocks were 31 at West Wittering on 7 Jan. and 30 at Amberley Wildbrooks on 5 Mar. At the end of the year 45 at Sidlesham Ferry on 16 Oct. and 14 at West Wittering were the largest flocks reported, very low numbers.

189. **JACK SNIFE** (*Lymnocyrtus minimus*):—The minimum monthly totals were:

Number of sites	Jan.	Feb.	Mar.	Apr.	Sept.	Oct.	Nov.	Dec.
Number of birds	5	2	2	1	1	5	5	4
	6	3	3	5	2	37	14	5

During the early part of the year numbers were significantly down, all records being of single birds except for 2 at Rye, Dell Quay and West Wittering. All records are requested.

The first returning birds were 2 at Icklesham on 1 Sept. At least 30 were considered to be present there in Oct. Rye held up to 4 in Oct. and Coldwaltham Brooks 7 in Nov., but elsewhere only Weir Wood Res. and Cuckmere Haven had more than 1, with 2 apiece. None were reported from Lewes.

190. **SNIPE** (*Gallinago gallinago*):—In Jan-Mar. there were peaks of 65 at Lewes, 95 at Coldwaltham Brooks, 104 at Pevensley Bridge Levels, 140 at Icklesham and 200 at Pulborough Brooks.

There was no evidence of breeding in Ashdown Forest or indeed at any other locality. All breeding season records are required.

The first returning bird to Thorney Deep was on 6 July. In the second winter period Rye recorded 100+ in Nov. and Dec., whilst 66 were at Weir Wood Res. and 400 at Amberley during the latter month.

194. **WOODCOCK** (*Scolopax rusticola*):—Another mild winter produced very few sightings with only 6 in Jan., 3 in Feb. and 3 in Mar. Reports of roding birds numbered only 48, even fewer than the 59 recorded in 1988. No reports were received for Aug-Oct., though 14 birds were noted in Nov. and 5 in Dec.

195. **BLACK-TAILED GODWIT** (*Limosa limosa*):—The estuary counts were as follows:

County totals	1989	1989	1990
	Jan.	Feb.	Mar.
Chichester Hbr	170	176	62
Pagham Hbr	168	162	62
	2	14	—

Spring passage was light, the only significant numbers being 13 at Pett Level on 18 Apr., a flock of 23 E past Seaford on 4 May, a most unusual sight for seawatchers, and 15 at Icklesham on 14 May. The May total for Icklesham was 39. There were inland records of 1 at Bewl Water on 5 Mar. and 5 at Coldwaltham Brooks on 3 June.

The regular summering flock at Sidlesham was smaller than in 1988, peaking at 55 on 3 June.

Returning birds appeared at Thorney Island on 3 July, building to 58 on 18th and 150 on 1 Aug., and at Rye on 4 July a juvenile was present.

196. **BAR-TAILED GODWIT** (*L. lapponica*):—The estuary counts were as follows:

County totals	1989	1989	1990
	Jan.	Feb.	Mar.
Chichester Hbr	405	820	59
Pagham Hbr	403	787	53
	2	33	6

Spring passage was again heavy, with 7447 E recorded at the main seawatching localities; although many of these are probably duplicate records, an absolute minimum of 3369 birds were involved. In April there were 1113 E at Worthing, 1355 E at Seaford and 313 E at Selsey Bill; in May 1961 E at Worthing, 2009 E at Seaford and 696 E at Selsey Bill. Peaks were 366 E at Seaford on 22 Apr., 359 E at Worthing on 29th, 288 E at Seaford on 30th, 640 E at Seaford and 352 E at Worthing on 4 May, 386 E at Seaford and 323 E at Worthing on 5th and finally 238 E at Selsey Bill, 473 E at Worthing and 225 E at Birling Gap on 6th.

At Rye 2-14 were present until 28 May, then a single in June from 8th to 22nd, and singles in July and Aug. In Chichester Hbr, on Pilsey, 2 were present on 3 June increasing to 14 on 14th, 52 on 28th and 312 by 27 July. Also in Chichester Hbr there was an unusually large flock of 130 on 3 June.

198. **WHIMBREL** (*Numenius phaeopus*):—Again up to 2 overwintered in Pagham Hbr. Spring passage began with singles in the Lower Cuckmere on 24 Mar., at Thorney Island on 2 Apr., the same date as in 1988, and at Worthing on 3rd. At the main seawatching localities 1680 E were noted, involving a minimum of 1156 birds. Passage was later than in 1988 with only 277 in Apr. The peak movements occurred on 6 May with 74 E at Seaford and 140 E at Worthing, and on 8th with 53 E at Seaford, 38 E at Selsey Bill and 336 E at Worthing. At Rye Hbr roosting birds increased from 3 on 19 Apr. to 10 on 23rd, 92 on 26th and 100+ on 27th; May saw a further increase with 125 on 1st and 155 on 2nd, rapidly declining to 3-12 until 17th. Elsewhere, notable counts included totals at Icklesham of 66 in Apr. and 51 in May with Bridge Levels on 7th. In June there was a single bird on 5 dates at Pilsley Island.

The first returning bird was again recorded at the Lower Cuckmere, though 4 days earlier, on 23 June, followed by 1 at Rye on 27th and 3 at Pilsley on 28th and 4 on 29th. Peak counts included 34 on Pilsley on 4 July which moved on, then another peak of 62 there on 20th; and 30 roosting at Rye on 26th, with 50+ there in Aug. In Oct., there were singles at Littlehampton GC on 1st and Rye on 19th, and 4 at the Lower Cuckmere on 15th. A single bird remained at Pagham Hbr throughout Nov-Dec.

Additional inland records included 10 at Amberley on 6 May and 14 at Southseas feeding in a mown grass field on 19 July.

199. **CURLEW** (*N. arquata*):—The estuary counts were as follows:

County totals	1989					1990				
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester Hbr	1146	1778	1217	918	1397	434	1812	770	1294	
Pagham Hbr	328	358	335	894	1885	976	1112	420	891	
Pett Level	10	250	130	16	389	327	150	341	183	384
Rye Hbr	161	176	10	8	59	19	23	219	128	18
Rye Hbr (night)*	686	320	NC	200+	200+	345	300+	110	21	1

*Nocturnal roost, excluded from the county totals.

Spring passage was slightly heavier than in 1988 with 233 recorded at Pilsley flying NE between 8-23 Apr., with a peak of 135 on 12th.

A pair nested in Ashdown Forest but success was not proved, and another was seen in possible breeding habitat at another site.

The first returning birds were recorded at Thorney Island on 1 June and Rye Hbr on 12th. The largest flock of the autumn was 800 at Nutbourne on 23 July.

Additional inland records included singles at Bewl Water on 12 Mar. and 27 Aug. and 8 at Cissbury Ring on 24 Oct.

201. **SPOTTED REDSHANK** (*Tringa erythropus*):—The approximate minimum monthly totals were as follows:

County totals	1989											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	2	3	4	4	8	11	8	12	7	8	3	2
Pagham Hbr	1	3	—	1	3	1	4	1	—	1	1	2
Pett Level	—	—	—	—	—	—	—	1-2	1	—	—	—
Rye Hbr	—	—	—	—	1	4	1	3	3	1	—	—

Singles were reported in the early months from Shoreham on 21 Jan., Thorney Deepes on 22-26th with 3 there on 21 Feb., and Arlington Res. on 26 Mar. In Apr. there were singles at Thorney Island on 5th, Cobnor Farm on 22nd and Horse Eye Level on 23rd. Icklesham and Thorney Island both recorded 3 during May and 4 were at the former site during June. Elsewhere in June, the Lower Cuckmere had 2 on 16th, Sidlesham 1 on 17th.

During the autumn birds were recorded from Icklesham, Lower Cuckmere, Shoreham, Coldwaltham Brooks, Littlehampton and Weir Wood Res. in addition to those sites listed above. The last recorded was 1 at Thorney Island on 31 Dec.

202. **REDSHANK** (*T. totanus*):—The estuary counts were as follows:

County totals	1989					1990				
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester Hbr	1154	1736	872	1479	1832	1264	1699	1653	2119	1885
Pagham Hbr	855	1130	589	802	1285	813	1192	1170	1404	1203
Adur	141	333	160	370	202	171	225	238	480	477
Rye Hbr	56	65	90	61	117	91	145	110	75	28

Reports for Jan-Mar. away from those sites listed above included 47 at Newhaven Tide Mills, 60 in Cuckmere Haven, 37 at Lewes Brooks, 33 at Goring Gap and 25 at Pulborough Brooks.

Very few breeding data were received, with only 37-39 pairs recorded. Rye Hbr had 14-17 pairs with a reasonable success rate and on Thorney Island 14 pairs bred.

The largest counts of the autumn were from Thorney Island with 2141 on 18 July and c.2500 in Aug.

The creamy individual recorded at Shoreham in 1985-88 was again present on 6 Jan. and 18 Oct.



203. **MARSH SANDPIPER** (*T. stagnatilis*):—A first-summer bird at Icklesham on 23 May (DB) has been accepted by *British Birds*. It was the 6th for Sussex, the first since 1984 and only the 2nd since 1951.

204. **GREENSHANK** (*T. nebularia*):—The approximate minimum monthly totals were as follows:

County totals	1989											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	1	1	—	23	50	9	132	218	142	93	4	1
Pagham Hbr	—	—	—	14	19	2	68	133	100	83	2	1
Rye Hbr	—	—	—	2	2	2	21	20	8	2	1	—

In addition to the above there were 24 E at Rye on 8 May and a total of 34 E at Seaford and Worthing.

Spring passage seems to have been light with no large flocks observed. Thorney Island recorded a returning bird on 28 June and 16 on 3 July, building up to a peak of 120 on 20 Aug. Elsewhere numbers were very small with daily maxima of 11 at Pett Pools on 26 Aug., 10 at Weir Wood Res. on 20th and 10 at Pagham on 21st.

208. **GREEN SANDPIPER** (*T. ochropus*):—The approximate minimum monthly totals were as follows:

County totals	1989											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	21	14	8	7	8	10	72	89	38	12	19	6

On 1 Jan. there were 4 at Icklesham, and 3 were seen at Barnhorn Level on 10th. The largest number recorded was 8 at Amberley on 12 Feb.

Maxima for Aug. were 12 at Darwell on 12th, 10 at Coldwaltham Brooks on 23rd and 7 at Drayton GP on 29th. Counts for Nov. included 3 at Icklesham on 1st, 5 at Money Penny GP on 11th and 2 at Coldwaltham Brooks. Birds were reported from 5 localities in Dec., all singles except for 2 at Pett Level.

209. **WOOD SANDPIPER** (*T. glareola*):—Another good year for the species, following 1988's run, with the same number reported albeit with different monthly totals as follows:

May	June	July	Aug.	Sept.
10	3	11	23	3

A single at Cobnor Farm from 5-14 May was the first reported and was followed by singles at Arundel on 6-7th and 14th, Icklesham on 7th, 15th and 31st, Barcombe Res. on 10th, Sidlesham Ferry on 25-26th, Darwell Res. on 28th and Lower Cuckmere on 30th. In June there were singles at Icklesham on 11th and 30th, and Weir Wood Res. on 18th. During July Icklesham recorded 4 birds, elsewhere singles were at Lower Cuckmere on 1st and 10th, Coldwaltham Brooks on 6th, Weir Wood Res. on 19th, Rye on 25-26th and 29-31st, and finally at Thorney Deepes on 29th. August records were 10 at Icklesham during the month, singles at Drayton GP on 3rd and 20th, Coldwaltham Brooks on 4th, Thorney Deepes on 6-9th, Weir Wood Res. on 8-11th, Lower Cuckmere on 12th and 26-27th, Pett Pools on 13-19th, Greattham Common on 20th and finally Rye during 1-13th, a different bird on 8th, then 2 from 14-22nd. There were 3 Sept. records, all single birds, at Pett Pools on 5th, Lower Cuckmere on 10th and Weir Wood Res. on 17-21st.

211. **COMMON SANDPIPER** (*Actitis hypoleucos*):—The approximate minimum monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
2	1	2	14	95	14	117	70	38	6	10	3

In Jan-Feb. birds overwintered at Thorney Island (2) and the Cuckmere (1). In April, the first spring migrants were noted at Sidlesham on 10th and the Lower Cuckmere with 3 on 15th. Passage was heaviest in May, as usual, the maximum seen together being 11 at Barcombe Res. on 10th.

Returning birds were first noted on 23 June with 3 at the Lower Cuckmere, and on 27th also with 3 at Coldwaltham Brooks. The first for Thorney Island was a single on 3 July with a peak there of 12 on 18-23rd decreasing to 6 by 19 Aug. Bewl Water noted its first on 16 July and peaked at 7 on 18 Sept. Elsewhere peaks were 12 at Pett Pools on 24 July, 12 at Lower Cuckmere on 25th, 11 at Coldwaltham Brooks on 27th, 14 at Lewes Brooks on 29th and finally 17 at East Guldeford Level on 6 Aug.

The highest counts in Sept. were at Coldwaltham, Ardingly and Lower Cuckmere with 7 each. In Oct. single birds were recorded at Icklesham on 5th and at the Lower Cuckmere and Darwell Res. on 15th and 2 at Worthing beach on 14th. November records were of singles at Pett Pools on 4th, Littlehampton on 11th, Dell Quay on 19th, with 2 there on 24th, and Thorney Island from 25th to the year end. The only other Dec. record was of 1 on the Cuckmere on 31st.

213. **TURNSTONE** (*Arenaria interpres*):—The estuary counts were as follows:

County totals	1989			1989			1990			
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester Hbr	480	606	668	662	1113	683	784	708	807	956
Pagham Hbr	65	120	73	192	193	141	244	140	144	204
Normans Bay	217	111	170	180	434	167	479	334	429	530
Glyne Gap	62	60	110	64	47	NC	47	30	58	3
Pett Level	124	295	314	193	280	330	NC	170	172	202
	12	20	—	30	121	39	3	32	—	7

Other notable concentrations were 130 at Selsey Bill and 162 at Pett Level on 11 Mar.

Spring passage was heavier than in 1988 with a minimum of 345 noted at main seawatching localities. The peak occurred on 6 May with 59 E at Worthing. Maxima elsewhere for Apr-May included 100 at Pett Level on 11 Apr. and 400 on Stakes Island on 6 May.

Two to three birds summered at Rye. The first returning birds appeared at Pilsley with 3 on 25 June increasing to 52 by 28 July; the numbers at Rye rose to 10 by 13 July and 110 by 28th. At Pett there were 94 roosting on the beach on 10 Aug.

215. **RED-NECKED PHALAROPE** (*Phalaropus lobatus*):—Last recorded in 1981, two graced the county in 1989. A superb female was at Sidlesham Ferry on 2 June (RP *et al.*), and a confiding juvenile stayed at Widewater, Lancing from 1-7 Sept. (mo).

216. **GREY PHALAROPE** (*P. fulicarius*):—One was at Church Norton on 12 Nov. (LC, MHD) and other singles were at Church Norton on 26-27 Dec. (CH *et al.*) and at Shoreham Hbr on 26, 28 and 30 Dec. (DIS *et al.*).

217. **POMARINE SKUA** (*Stercorarius pomarinus*):—An early individual flew E off Seaford on 2 Apr. Easterly passage totals at the main seawatching localities were: Selsey Bill 71 (peak of 22 on 5 May), Worthing 129 (peak 41 on 7 May) and Seaford 290 (peak 120 on 5 May when flocks of 26, 25 and 20 were recorded). A simple analysis of the complex spring records suggests that at least 390 birds were seen.

Two were seen at sea 10 km S of Brighton on 16 July (NJT). There were no sightings in the later autumn.

218. **ARCTIC SKUA** (*S. parasiticus*):—Singles off Worthing on 4 Feb. and Selsey Bill on 5 Mar. Fewer were recorded in spring than in recent years. Easterly passage totals from the main sites were Selsey 55 (peak 7 on 6 May), Worthing 65 (peak 8 on 30 Apr.) and Seaford 155 (peak 42 on 30 Apr.). The records suggest that a minimum of 213 passed E during April and May.

There were five sightings of singles offshore during June. Autumn passage involved about 60 birds between 23 July and 8 Nov. One was seen off Worthing on 20 Dec.

220. **GREAT SKUA** (*S. skua*):—One stayed at Pilsley Island in Chichester Hbr from 15 Mar. to 3 Apr. Easterly spring passage totals were Selsey 5, Worthing 7 and Seaford 8, probably all different birds. One was observed at sea off Brighton on 4 June.

Between 1 Aug. and 28 Oct. 26 were recorded off Worthing, and a single flew past Selsey Bill on 24 Dec.

222. **MEDITERRANEAN GULL** (*Larus melanocephalus*):—There were 171 records involving 311 birds; the amount of duplication in the records was difficult to assess and makes it impossible to give a precise statement on the number seen in the county. The following table shows the approximate numbers of each age seen in each month and includes records of 6 unaged individuals.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Adults	2	1	8	21	10	6	3	4	7	2	4	2
2nd year	2	3	2	11	6	7	1	2	2	2	4	1
1st year	1	1	3	9	29	14	1	1	1	1	1	1
TOTAL	7	4	13	41	45	27	6	6	10	5	4	4

Clearly most records come from the spring months and many of these were of birds passing, usually eastward, along the coast. The largest number was seen in Chichester Hbr, with 16 different individuals recorded in June and an incredible count of 11 first-year birds on Pilsley Sands on 1 June. Away from Chichester Hbr most sightings were of 1 or 2 individuals

but there were 5 at Splash Point, Seaford on 30 Apr. and 6 at Birling Gap on 7 May. The only records far from the coast were of singles at Bewl Water on 28 Feb. and Weir Wood Res. on 31 Dec.

225. **LITTLE GULL** (*L. minutus*):—A remarkable year when the estimated minimum total of 948 birds easily surpassed the previous record number seen in 1988. The following table is an estimate of the minimum number seen in each month and clearly shows the spring as the peak season.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
3	—	30	294	495	13	2	13	11	62	12	13

After 3 at Worthing on 7 Jan. there were none until 16 flew E at Worthing on 19 Mar. Thereafter large numbers were noted at coastal sites, particularly in periods of east winds. The most spectacular gathering was at the Crumbles GP where up to 129, mainly adults, were watched between 22 and 29 Apr. The spring seawatch totals (Mar-May) from the regularly watched sites were 119 at Selsey Bill (401 hours); 198 at Worthing (371 hours) and 579 at Splash Point, Seaford (411 hours), showing that most were seen in East Sussex. These three sites all recorded a peak movement on 5 May when 224 passed E at Seaford, but even in later May good numbers were passing, with 27 and 15 seen at Seaford and Selsey Bill respectively on 21 May. Away from the coast small numbers were seen on Chichester GP, up to 8 at Arlington Res. on 12 Apr. and a single at Weir Wood Res. on 11 and 12 Apr.

Apart from 5 at Weir Wood Res. on 21 Aug. most of the autumn and winter records were from coastal sites and most were records of 1 or 2 birds except for 19 and 28 which passed Worthing on 21 and 28 Oct. respectively. During the strong onshore winds at the end of Dec. there were several sightings including 4 between Littlehampton and Climping and 5 at Beachy Head on 25 Dec.

226. **SABINE'S GULL** (*L. sabini*):—A juvenile sat with waders on the shingle spit at Church Norton for a few minutes on 17 Dec. (SJK). This was the 3rd county record for Dec.

228. **BLACK-HEADED GULL** (*L. ridibundus*):—Although this is a numerous and widespread wintering species the only large roost count was an estimated 15000 at Bewl Water on 20 Feb. Migration watchers at Worthing recorded an E movement during the spring with a total of 1571 seen in Mar., 1939 in Apr. and 5031 in May; the peak spring movement of 1645 occurred on the later than usual date of 5 May.

Breeding at Stakes Island in Chichester Hbr was successful with at least 1000 chicks reared from 1562 nests, but at Rye fledging was very poor because of extensive predation by foxes and probably less than 40 young were reared by 417 pairs.

Autumn numbers started to increase in July; counts on a short section of Worthing beach were 1801 on 23 July, 2100 on 20 Aug. and 20000 on 14 Oct. The only other noteworthy counts were 2009 in the Lower Cuckmere Valley on 14 Oct. and 1250 regularly gathering in Preston Park, Brighton at dawn in Dec.

During the year there were at least 4 albino or partially albino birds recorded at Pilsey Island, Pett Level, Barcombe Res. and Worthing.

233. **COMMON GULL** (*L. canus*):—The largest flocks in the winter were 600 near Cissbury Ring on 7 Jan., 300 near Heathfield on 15 Jan. and 1500 roosting at Bewl Water on 28 Feb. Coastal counts in Mar. were small, the largest being 500 at Pilsey Island on 15 Mar. and 780 at Worthing beach at dusk on 24 Mar. During the spring northward movement was noted at Bewl Water when 150 and 60 flew N on 2 Apr. and 16 Apr. respectively, whilst on the coast the movement was predominantly eastward as 1213 were noted passing Worthing in Apr. and 153 in May.

Few were recorded in late May and early June but there were 30 at Pilsey Island on 21 June, 150 there on 13 July and 277 at Worthing on 23 July. An estimated 3000 near Cissbury Ring on 26 Oct. was the largest autumn gathering.

234. **LESSER BLACK-BACKED GULL** (*L. fuscus*):—The largest numbers in the winter were recorded inland with 42 at Warnham Mill Pond on 22 Jan. and 140 at Faygate on 26 Feb. The largest coastal count was 31 in the Lower Cuckmere Valley on 25 Feb. and then spring migration was unremarkable apart from a total of 63 E at Worthing in Apr. and 50 in May.

Conversely autumn numbers were considerably greater and were mainly recorded near the coast. At Rye 250 stayed throughout Aug. and there were other Aug. counts of 31 in the Cuckmere Haven, 34 at Shoreham and 67 at Worthing. A count of 1500 at Scotney Court GP on 29 Sept. is the largest gathering recorded, and 70 at Shoreham Airport on 21 Oct. and 53 at Goring Gap on 1 Nov. are counts greater than usual.

235. **HERRING GULL** (*L. argentatus*):—There were 19 pairs nesting at Rye, and at Northpoint GP 37 pairs raised 60-70 young. Breeding was noted on rooftops in several coastal towns but no full surveys were reported. The largest counts were 100 at Pilsey on 23 June, 350 at Worthing on 20 Aug. and 250 on Shoreham Airport on 21 Oct.

A completely white individual was noted in the Eastbourne area. There were more records of the yellow-legged race *L.a. michallitis* and as usual most were recorded during the summer and autumn. Records were clustered into two main groups in the Chichester area and the Adur Valley or Washington refuse tip. The largest counts were 106 in Pagham Hbr on 2 Aug., 60 at Washington refuse tip on 13 Sept. and 76 at Chichester GP on 28 Sept. The following table of monthly minimum totals shows the pattern of occurrence and suggests an increase in numbers in 1989:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	—	—	1	7	47	76	148	136	65	2	1

236. **ICELAND GULL** (*L. glaucooides*):—The three records were a second-year at Pagham Hbr on 3 Jan. (TJE), a first-year at Beachy Head on 8 Apr. (JFC, DC) and an adult at Climping on 22 Oct. (ASC).

237. **GLAUCOUS GULL** (*L. hyperboreus*):—The adult which had been regularly seen in the Selsey area for several years was again recorded between Jan. and 12 Mar. and after 7 Aug.; possibly the same individual was seen in Chichester Hbr on 9 Feb., 30 Sept. and 31 Dec. Birds in first-year plumage were seen at Weir Wood Res. on 15 Jan., in the Cuckmere Haven on 4 and 6 Feb., at both Pagham Hbr. and Pett Level also on 6 Feb., and at Worthing on 22 May.

238. **GREAT BLACK-BACKED GULL** (*L. marinus*):—The largest gatherings were from coastal sites with counts of 200-300 at the Cuckmere Haven in Jan., Sept., Nov. and Dec., 120 at Pilsey Island on 2 July, 700 on Shoreham Airport on 21 Oct. and 311 on Worthing beach on 26 Oct. The largest count from an inland site was 95 at Darwell Res. on 15 Jan.

240. **KITTIWAKE** (*Rissa tridactyla*):—There were no large coastal movements recorded during the winter months, the peak being 49 noted at Worthing on 19 Feb. Likewise in spring most of the coastal movements were small with most, as usual, recorded from Brighton Marina where 50 were seen on 16 Apr., 72 on 4 May and 62 on 21 May. The breeding colony at Newhaven was surveyed for the first time since 1987 with an estimated 1072 pairs present, a record count for this site. The small colony at Splash Point, Seaford, appears to be establishing itself for 46 occupied nests were counted. During the summer larger numbers than usual occurred off Worthing where 133 were seen on 9 June and 211 on 11 June and a party of 47 were feeding offshore on 13 July.

A series of counts at Bexhill during the autumn peaked at 68 on 11 Sept., but as usual most significant records in the autumn and early winter were of coastal movements noted in fresh or strong onshore winds. The largest movements were 79 at the Cuckmere Haven on 21 Oct. and 150 at Seaford on 28 Oct., and at Worthing 172 on 24 Sept., 365 in 1.4 hours watching on 5 Nov., 61 on 23 Dec. and 64 on 24th.

The inland records were noteworthy with 2 at Bewl Water on 14 May and singles at Weir Wood Res. on 1 Sept. and 10 Dec. and at Barcombe Res. on 31 Dec.

LESSER CRESTED TERN (*Sterna bengalensis*):—On 6 May an adult flew E past Splash Point, Seaford, at 1410 hours (AW *et al.*) and past Birling Gap at 1430 hours (BAEM, RFP) and was seen at Dungeness several hours later. It has been accepted by *British Birds* and is the second county record, though possibly the same individual as that seen at Rye Hbr on 13 May 1986. Both are thought to have been the bird summering on the Farne Islands making its way north.

245. SANDWICH TERN (*S. sandwichensis*):—One was seen at Widewater on 11 Feb. At the main seawatching stations, easterly spring passage totals were Selsey Bill 2244, Worthing 3546 and Seaford 3238. An early movement of 232 past Seaford on 27 Mar. was noteworthy; peak counts were 297 at Worthing on 9 Apr., 344 at Seaford on 30 Apr. and 252 at Selsey on 6 May. In Chichester Hbr, where no flooding problems occurred, 14 pairs raised only 1 chick. At Rye Hbr 40 pairs settled on the breeding site in late Apr. but none nested. An increase in numbers during June may have resulted in 3 pairs nesting.

Between Aug. and early Oct. a total of 597 W and 116 E were seen at Worthing with a peak of 181 on 10 Sept. A late bird was present at Thorney Deepes on 2 Dec.

246. ROSEATE TERN (*S. dougallii*):—The only authenticated records were singles E at Brighton Marina on 30 Apr. (BDJ, PJ), with 13 Common and 2 Little Terns at Worthing on 6 May (PMB, JAN), and again at Worthing on 7 and 11 May (JAN). At Rye Hbr there were up to 5 in June and 2 in July (BJY *et al.*).

247. COMMON TERN (*S. hirundo*):—In Chichester Hbr during June there were at least 55 nests; although some were washed out, at least 50 chicks were counted. At the Rye Hbr colony a total of 80 pairs nested but very few young hatched and none survived. Foxes were the major problem but there was also a doubt concerning adequate food supply. On the Society's rafts at Chichester GP 4-5 pairs raised 13 young; and a pair summered at Bewl Water.

In Aug. there were 53 at Bewl Water on 19th, 110 moving S at Weir Wood Res. on 20th, 84 at Pilsley Island on 22nd, and 200, mostly juveniles, at Rye on 23rd. In Sept. 40 were recorded at Newhaven Tide Mills on 17th.

248. ARCTIC TERN (*S. paradisaea*):—Three were seen at Selsey Bill on 26 Apr. and in May there were singles at Chichester GP on 3rd and Icklesham on 13th. One was identified at Rye Hbr on 18 July. In autumn a total of 9 were reported between 6 Aug. and 17 Sept.

247/248. COMMON/ARCTIC TERN:—A maximum of 4 were recorded from various seawatching sites during fresh SE winds on the early date of 27 Mar. Easterly spring passage totals were Selsey Bill 4341 (peak 810 on 10 May), Worthing 6389 (peak 921 on 6 May) and Seaford 12898 (peaks 1993 on 29 Apr. and 2097 on 5 May). These figures illustrate well the higher numbers recorded the further east the watch point, and that differing localised weather conditions may produce different peaks on different dates.

During autumn regular watching at Worthing revealed a total of 1793 W and 331 E, with a peak of 384 on 26 Aug. The last recorded was 1 at Worthing beach on 8 Nov.

251. LITTLE TERN (*S. albigrons*):—First recorded at Pilsley Island on 9 Apr. Easterly passage at the well-watched sites was remarkably similar, totals being Selsey Bill 485, Worthing 527 and Seaford 504; peak passage occurred on 4 and 6 May.

In Chichester Hbr breeding was attempted at 3 sites: at the first 7 pairs were washed out; at another 3 pairs were unsuccessful due to egg predation by crows; at the third site 1 pair with 2 chicks were seen on 4 Aug. At the Rye Hbr colony there was very little display and courtship feeding, perhaps owing to poor food supply or the presence of large numbers of foxes. As a result, only about 30 pairs nested and no young were seen.

Autumn peaks at Pilsley Island were 83 on 22 July and 79 on 5 Aug. Last of the year were 4 at Arlington Res. on 25 Sept.

253. BLACK TERN (*Chlidonias niger*):—The first recorded were 2 E at Seaford on 15 Apr. Easterly passage totals from the main seawatching points were Selsey Bill 95, Worthing 187 and Seaford 246. Peak movement at these sites occurred on 9 May when there were also 320 E at Birling Gap. Twenty-five were at Bewl Water on 8 May.

In autumn a total of 38 were recorded from various localities between 6 Aug. and 21 Sept., with a maximum of 17 at Weir Wood Res. on 20 Aug.

254. WHITE-WINGED BLACK TERN (*C. leucopterus*):—1988:—A first- or second-summer bird observed at the Ferry Pool, Sidlesham on 14 July (KW) and subsequently seen in Chichester Hbr from 15 July to 1 Aug. (CBC, GAC, JHME, KWM), has been accepted by *British Birds*.

1989:—A juvenile at the Midrips on 3-4 Sept. (BAD, NAD) has been accepted by *British Birds*, moving to Dungeness from 5-11th. Ten have been accepted for the 1980s.

255. GUILLEMOT (*Uria aalge*):—Although again more numerous than Razorbill, it is obviously under-recorded and many more should be observed off the Sussex coast. Monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
62	21	3	8	12	—	1	—	2	10	22	98

These figures include 55 birds dead or oiled. The only large concentration noted was that of 45 off Brighton on 10 Dec. See also Auk sp.

257. RAZORBILL (*Alca torda*):—Again scarce with very few records received. Monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	1	—	—	9	—	—	1	—	8	1	—

These figures include 1 dead bird and 1 oiled individual. See also Auk sp.

260. LITTLE AUK (*Alle alle*):—There was a small influx in Nov., with sightings as follows: 1 E off Worthing beach on 2nd (JAN), 1 on sea at West Wittering on 11th (BJ, CMJ), and up to 20 at Selsey as follows: 1 W on 4th (BJC), 12 W on 7th (BJC, TJE) including two flocks of 5; up to 6 W on 9th (BJC, TJE) and 1 E on 16th (BJ, CMJ, TJE, BJC).

261. PUFFIN (*Fratercula arctica*):—A total of 5 were recorded as follows: 1 E at Birling Gap on 6 May (BAEM) followed by 3 there on 10th (RDME, BAEM) and 1 on the sea 10 km S of Brighton Marina on 27th (DG, RG).

AUK SPECIES:—Observations at the main seawatching localities were as follows:

	Jan-Feb.	Mar-May	June-July	Aug-Oct.	Nov-Dec.
Splash Point	48	176	—	—	—
Worthing	55	62	—	45	72
Brighton Marina	357	—	—	—	—
Selsey Bill	—	—	25	—	—

The peak movement was of 292 in 1 hour at Brighton Marina on 4 Feb.

Cat. C. RING-NECKED PARAKEET (*Pittacula krameri*):—At Hollingbury Woods a pair bred raising 1 young to the flying stage. Elsewhere 2 were recorded at Weir Wood Res. on 10 Feb., 4 at Stanmer Park on 1 Mar., 2 at Balseham Valley, flying N, on 28 Mar., 2 at Hove Park on 29 July, 1 at Collington Wood, Bexhill on 6 Nov., and finally 2 on Thorney Island on 13 Nov.

264. STOCK DOVE (*Columba oenas*):—During the early part of the year the largest flocks reported were 84 at No-Mans Land, Findon and 64 at Sidlesham Ferry. Very few breeding records were received. In the latter part of the year 70 were recorded at Icklesham, 60 at Pett Level, 75 at Stoughton and 100 at the Severals, Pagham Hbr.

265. **WOODPIGEON** (*C. palumbus*):—Again there were no reports of large movements in the first half of the year, but large flocks were recorded with 1000+ on rape at Rye Hbr, 1500 at Lewes Brooks and 3000 on rape on Steep Down, Lancing.

No significant breeding season reports were received. November produced some large flocks, movements recorded including 5700 in 10 flocks moving W in 20 minutes on 5 Nov. at Weir Wood Res. and 2000 W in 20 minutes at Balcombe. Other large numbers in Nov. were recorded as follows: 3000 at Cissbury Ring on 5th, 3600 at Preston Park, Brighton on 6th, 1150 at Maynards Green on 21st, 3000 at West Chiltington on 22nd and 3000 at Pett Level on 23rd. December records included 1900 at roost at Maynards Green, 2000 near Haywards Heath and 1000 at Weir Wood Res.

266. **COLLARED DOVE** (*Streptopelia decaocto*):—Large flocks were reported only in the latter part of the year with 120 at West Hove GC on 3 Oct., 150 at Icklesham on 1 Nov. and 125 at Stakers Farm, Yapton on 29 Nov.

The 2 almost white individuals first noted in 1988 were seen amongst a flock of 160 at Rye Hbr on 6 Dec.

267. **TURTLE DOVE** (*S. turtur*):—First recorded on 16 Apr. at Rye Hbr and on 18 Apr. at Offham, near Lewes. Spring passage was very light, the largest numbers being 5 at Pagham Hbr on 13 May and 4 on Thorney Deepes on 1 May.

At the latter site 4 pairs bred again, but few breeding data were received from elsewhere. From at least 11-15 June there was a large concentration of 60-70 at Rye Hbr. Autumn passage was again very poor, the peak count being 11 in the Lower Cuckmere on 23 Sept. The last for the year were singles at Rye and Beachy Head on 12 Oct., Rye on 15th, and the Lower Cuckmere on 22nd and 24th.

271. **CUCKOO** (*Cuculus canorus*):—First recorded on 1 Apr. at Church Norton and Climping, and on 4th at Lower Cuckmere. There was a widespread arrival on 12-13th.

Six pairs were present on Thorney Island, and Rye had juveniles from 17 July and its best year for at least 6 seasons.

The last for the year was 1 at Old Lodge Reserve, Ashdown Forest, on 1 Oct.

274. **BARN OWL** (*Tyto alba*):—Records are tabulated as follows:

Year	Breeding Season			Winter birds
	Probable pairs	Birds present	Total sites	
1988	22	14	36	15
1989	24	23	47	23

Last year's success story continued, with record increases as shown in the table. Coverage was widespread, with 99 records processed. New sites appeared on the computer print-out and many of last year's were again favoured; for example, in the area of East Sussex mentioned previously, 3 pairs raised 13 young, and in the West Sussex area 5 pairs reared 7, whilst in the Horsham sector 2 pairs fledged 8 young. A total of 18 nestlings were ringed, including 4 at Westfield. Surprisingly there were very few records from the Selsey peninsula, apart from regular sightings mainly in May and June at the information centre at Sidlesham Ferry. No road fatalities were reported.

279. **LITTLE OWL** (*Athene noctua*):—Records are tabulated as follows:

Year	Breeding Season			Winter birds
	Probable pairs	Birds present	Total sites	
1988	34	32	66	25
1989	23	37	60	22

Although the numbers of known and probable pairs again showed a downward trend, the other statistics indicate a static situation with this species, which is probably under-recorded. In the east 3 pairs raised 8 young in one locality and there were up to 4 pairs at Rye Hbr SSSI. Unusually there were only 2 urban records and 1 road casualty.

280. **TAWNY OWL** (*Strix aluco*):—Records are tabulated as follows:

Year	Breeding Season			Winter birds
	Probable pairs	Birds present	Total sites	
1988	43	42	85	41
1989	42	21	63	17

It will be seen from the tables that this species is again in apparent decline, although some observers attribute this to under-recording. The low total of winter-only records, however, which should represent juveniles moving into new territories, could point to a poor breeding season, but the low number of young raised seems totally unrealistic. Up to 8 young were reared on Thorney Island and 5 at Weir Wood, leaving only 4 raised in the rest of the county! There were 4 urban records, 1 nest-box success and 1 road casualty.

281. **LONG-EARED OWL** (*Asio otus*):—Records spanned 8 months, the best coverage during the last 10 months, as follows:

Number of birds	Breeding Season							
	Jan.	Feb.	Mar.	Apr.	May	July	Oct.	Nov.
Number of birds	7	4	13	2	1	1	2	5
Number of sites	4	2	5	1	1	1	2	3

Allowing for overlapping in one area, the table shows the minimum numbers of birds present, double last year's total. The largest concentrations were 5 in the Adur Valley and 5 in the Pagham Hbr area, both in March. Three birds were reported from the east of the county and there was 1 unusual July record. There was no evidence of breeding; the trees in the area of the 1988 nest site had been clear-felled, though there is other suitable habitat in the vicinity.

282. **SHORT-EARED OWL** (*A. flammeus*):—Birds were again noted during 10 months of the year, particularly from Jan. to April. The monthly totals were:

Jan.	Feb.	Mar.	Apr.	May	June	Sept.	Oct.	Nov.	Dec.
37	22	22	23	4	1	5	16	28	15

An excellent year for sightings, indicating a suitable food supply. The figures represent the maxima per month at the various sites although some birds remained in favourable areas for up to 4 months in the early season and again over the last 3 months. Of 153 records analysed, 43 different sites were identified, widespread across the county. Maximum daily counts were Upper Arun Valley 13 on 22 Jan. and Thorney 6 on 8 Feb. and 17 Mar. A late bird was present on Pilsley Island on 7 June. An unusual record was of one flying S over Arundel on 30 Oct. at an estimated height of 500 metres.

284. **NIGHTJAR** (*Caprimulgus europaeus*):—First recorded on 6 May at both Brighton Marina and Icklesham. An early arrival was evident with many records for May being received. Breeding season reports suggested 70 territories in the county, 40 in West Sussex (41 in 1988) and 30 in East Sussex (21 in 1988). The last record for the year was on Woolbeding Common on 19 Sept.

289. **SWIFT** (*Apus apus*):—First recorded at Lower Cuckmere on 10 Apr., the earliest ever date for Sussex this century.

Spring arrival was again earlier than usual with many records from 20 Apr., including 11 at Chichester GP on 23rd, 8 on Thorney Island on 25th, 12 at Bewl Water on 26th, 30 at Pagham on 27th, 30 at Ivy Lake on 28th and 40 on the Crumbles on 29th. A major influx occurred in early May with 200 at Bewl Water on 5th and 160 at Selsey Bill on 6th. On the 11th there were 100 at Barcombe Res., 500 at Weir Wood Res. and 100+ at Rye. Late May and early June also produced large numbers: 500+ at Rye on 26 May, 2000+ at dusk at Rye on 1 June, 500 at Bewl Water on 4th, and 150 on Thorney Deepes on 7th.

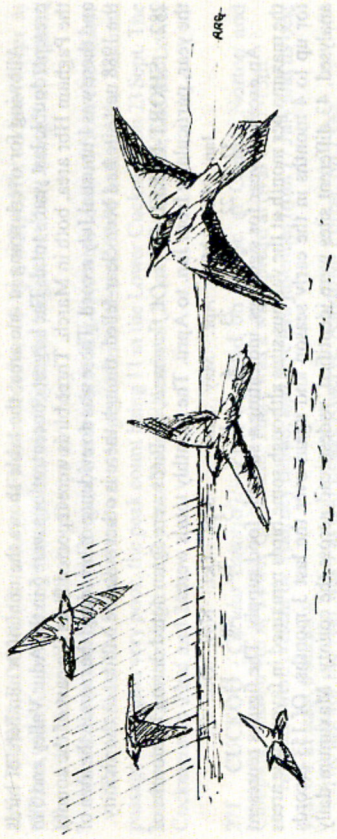
An early movement occurred on 2 July when 300 were recorded W in muggy weather at Woodingdean. It was not until the end of the month that other movements were recorded with 200 at Coldean (Brighton) and Broadwater (Worthing) on 22nd, 340 at the Lower Cuckmere on 25th, 150 at Bewl Water and 200 at Rye on 31st. Passage continued at Rye on 1 Aug., with 300, but Swifts were scarce there from the 5th, while at Selsey 100 were recorded on 19th. A total of 25 were recorded in Sept. and singles were seen on 3 dates in Oct., the last being at Lower Cuckmere on 15th.

293. **KINGFISHER** (*Alcedo atthis*):—Observations during winter months were as follows:

	Jan.	Feb.	Nov.	Dec.
No. of birds	16	10	16	6
No. of inland sites	6	3	5	4
No. of coastal sites	9	5	6	2

Three pairs are known to have bred and birds were reported from not more than 12 other localities in the breeding season. A full analysis of records is required as the population seems much lower than that of the 1970s and early 1980s despite some recent mild winters.

295. **BEE-EATER** (*Merops apiaster*):—Six, possibly seven, were seen at Beachy Head on 28 May (DC, DRC, JFC). They have been accepted by *British Birds* and bring the county total to 42. Seventeen have been recorded in the 1980s, all but 2 being at Beachy Head and over half between 25-28 May.



297. **HOOPOE** (*Upupa epops*):—Only 3 were reported in a poor year, 2 in Mar., at Sidlesham Ferry on 20th (OM) and at Street on 28-29th (PDL), and 1 more typically on 10 May at Fairlight (RFB, GRB *et al.*). Of just over 250 recorded since 1962, only 6 have been in March, the Sidlesham bird being the earliest of them all.

298. **WRYNECK** (*Jynx torquilla*):—1988:—One was trapped at Charleston Reed Bed on 10 Sept. (TWP, BJW).
1989:—A below-average showing with 1 report in late spring, at Cuckmere Haven on 25 May (ARK), and 11 reported in autumn: at Beachy Head on 31 Aug. (KGBH) and 6 Sept. (BMM, DCM), found dead in Western Road, Brighton on 13th, 2 trapped at Icklesham on 5 Sept. (SJR), 1 at Beachy Head on 18 Sept. (RHC) and 2 on 19th (RHC, RDME), and singles at Balsean on 21st (GAS), at Pagham Hbr from 22 Sept. to 1 Oct. (mo) and at Littlehampton GC on 24 Sept. (RJLK).
An unusual recovery of one of the Icklesham birds is detailed in the Ringing Report on page 69.

300. **GREEN WOODPECKER** (*Picus viridis*):—Continues to be widespread throughout the county, but only 2 counts received for defined areas in the breeding season, i.e. 5 pairs in 200 ha at Pippingford Park, and 1 pair in 60 ha at Cattlestone Farm, West Chilmington. More counts would be very welcome.

301. **GREAT SPOTTED WOODPECKER** (*Dendrocoptes major*):—Breeding season counts were of 8 pairs in 200 ha at Pippingford Park, and 3 pairs in 60 ha at Cattlestone Farm, West Chilmington. On 17 Jan. 8 were seen on a 7km walk in the Greatham-Wiggonholt area, and there were 6 at Warnham LNR on 12 Nov. Singles at Chyngton Farm, Cuckmere and Cliff End, Pett on 7 Oct., 2 at Beachy Head on 12th and 1 at Cuckmere Haven on 14th may have been immigrants.

302. **LESSER SPOTTED WOODPECKER** (*D. minor*):—Records were received from 44 localities, 25 of which were in the breeding season, though breeding was proved at only 1 site. One was seen feeding on peanuts in a garden at Broadwater, Worthing on 2 Dec. The distribution of this species in Sussex over the last 25 years is reviewed in a paper on pages 76-86.

310. **WOODLARK** (*Lullula arborea*):—In Jan. and Feb., 1 to 3 were recorded at 3 possible wintering sites in the west of the county. In the breeding season there was an unfortunate decline from 1988, with records from only 1 locality where 3 pairs and a single male were present. One pair was proved to breed successfully, raising 3 young. At the coast 1 was seen at St. Leonards-on-Sea on 23 Oct.

311. **SKYLARK** (*Alauda arvensis*):—Seventy at Rye in early Jan., 60 at Faygate on 2nd and 300 at Hill Barn, Worthing, on 31 Jan. were the only flocks recorded in the early part of the year.

On Pilsey Island, 8 territories were recorded and 38 pairs were at Rye.
In the autumn there were 175 in the Lower Cuckmere and 80 at Bewl Water on 15 Oct., 40 at the Wild Park, Moulsecoomb on 19 Nov., and in Dec. 150 at Pulborough Brooks, 90 on the west side of Pagham, 63 at Chyngton Farm, Cuckmere and 100 at Holmbush Farm, Faygate.

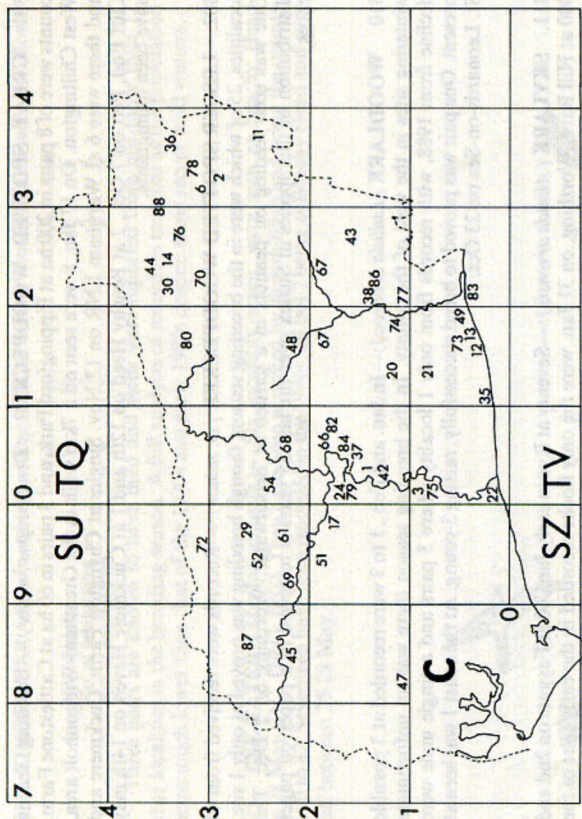
313. **SAND MARTIN** (*Riparia riparia*):—First recorded on 10 Mar. at Amberley Wildbrooks, the earliest date since 1977. This was quickly followed by records of 2 at the Lower Cuckmere and Littlehampton on 11th, 7 at Chichester GP on 12th, 10 at Icklesham on 13th and 20 at Bewl Water on 14th. Spring passage was again heavy, maximum counts being 150 at Coldwaltham Brooks on 2 Apr., 150 at Arlington Res. on 23rd, 200 at Weir Wood on 24th and 150 at Barcombe Res. on 29th.

Counts received from breeding colonies continued to indicate a recovery in the species. Selected figures are given as follows:

Site	No. of pairs	
	1988	1989
Heathend	90	90
Pendean	50+	70
Sandgate Park	25-30	47
Stedham	100	150
West Heath Sand Pit	75	100

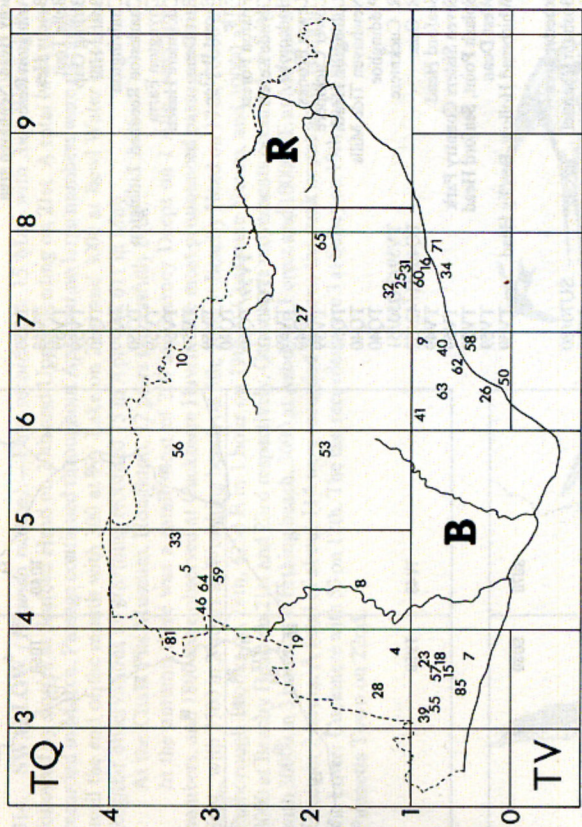
There was an increase in all NW Sussex pits and new colonies were found in several areas. Autumn passage was heavy with large flocks present at Rye where there were 400 on 30 July, 400 on 21 Aug., 500 on 25th and 2000+ on 27th and 29th. In Sept. there were 2000 on 2nd rising to 5000+ on 3-5th declining to 2000 on 9th. The largest concentration by far was an astonishing peak count in Aug. at Icklesham of a roost of 50000. The last recorded were 4 at Sompting Brooks on 2 Nov.

CRAG MARTIN (*Ptyonoprogne rupestris*):—1988:—One seen at Beachy Head on 9 July (EDU) has been accepted by *British Birds* and is the first county and second British record, the first being in Cornwall two weeks earlier. A full account is published on pages 74-75.



Key to localities (not necessarily of public access)

1 Amberley Wild Brooks	TQ01	<i>C Cobnar Point/Farm</i>	TQ72
2 Ardingly Reservoir	TQ32	23 Cold Coombes, Kingston	TQ30
<i>B Arlington Reservoir</i>	TQ00	24 Coldwaltham Brooks	TQ01
3 Arundel WWT/ Park	TQ31	25 Combe Haven	TQ70/71
4 Ashcombe Bottom/Farm	TQ42/43	26 Crumbles Gravel Pit	TQ60
5 Ashdown Forest	TQ33	<i>B Cuckmere Haven</i>	TQ31
6 Balcombe	TQ30	27 Darwell Reservoir	TQ72
7 Bardslean	TQ41	<i>C Dell Quay</i>	TQ31
8 Barcombe Reservoir/Mills	TQ60	28 Ditchling Beacon	TQ31
9 Barnhorn Level, Hooe		<i>B East Dean</i>	
<i>B Beachy Head</i>		<i>R East Galdeford Level</i>	
<i>R Beckley Woods</i>		<i>C East Head</i>	
<i>B Belle Tout</i>	TQ63	29 Ebernoe Common	SU92
10 Bewl Water	TQ32	<i>B Exceat Bridge</i>	
<i>B Birling Gap</i>		<i>R Fairlight</i>	
11 Bluebell Railway		30 Faygate	TQ23
<i>C Bosham Channel</i>		31 Filsham LNR	TQ70/71
<i>B Bostal Hill</i>		<i>B Fittle</i>	
<i>C Bracklesham Bay</i>		<i>C Fishbourne Channel</i>	
<i>R Brede Levels</i>	TQ10	<i>R Flatropers Wood</i>	TQ71
12 Broadwater	TQ10	32 Fore Wood (RSPB)	TQ43/53
13 Brooklands, Worthing	TQ23	33 Friars Gate	
<i>R Broomhill Level</i>	TQ30	<i>B Friston Forest</i>	TQ70
14 Buchan Park	TQ70/71	<i>B Glynade Levels</i>	TQ10
15 Bullock Hill	SU91	34 Glynne Gap	TQ33
16 Bulverhythe	TQ30	35 Goring Gap	TQ01
17 Burton Pond	TQ30	36 Gravetye Manor	TQ11/21
<i>R Camber Sands</i>		37 Greattham Bridge	
18 Castle Hill	TQ32	38 Hemfield Brooks	
19 Chailay Common	TQ11	<i>B Hockcombe</i>	TQ30
<i>B Chiddingfold</i>		39 Hollingbury Camp/GC	TQ60
20 Chantonsbury Ring		40 Hooe Level	TQ60
<i>B Charleston Recedbed</i>		41 Horse Eye Level	TQ01
<i>C Chichester Gravel Pits</i>		42 Houghton Bridge	TQ21
<i>C Chichester Harbour</i>		43 Hurstpierpoint	
<i>C Chidham</i>		<i>R Icklesham</i>	TQ23
<i>C Church Norton</i>	TQ10	44 Lifield Mill Pond	TQ43
<i>B Chyngton Farm</i>	TQ00	45 Iping Common	
21 Cassbury Ring		46 Isle of Thorns	
22 Climping		<i>C Ivy Lake</i>	

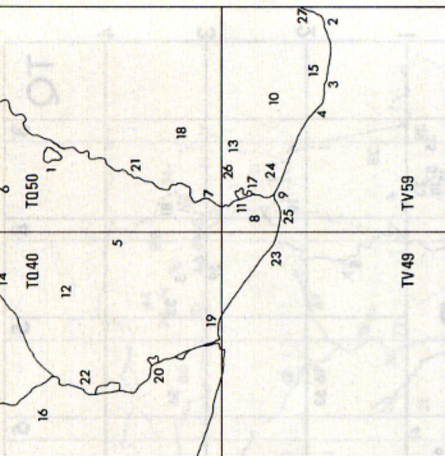


B = Beachy, C = Chichester, R = Rye area (see over)

<i>R Jury's Gap</i>	SU81	<i>R Rother (East)</i>	TQ01/SU91/92/82
47 Kingley Vale	TQ12	<i>R Rother Levels</i>	
49 Lancing	TQ60	<i>R Rye Harbour</i>	TQ23
50 Langney Point	SU91	70 St. Leonards Forest	TQ70
51 Lavington Common		71 St. Leonards (on Sea)	
<i>B Lewes Brooks</i>		<i>R Scauney Court Gravel Pit</i>	
<i>B Lower Cuckmere</i>		<i>B Seaford Head</i>	
<i>B Lullington Heath</i>	SU92	<i>C Selsey Bill</i>	
52 Lurgashall	TQ51	<i>C Severals, The</i>	
53 Maynards Green	TQ02	72 Shillingee Mill Pond	SU93
54 Mens, The		<i>C Siddlesham Ferry</i>	
<i>R Midrips</i>		73 Sompting Brooks	TQ10
<i>R Money Penny Gravel Pit</i>		<i>B Splash Point</i>	
55 Moulsecomb Wild Park	TQ30	74 Strivens Recedbed, Steyning	TQ11
56 Nap Wood	TQ53	75 Swanbourne Lake	TQ00
<i>B Newhaven Tide Mills</i>		<i>C Thorney Deepes</i>	
57 Newmarket Hill	TQ30	<i>C Thorney Island</i>	TQ23
58 Normans Bay	TQ60	76 Tilgate Forest	
<i>R Northpoint Gravel Pit</i>		<i>R Tillingham Valley</i>	
<i>C Nubourne Marsh</i>		<i>R Union Channel</i>	
59 Old Lodge Reserve	TQ42/43	77 Upper Beeding	TQ11/21
<i>C Pagham Harbour</i>		78 Wakehurst Place	TQ33
<i>C Pagham Lagoon</i>		79 Waltham Brooks	TQ01
60 Peobham	TQ70/71	80 Warnham Mill Pond/LNR	TQ13
<i>R Pett Level</i>		81 Weir Wood Reservoir	TQ33
61 Petworth Park	SU92	<i>B West Dean</i>	TQ01
62 Pevensey Bridge Level	TQ60	<i>C Westhampnett Gravel Pit</i>	
63 Pevensey Levels	TQ60/61	<i>C West Itchenor</i>	
<i>B Piddinghoe</i>		<i>C West Wittering</i>	
<i>C Pilsey Island</i>		<i>B Whitbread Hollow</i>	
64 Pippingford Park	TQ43	83 Widewater	TQ20
65 Powdermill Reservoir	TQ71/81	84 Wiggonholt Brooks/Common	TQ01
<i>C Prinsted</i>		<i>R Winchelsea Beach</i>	
66 Pulborough Brooks	TQ01	85 Woodingdean	TQ30
67 R. Adur	TQ20/10/11/21/12	86 Woods Mill	TQ21
68 R. Arun	TQ00/01/02	87 Woolbeding Common	SU82
<i>B R. Cuckmere</i>		88 Worth Forest	TQ23/33
<i>B R. Ouse</i>			

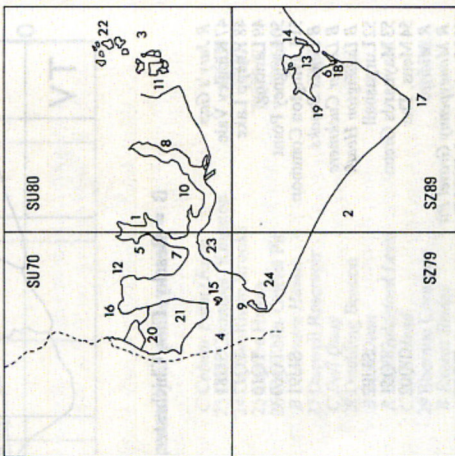
Beachy Head/Newhaven area

- 1 Arlington Reservoir
- 2 Beachy Head
- 3 Belle Tout
- 4 Birling Gap
- 5 Bostal Hill
- 6 Chalvington
- 7 Charleston Reedbed, Litlington
- 8 Chyngton Farm
- 9 Cuckmere Haven
- 10 East Dean
- 11 Exeat Bridge
- 12 Firle
- 13 Friston Forest
- 14 Glynde Levels
- 15 Hodcombe
- 16 Lewes Brooks
- 17 Lower Cuckmere
- 18 Lullington Heath
- 19 Newhaven Tide Mills
- 20 Piddinghoe
- 21 R. Cuckmere
- 22 R. Ouse
- 23 Seaford Head
- 24 Seven Sisters Country Park
- 25 Splash Point, Seaford Head
- 26 West Dean
- 27 Whitbread Hollow, Beachy Head



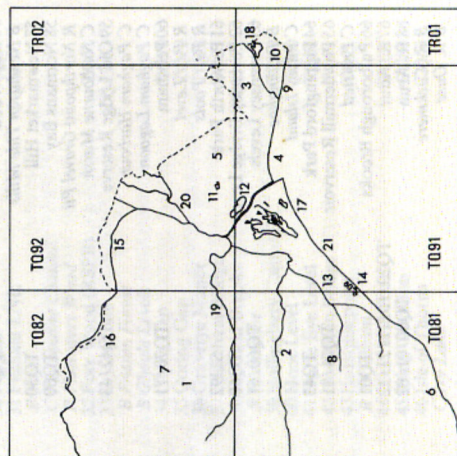
Chichester area

- 1 Bosham Channel
- 2 Bracklesham Bay
- 3 Chichester Gravel Pits
- 4 Chichester Harbour
- 5 Chidham
- 6 Church Norton
- 7 Cobnor Point/Farm
- 8 Dell Quay
- 9 East Head
- 10 Fishbourne Channel
- 11 Ivy Lake, Chichester GP
- 12 Nutbourne Marsh
- 13 Pagham Harbour
- 14 Pagham Lagoon
- 15 Pilsey Island
- 16 Prinsted
- 17 Selsey Bill
- 18 Severals, Church Norton
- 19 Sidlesham Ferry
- 20 Thorny Deep
- 21 Thorny Island
- 22 Westhampton Gravel Pit
- 23 West Itchenor
- 24 West Wittering



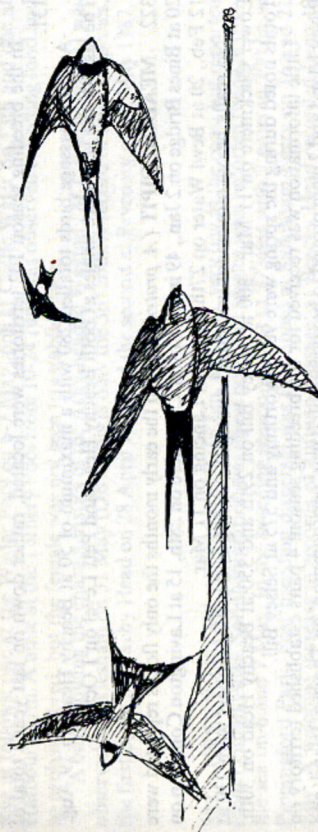
Rye area

- 1 Beckley Woods
- 2 Brede Levels
- 3 Broomhill Level
- 4 Camber Sands
- 5 East Guldeford Level
- 6 Fairlight
- 7 Flatropers Wood
- 8 Icklesham
- 9 Jury's Gap, Camber
- 10 Midrips
- 11 Money Penny Gravel Pit
- 12 Northpoint Gravel Pit
- 13 Pett Level
- 14 Pett Pools
- 15 R. Rother (East)
- 16 Rother Levels
- 17 Rye Harbour LNR/SSSI
- 18 Scone Court Gravel Pit
- 19 Tillingham Valley
- 20 Union Channel
- 21 Winchelsea Beach



314. **SWALLOW (*Hirundo rustica*)**.—First recorded on 15 Mar. with 3 at Winchelsea, followed by singles at Seaford Head on 20th and Upper Beeding on 21st. A total of 44 were recorded in March. Passage continued throughout April but no large numbers were recorded until the end of the month with 300 at Ivy Lake on 23rd and 3000 at Bewl Water on 24th. Regular observations at Worthing recorded 75 in Apr. and 611 in May.

At the Chalk Pits Museum, Houghton, 12 pairs successfully bred. In the autumn there was a small roost of 200 at Thorny Deep on 1 Aug., very low numbers, and 1800 were observed at Cuckmere Haven. The most pronounced passage was in Sept., with 3300 in 2 hours at Worthing beach on 5th, 2000 at Beachy Head on 17th, 10000 at Pulborough Brooks on 18th, 6250 E in 1 hour on 19th at Cuckmere Haven, and 10000 and 30000 at Beachy Head on 21st and 23rd respectively. Other large movements occurred on 24th with 30000 in 3 hours at Worthing beach, 3000 at Ashdown Forest and 10000 SE at Maynards Green in 2 hours. A total of about 114 were recorded in Nov., the peak count again being in the Lower Cuckmere with 53 on 12th. The last recorded were 3 at Selsey on 19th and a single at Punnett's Town on 22nd.



315. **RED-RUMPED SWALLOW (*H. daurica*)**.—One at Sidlesham Ferry on 22 Apr. (PFBu, TS) has been accepted by *British Birds* and is the 8th county record, although 5 have occurred since 1985. All have fallen between 17 Apr. and 29 May.

316. **HOUSE-MARTIN (*Delichon urbica*)**.—First recorded on 11 Mar. with 4 at Cuckmere Haven, then 3 at Hamsey on 14th, 6 in the Cuckmere on 25th and 14 at Seaford Head on 26th. There was a steady trickle of migrants during early Apr., then 83 in the Cuckmere on 15th and larger numbers throughout the county from 24-25th. Once again observers commented on the low numbers seen in spring, the peak counts being 159 in the Lower Cuckmere on 6 May, 500 at Weir Wood on 11 May and 400 at Barcombe Res. on 3 June. Regular observations at Worthing produced only 4 in April and 65 in May.

Again very little information for the breeding season was received. At Selsey 3 pairs nested in the holiday camp. At Maynards Green there was an increase of 1 pair, 23 being present of which 22 successfully raised a first brood, 14 a second with one failure. At Haywards Heath College there were 22 nests with moderate success and young were still in a nest on 22 Sept.; and at Broad Oak, Heathfield 12 nests produced 50+ young. As with Swallow autumn passage was most pronounced in Sept. with peak counts of 5700 at Seaford Head on 3rd, 7800 at Cuckmere Haven on 23rd, and 14900 in 3 hours at Worthing beach on 24th. At Beachy Head there were 1000 on 2nd, 2000 on 17th, 10000 on 21st and 3000

on 23rd. Passage was not heavy in Oct., the maximum reported being 900 at Chyngton Farm, Cuckmere on 14th. In Nov. a total of about 214 were recorded with 149 at Chyngton Farm, Cuckmere on 12th and 38 there on 19th. The last reported was a single at Shoreham on 22nd.

317. **RICHARD'S PIPIT** (*Amihus novaezeelandiae*):—One present at Pett Level on 8-9 Oct. (CHD *et al.*) was only the 7th record in the 1980s although just over 60 have been recorded in total.

318. **TAWNY PIPIT** (*A. campestris*):—A poor year with only 3 records, all in Sept. One was found at Littlehampton GC on 12th (ASC) and an adult was watched at Beachy Head also on 12th (PJW) while one was recorded at Newhaven on 23rd (EDU). The worst showing since 1984. During the 1980s 67 have been recorded, 2 in May and the rest between 16 Aug. and 5 Oct.

320. **TREE PIPIT** (*A. trivialis*):—A very early arrival, the first being at Buchan Park, Crawley on 17 Mar. (JRH), the earliest county record. A further 4 were reported before the end of the month. A small spring passage followed, with only 25 more noted, the maximum being 10 at Hollingbury GC on 23 Apr.

In the breeding season 102 territories were located, rather down on last year's total of 131.

Autumn passage birds totalled 280 with a maximum of 50 at Beachy Head on 19 Aug. The last for the year were singles at both Beachy Head and Pett Level on 1 Oct.

322. **MEADOW PIPIT** (*A. pratensis*):—In the early months the only flocks reported were 20 at Bines Bridge on 2 Jan., 49 in the Lower Cuckmere on 28th, 15 at Lavington Common on 12 Feb., 20 at Bewl Water on 27th and 25 at Lancing on 11 Mar.

No really heavy movement was noted during the spring and peak numbers were 239 at Lower Cuckmere on 11 Mar., 300 at Selsey Bill on 29th and 350 at Beachy Head on 30th. Totals noted during the spring were 98 at Worthing and 575 at Selsey Bill.

Little information was received for the breeding season: 4 pairs established territory on Pilesey Island and 2 were proved to be successful; it was 'very common' on Thorney Island; and c.18 pairs at Rye were generally successful. There was only one record from Woolbeding Common.

Heavy passage was noted during the latter part of Sept., peak counts being on 23rd with 200 at Beachy Head and 453 at Lower Cuckmere, on 24th with 1000 at Beachy Head and 150 at Hollingbury Camp, 1500 E at Pagham on 27th and 1000 at Beachy Head on 28th. In Oct., there were 1000 at Hastings on 26th. November records included 30 roosting at Hindleap, Ashdown Forest, while in Dec., 20 were feeding on mud at Weir Wood Res. and 40 were in Fishbourne Channel.

324a. **ROCK PIPIT** (*A. petrosus*):—The largest concentrations recorded were from the Lower Cuckmere Valley with 18 on 14 Jan. and 14 Oct., 12 on 22 Dec. and 11 on 2 Sept. The only other double figure count was from Pett of 10 on 7 Oct.

In the breeding season 3 young were raised from 2 broods at Cuckmere Haven. The only other breeding record received was from Peasehaven.

A bird showing the characteristics of the Scandinavian race *A.p. littoralis* was at Belle Tout on 13 May (RJJ, JP). The last confirmed record of this race was in 1984.

324b. **WATER PIPIT** (*A. spinoletta*):—In Mar. singles were at Pagham Hbr on 9th (TJE), the Crumbles on 11th (DC, JFC), Bognor on 14th (PTP, SJP) and Barcombe Res. on 17th (RDME), with 3 at Filsham LNR on 25th (RJJ). In Apr. there were 2 at Pett on 15th (CHD) and singles at Widewater on 21st (GMP) and Pett on 24th (JABG).

In the latter part of the year there were 2 at Pagham Hbr on 9 Oct. with singles there on 5 and 9 Nov. (TJE). The last was at Widewater on 28 Dec. (BFF).

325. **YELLOW WAGTAIL** (*Motacilla flava*):—First recorded at Icklesham, with one on 26 Mar., the same date as in 1988. In early Apr. further reports were from Pevensey, Lower Cuckmere and Church Norton. On 15th 12 at Lower Cuckmere and on 16th 13 at Rye Hbr were the first major falls. The 23rd and 24th produced the largest peaks for the month, with 20 on the Severals, 42 at Selsey Bill, 15 at the Crumbles, 8 at Beachy Head and 6 at Barcombe Res. on the former date, and a remarkable 100 at 14.00 and 171 by 18.00 at Bewl Water on the latter date.

In the breeding season there were 59 pairs at Rye Hbr, 4 pairs on Glynde Levels, 2 pairs at Amberley Wildbrooks, 3 pairs on Horse Eye Level, and single pairs at Lower Cuckmere and Thorney Deepes.

On 27 July there were 100 at Rye Hbr and on 6 Aug. there were 50 at Northpoint GP. There were no large numbers elsewhere but heavy passage was noted during the latter part of the month with 30 at Beachy Head on 20th, 19 at Arlington Res. on 21st, 90 at Cissbury Ring on 24th and 30 there on 28th, and 65 roosting at Thorney Deepes on 30th. The peak autumn count at the Lower Cuckmere was 143 on 2 Sept.; other counts for this month included 20 at Worthing beach on 9th, 20 at Sidlesham Ferry on 11th and 25 at South Stoke on 21st. In Oct., 13 were recorded including 3 at East Brighton GC on 18th. Only 2 were recorded in November, singles at Sumping Brooks on 2nd and at Lower Cuckmere on 3rd.

Birds showing the characteristics of the Blue-headed race (*M.f. flava*) were recorded at Rye as follows: one at the Wader Pool on 6-7 May, one at Castle Water on 13th and one at Harbour Farm. A male at the Ternery Pool from 10-24 June was observed collecting food and so probably bred, but the female was not seen to establish race.

A bird showing the characteristics of the Ashy-headed Wagtail (*M.f. cinereicapilla*) was observed at Icklesham on 31 May (DB). This is only the 3rd county record of this subspecies, the first being at Beachy Head on 28 April 1968 and the second at Pevensey on 12 May 1987.

327. **GREY WAGTAIL** (*M. cinerea*):—In Jan. and Feb. very few at the coast but reported from 17 inland sites. Spring migration was again poor, but singles were reported flying in from the sea on 6 and 7 May. In the breeding season present at 37 sites with 7 pairs in 200 ha at Pippingford Park. Post-breeding dispersal was first noted at Sidlesham Ferry on 16 and 21 July. A welcome increase in records of autumn passage: at Beachy Head recorded from 19 Aug. to 8 Oct. with a maximum of 17 on 16 Sept. At West Beach, Littlehampton, double figures were reported daily from 11-18 Sept. with a peak of 37 on 12th; 10 were at Lancing on 29 Sept. In Nov. and Dec. reported from 9 coastal and 11 inland sites.

328. **PIED WAGTAIL** (*M. alba*):—Counts for the early months included 40 at Burton Mill Pond on 14 Jan., 24 at Darwell Res. on 15th and 30 at Shoreham Hbr on 29th. In Feb. there were 46 at Rye Hbr and 36 at Bewl Water, and in Mar. 182 were roosting outside a bookshop in Eastbourne, 45 were noted at Bewl Water and 60 were at Strivens Reedbed, Steyning on 12 May.

In the autumn regular observations at Worthing during seawatches produced 1146. Elsewhere little passage was reported; 90 flying W at dusk at Shoreham on 11 Oct. could have been going to roost, and these with 86 at Seaford Head on 1st were the largest numbers recorded. Figures for Nov. and Dec. roosts produced 40 at the Steyning site and 250 at Eastbourne. Also in Dec. feeding flocks of 37 at Partridge Green SF on 6th and of 39 at Hurspierpoint were noted.

Birds showing the characteristics of the White Wagtail (*M.a. alba*) were seen on very early dates with 2 at Worthing beach on 5 Mar., singles in the Cuckmere on 11th and 12th, 7 there on 18th and one on Barnhorn Level on 19th. Later in the month singles were seen at Church Norton on 27th and Rye on 29-30th. A further 20 were seen along the coast during Apr., 10 of which were on the Crumbles.

There were few records in the autumn. Three birds considered to be of this race were seen at Worthing beach on 6 Oct., one at St Leonards on 8th, 4 in the Lower Cuckmere on 15th and finally 6 on West Beach, Littlehampton on 27 Nov.

331. **WREN** (*Troglodytes troglodytes*):—At Old Lodge Reserve, Ashdown, 71 were counted on 19 Jan. Counts at Darwell Res. produced 8 in Jan., 30 in Mar. and 19 in Nov. At Friars Gate 17 were counted on a 5 km walk through wood and heathland on 27 Mar.

336. **ROBIN** (*Erithacus rubecula*):—Peak counts at Darwell Res. were 19 on 12 Feb., 24 on 17 Sept. and 32 in Nov., whilst at Whitbread Hollow, Beachy Head the highest autumn total was 50, well down on 1989. At Friars Gate 39 were counted on a 5 km walk through wood and heathland on 27 Mar.

338. **NIGHTINGALE** (*Luscinia megarhynchos*):—The first was recorded at Lullington Heath on 12 Apr. followed by 3 at Woods Mill on 13th, 1 at Church Norton on 15th and 3 at Ashcombe Bottom on 17th. By the end of Apr. at least 22 individuals had been recorded. As usual most records were in May and early June when 124 singing males were noted from 52 different sites; the highest concentrations were at Bewl Water where 11 were noted on the south side on 25 May, and at Ashcombe Bottom near Lewes where there were 10 pairs despite the habitat being described as less suitable for this species.

Single birds were recorded in Aug. at West Chiltington, Langney Point, Hollingbury Camp and Cissbury Ring but most of the autumn records were, as usual, from Whitbread Hollow where during an 'average' year the maximum on a day was 4 and the last was recorded on 17 Sept.

342. **BLACK REDSTART** (*Phoenicurus ochruros*):—A below-average showing in spring was followed by the poorest autumn since 1983, the approximate monthly totals, excluding breeding birds, being:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	1	21	24	1	1	1	2	2	25	26	1

During Jan. singles were reported from Normans Bay (on 3 dates), Widewater and Selsey with up to 3 at Southwick Power Station/Shoreham Hbr in mid-month, but only 1 there to early March. One at Cuckmere Haven on 4 Mar. was probably a migrant, while 4 there and singles at Rye Hbr and Beachy Head on 11th certainly were. Scattered individuals were recorded, mainly from along the coast from 15 Mar., with 2 at Church Norton from 19-22nd, 2 near Crawley from 25th to 19 Apr. and 2 at Beachy Head on 29-30 Mar. Only 7 were recorded during the first half of Apr., 3 in Cuckmere Valley (2 on 1st), 1 at Bewl Water on 8th and 3 at Beachy Head (2 on 14th). All subsequent spring records were coastal, with peaks of 3 at Paghham Hbr on 22nd and 2 at Selsey Bill on 24th, the last migrants being seen at Selsey Bill on 2 May and Beachy Head on 30 May.

One pair was reported during the breeding season at a site in the east of the county. At this site song and display were noted from 20 Apr.; 2 recently fledged young were watched being fed on 9 June with intermittent song heard until 8 July. A young bird at Church Norton on 25 June was thought unlikely to have come far.

Returning birds were recorded at Cuckmere Haven (2) on 23 Sept., Hollingbury GC from 24-26th, Seaford Head on 1st Oct. and Church Norton (2) on 2nd. Three at Church Norton on 11 Oct. had risen to 5 on 15th, but none were reported elsewhere before singles at Worthing on 23rd and Ashcombe Farm on 25 Oct. On this date 5 were again recorded at Church Norton but only 2 were seen on 26th, while 2 were recorded at Birling Gap on 27th, 2 at Selsey Bill from 27 Oct. to 6 Nov. and 2 at Rye Hbr on 31 Oct. All subsequent records were of singles along the coast (mainly in the West), those at Lewes and Boxgrove on 3 Nov. and 2 at Climping on 5-6th being exceptions. Last of the year were 2 at Church Norton on 20 Nov. and singles at Worthing beach on 21st, Selsey Bill on 26th and Goring Gap on 18 Dec.

343. **REDSTART** (*P. phoenicurus*):—First recorded on 29 Mar. in the Cuckmere Valley, with another at Church Norton on 31st. An early and much larger spring passage than usual, with 149 recorded up to 6 May, including 88 during 23-25 Apr.

During the breeding season 56 singing males were located (72 in 1988).

A total of 232 were reported in autumn, with a maximum of 17 at Beachy Head on 14 Sept. The last for the year was at Pett Level on 29 Nov. (JABG), the latest county record by a day (28 Nov. 1980).

344. **WHINCHAT** (*Saxicola rubetra*):—A good spring was followed by an average autumn, the approximate monthly totals being:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
—	—	—	1	20	67	2	16	170	360	20	2

First recorded on 24 Mar. at Cuckmere Haven, the earliest county record since 1968, with 1 near there on 8 Apr. and 4 on 22nd. Singles were also seen at Paghham Hbr on 18th and Langney Point on 20th. A more widespread arrival was evident from 24 Apr. when individuals were reported from 5 localities including Weir Wood Res. and Newmarket Hill. Good numbers were seen in the first half of May with 4 at Church Norton on 1st and 15 reported on 6th including 4 at Sidlesham Ferry and 5 at Selsey Bill. Other peaks were 5 at Rye Hbr and 3 at Hollingbury Camp on 9th and 5 at Beachy Head on 14th but only 6 singles were seen between then and 22 May. Last of the spring were 2 in Cuckmere Valley on 28 May and singles at Castle Hill on 1 June and the Cuckmere on 10th.

Returning birds were recorded from 11 July, at Rewell Wood, with singles at Paghham Hbr on 14th, Rye Hbr on 17th and Thorney Deepes on 18 July. Records were thinly scattered throughout much of Aug., with 7 at Upper Adur Levels on 21st the highest count. The main arrival of the autumn occurred during the period 27 Aug.-2 Sept. with at least 150 reported, including 12 at Wiggoholt Brooks on 27 Aug., 12 at Cissbury Ring on 28th, 9 at Bullock Hill on 1 Sept. and 35 at Beachy Head and 18 in the Cuckmere on 2nd. The species was much in evidence throughout Sept., a total of 110 passing through Icklesham (where 77 were trapped in the autumn), more notable records in this period being 17 at Cuckmere Haven on 10th, 15 at Hollingbury Camp on 13th, 25 at Beachy Head on 14th, 9 at Bewl Water on 18th, 4 at Camp Hill on 19th and 10 at Climping on 24th. Numbers dropped considerably from the last week of Sept. with only ones and twos reported. Only 6 were seen in the second half of Oct., the last records being at Littlehampton GC on 30 Oct., Lower Cuckmere Valley on 3 Nov. and Widewater on 5 Nov.

345. **STONECHAT** (*S. torquata*):—The status of this species continues to improve, with 64 reported in Jan., 26 in Feb. and 32 in Mar.

A total of 39 pairs were reported during the breeding season (32 in 1988), of which 24 were in Ashdown Forest.

In autumn 130 were recorded, the maximum being 32 at Beachy Head on 5 Oct. Reports for the end of the year totalled 33 in Nov. but only 8 in Dec.

346. **WHEATEAR** (*Oenanthe oenanthe*):—One on Worthing beach and another at Cuckmere Haven on 6 Mar. were the first arrivals, slightly earlier than usual, but on the same date as in 1988. Another was seen on Worthing beach on 9th and, not to be outdone, at Cuckmere Haven on 10th. A widespread arrival was noted on 11th with 26 seen at 11 localities including 6 at Selsey Bill, 5 at Church Norton, 3 at Cuckmere Haven, 4 at Langney Point and 1 as far inland as Bewl Water. Only 14 were reported on 12 Mar. and, apart from 7 at Sidlesham Ferry on 19th, 15 at Newhaven Tidemills on 20th and 12 at Langney Point on 23rd, few were seen before the next arrival in late March. Counts of 15 at Selsey Bill and 8 at Littlehampton GC on 27th and 19 around Shoreham Airport and 11 at Beachy Head on 30th were unexceptional but the only concentrations before mid-April. The peak spring counts were 19 at Beachy Head on 23 Apr., 35 at Selsey Bill and 39 at Climping/Littlehampton GC on 24th, 42 at Thorney on 25th and 20 at Castle Hill on 26th. Many other localities had their peak counts at about this time including 10 at Worthing and 11 at Bewl Water. Few birds lingered and only 13 were seen on passage after the first week of May, including 5 at Cuckmere Haven on 13th and singles at Thorney on 20th, Faygate on 21st, Littlehampton on 3 June and Church Norton on 8th.

During the breeding season 9-11 pairs bred, mainly in ground boxes, at Rye Hbr, slightly fewer than in 1988, with unknown success. No other breeding season reports were received. One was recorded at Cuckmere Haven on 1 July with singles at Pevensey Bridge Level and Pilsey on 17th. Nine were seen in late July but, apart from 12 at Beachy Head on 6 Aug. and 20 at Thorney on 20th, only 4 individuals were reported away from Rye before 28th. The largest movements of an unexceptional autumn involved 76 at Goring Gap, 45 at Cuckmere Haven and 35 at Beachy Head on 28 Aug. and 21 at Pagham Hbr and 25 on Bullock Hill on 29th. Notable records in Sept. included 25 at Beachy Head on 1st, 24 on a Newhaven School field on 11th, 23 at Littlehampton GC on 14th, with 48 there on 18th but only 10 on 21st, and 20 at nearby Climping on 24th. One at Broad Oak on 25th was the first to be recorded there for 3 years. Small numbers were widespread in Oct., all along the coast and adjacent downland, with a total of about 75 individuals reported with peaks of 15 at Beachy Head and 11 at Worthing beach on 8th, 4 at Church Norton on 27th and a late concentration of 7 at Littlehampton GC on 31st. Twelve were recorded in Nov., the last being at Camber Castle and Littlehampton GC on 11th, Rye Hbr on 12th and Church Norton from 7-13 Nov. A typical latest date, in 5 of the last 6 years this has fallen between 11-15 Nov.

349. **DESERT WHEATEAR** (*O. deserti*):—Probably the highlight of the year, a female/first-winter found at Selsey Bill on 1 Nov. remained to 6th (CMJ, BJ *et al.*), much to the delight of many. It has been accepted by *British Birds*, is the third county record and the first since 1966. Coincidentally the first was also at Selsey Bill, from 28 Oct. to 8 Nov. 1960.

359. **RING OUZEL** (*Turdus torquatus*):—Slightly more were recorded during a very good spring than in a quiet autumn. Approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
—	—	—	—	9	5	1	—	5	—	47	11
—	—	—	—	52	5	—	—	—	—	—	—

First recorded at Selsey Bill on 26 Mar. with 1 at Church Norton on 28th and 7 at Cold Coombes, near Lewes on 29th. From 2-10 birds were then present daily to 28 Apr. in the Cold Coombes-Castle Hill-Newmarket Hill area, with peaks of 3 at Cold Coombes and 7 at Castle Hill on 7th and 4-5 at Castle/Newmarket Hill from 25-28th. Elsewhere in April 7 were seen at Cliff End, Cuckmere Haven and 5 at Beachy Head on 22nd, 2 at Poverty Bottom, Newhaven on 25th and singles at Littlehampton GC on 17th, Sharpthorne and Pett Level on 25th and Bognor GC on 29th. In May singles were present at Castle Hill on 1st and 10th, while 3 were seen at Bostal Hill on 7th. One seen at Littlehampton GC on 1 June is only the second record for that month.

First of the autumn was recorded at Littlehampton GC on 2 Sept. followed by singles at Cold Coombes on 17th, Church Norton on 24th and Beachy Head on 24 and 30 Sept. In Oct. scattered ones and twos were recorded, mainly on the Downs between Brighton and Beachy Head, with 3 at Hollingbury Camp on 2nd, 12 in Lower Cuckmere on 15th, 4 on East Brighton GC on 19th, 3 at Beachy Head on 25th and 2 at Littlehampton GC on 30th. November records were mainly coastal with 2 at Cold Coombes on 3rd, singles at Rye Hbr, Worthing, Littlehampton GC and Church Norton from 2nd to 11th and 5 at Beachy Head on 5th, 2 of which remained to 12 Nov.

A review of Ring Ouzel migration through Sussex is presented on pages 87-92.

360. **BLACKBIRD** (*T. merula*):—At Pagham Hbr 250-300 were present on 2 Feb., at Darwell Res. 24 were counted on 12th, and at Friars Gate 23 were counted on a 5 km walk in wood and heathland on 27 Mar. At Lewes adults were feeding fully grown young on 3 Apr. In the autumn the maxima were 40 at Whitbread Hollow on 1 Nov., where they ringed the smallest number ever, 51 at Lower Cuckmere on 3rd and 35 at Darwell Res. on 12th.

364. **FIELDFARE** (*T. pilaris*):—Several large flocks were noted in Jan., including 110 at Icklesham on 1st, 250 at Bines Bridge on 2nd, 300 at Hailsham on 8th, 110 at Streele Farm, Billingshurst on 14th, 200 at Cattlestone Farm, West Chiltington on 18th and 250 at Greatham on 28th. The maximum counts during the first winter period were 400 at Arundel

Park on 12 Mar. and 650 at Stapleash Farm, Chilgrove on 25th. The last records for the spring were of a single at Selsey, 4 at Pagham and 40 at Beachy Head, all on 1 May.

The first recorded for the autumn was a single at Lower Cuckmere on 16 Sept. At Seaford Head there were 62 on 1 Oct., but large numbers were not noted until Nov. when 238 were at Chyngton Farm, Cuckmere on 6th and 300 at Wiggonholt Common on 26th, although many flocks of 100+ were recorded elsewhere. In Dec., 200 at Amberley Wildbrooks on 13th, 200 on Manxey Levels on 17th, 350 roosting in long grass at Pulborough Brooks on 23rd, 1000 on Pevensey Levels on 24th, 500 at Greatham Bridge on 28th, 500 at Herstmonceux Castle on 29th and 200 at Bewl Water on 31st were the maximum counts received.

365. **SONG THRUSH** (*T. philomelos*):—At the beginning of the year 50 were recorded at Pagham Hbr. In the autumn good passage was noted at Ashcombe Bottom with 50 seen on many days. At Seaford Head 49 were observed with other thrushes and finches on 1 Oct. and in Whitbread Hollow the peak count was of 45 on 14th, more than in 1987 or 1988. Elsewhere there were 25 at Darwell Res. on 15 Oct.

366. **REDWING** (*T. iliacus*):—An even poorer year than 1988 and 1987. There were no large concentrations recorded during Jan-Mar., the biggest flock being 175 at Chyngton Farm, Cuckmere on 11 Mar., declining to 89 by the 18th. Only 7 other localities recorded flocks of 20+ and none more than 60. At Ashcombe Bottom, a traditional roost, the highest number recorded was 31.

In the autumn 3 at Charleston Reedbed, 4 in the Lower Cuckmere and 3 at Shoreham Sanctuary, all on 30 Sept., were followed by 40 at Seaford Head on 1 Oct. Numbers continued to be low with peak counts of 200 at Weir Wood Res. on 5 Nov., 100 at Upper Beeding on 17th and 250 at Wiggonholt Common on 26th. December was not much better, but 1000 on Pevensey Levels on 24th, 500 at Wiggonholt Brooks on 28th and 350 at Cattlestone Farm, West Chiltington were encouraging.

367. **MISTLE THRUSH** (*T. viscivorus*):—The only notable flocks were a mere 15 on Newmarket Hill on 3 Aug., 37 in the Lower Cuckmere on 28th, 75 at Old Lodge Reserve, Ashdown on 1 Oct. and 14 at Exceat Bridge on 18 Nov.

369. **CETTIS WARBLER** (*Cettia cetti*):—At one regular wintering site a bird was recorded on one day in Jan. only. At another, 1 was recorded on 15 Jan. and remained until 27 Mar.; a single was also recorded here on 18 Apr. At a third site a singing male was present from 19 Mar. and throughout the breeding season. It bred with two females, the first being seen with 3 juveniles on 25 June. The second, ringed, female was also seen with 3 young on 31 July and last seen on 12 Aug. These are the first breeding records in the county since 1975.

In Aug., 1 bird was present in East Sussex and in Sept. 2 at another site in the East with a single in the West. Only 1 bird was recorded in Oct., at a fourth site, with 3 there in Nov. The breeding site also had a single bird in Nov.

373. **GRASSHOPPER WARBLER** (*Locustella naevia*):—First recorded on 13 Apr. at Thorney Island and Beachy Head. A further 19 were noted on spring passage.

During the breeding season 31 territories were located (24 in 1988), including 8 at Verdley Wood, Fernhurst, 5 at Thorney Deeps and 4 at Lullington Heath.

In autumn a total of 168 were recorded, of which a remarkable 140 were ringed at Icklesham. This included the last of the year on 6 Oct.

375. **SAVYS WARBLER** (*L. luscinoides*):—1988:—One was trapped at Icklesham on 23 Oct. and stayed until 25th (SJRR). This has been accepted by *British Birds* as the nominate race, not the eastern race *fuscus* as was first thought.

1989:—One was found in bushes adjoining Adur Recreation Ground on 6 Sept. (R.J.F.). The 1988 and 1989 records are the first migrants recorded since 1980 and only the 6th and 7th in all.

377. **AQUATIC WARBLER** (*Acrocephalus paludicola*):—On 13 Sept. one was found at Beachy Head (PJW *et al.*), and another was trapped at Icklesham on 25 Sept. (DB, DJP, JW). Seventeen were recorded during the 1980s, split evenly between Aug. and Sept. The county total moves to 52.

378. **SEDGE WARBLER** (*A. schoenobaenus*):—The earliest arrival since 1981 with singles on 29 Mar. at Rye Hbr and Pagham Hbr and on 30th at Thorney Deepes. By 31st there were 6 at Pagham Hbr.

Breeding counts were received from Rye Hbr where there were 76 pairs (22 in 1986, 34 in 1987), suggesting a significant increase, and from Thorney Deepes with 60 pairs (71-73 pairs in 1988).

The only autumn concentration reported was at least 50 at Whitbread Hollow on 28 Aug., with 30 there on 1 Sept. and 20 at Beachy Head on 14 Sept. At Whitbread Hollow 58 were ringed, the highest total since 1977. The year's ringing total at Icklesham was an astonishing 3983.

The last were on 14 Oct. at Icklesham and on the very late date of 26 Oct. in the Upper Cuckmere Valley. The latest for the county was on 29 Oct. 1961.

381. **MARSH WARBLER** (*A. palustris*):—The only record was of a singing bird at one site from 29 May until at least 3 June.

382. **REED WARBLER** (*A. scirpaceus*):—First recorded on the rather late date of 22 Apr. at Rye Hbr, only 3 other sites having Apr. records.

Some significant breeding season records were received including 82 pairs at Thorney Deepes, very similar to 1988 and well up on 1987. At Rye Hbr some 150 pairs were estimated, approaching double the 1986/1987 Society survey total. At Weir Wood Res. one pair nested in reed canary-grass (*Phalaris arundinacea*) and at Rye Hbr some in oilseed rape (*Brassica napus*) instead of the more usual common reed (*Phragmites australis*).

The first autumn concentration was 15 on 21 Aug. at West Beach, Littlehampton, with 40 at Whitbread Hollow on 1 and 20 Sept. and 45 on 19th, where 10 on 24th was the unusually early last record. The only Oct. records were on the 1st and 2nd at Warnham Mill Pond, 4th at Shoreham Sanctuary, 10th at Rye Hbr and finally on the 27th at Icklesham.

At Whitbread Hollow during the autumn 133 were trapped, the highest total since 1980. This pales into insignificance compared with the year's ringing total at Icklesham of 3576!

383. **GREAT REED WARBLER** (*A. arundinaceus*):—A singing male at Thorney Deepes on 19 May (CBC) has been accepted by *British Birds*.

387. **ICTERINE WARBLER** (*Hippolais icterina*):—1988:—One was trapped at Charleston Reedbed on 18 Sept. (TWP *et al.*).

1989:—One was reported from Hodcombe, Beachy Head on 23 May (RHC), and another from Harwoods Lane, East Grinstead on 19 Aug. (CFB, NAD, DS), the former being the 4th spring record and the latter being only the 2nd away from the coast. Ten of the 24 county records have been in the 1980s; the first record was as recently as 1965.

388. **MELODIUS WARBLER** (*H. polyglotta*):—One at Beachy Head on 3 Sept. (DC, DRC, JFC, TEC). A typical record. Fifteen have been recorded in the 1980s and 20 previously, nearly half the total being at this locality and nearly half in Sept.

389. **DARTFORD WARBLER** (*Sylvia undata*):—At the beginning of the year birds were observed at Pagham Hbr from 1 Jan. to 10 Feb., and the 2 wintering at Thorney Island remained until 20 Feb. Singles were observed at West Wittering on 17 Mar. (PCa) and Littlehampton GC on 29th (RJLK).

In the breeding season birds were present at 4 sites and breeding was proved at all of them, a welcome return of this species to the county.

At the end of the year there were singles at Climping on 1 Oct. (RJLK), at Pagham Hbr from 4-10 Oct. and from 6 Nov. until 3 Dec. (mo), at Beachy Head on 13 Oct. (PJW), at Thorney Island on 10 Nov. and seen intermittently until 26 Dec. (CBC), and at Littlehampton GC on 23 Nov. (ASC).

396. **BARRED WARBLER** (*S. nisoria*):—A good year with 3 records. An obliging individual was found at Whitbread Hollow, Beachy Head on 23 Sept. (DC, DRC, JFC) while others were trapped at Icklesham on 28 Sept. (DB, DJP, JW) and at Hodcombe, Beachy Head on 12 Oct. (RHC). A total of 32 have now been recorded in the county, of which 24 have been at Beachy Head, 26 in Sept. and 13 during the 1980s.

397. **LESSER WHITETHROAT** (*S. curruca*):—The first on 4 Apr. at Moulsecoomb Wild Park was the earliest ever recorded in the county (previously the 7th), and 1 in the Lower Cuckmere on the 9th was also very early. Rather more usual were 2 at Beachy Head and 1 at Bewl Water on the 16th, with 5 at Thorney Deepes and 1 at Pett Level on 17th.

A more general arrival took place from 21st onwards with 10 at Beachy Head on 22nd and 35 there on 27th.

Information on breeding gives no clear pattern. At Rye Hbr 3 pairs bred after none had bred for 3 years, while at Thorney Deepes only 6 pairs bred where there were 10 in 1988; birds were said to be 'scarce' in the Midhurst area.

However, autumn totals were good with 75 at Whitbread Hollow on 10 Aug., 100 at Beachy Head on 20th and 26th and 50 at Pagham Hbr on 24th. There were 50 in Whitbread Hollow on each of the first 3 days in Sept. and 40+ at Rye Hbr on 13th. From then on the number of reports decreased rapidly, although on 24th there were 11 at Rye Hbr and 15 at Whitbread Hollow where the 160 ringed was the highest autumn total since 1977. Five were recorded on 4 dates in Oct., the last being in the Lower Cuckmere on 15th.

398. **WHITETHROAT** (*S. communis*):—One on 24 Mar. at the Crumbles was exceptionally early (earliest county record, 19 Mar. 1966) as was 1 on 3 Apr. in the Lower Cuckmere Valley with 3 there and 1 at Beachy Head on 9 Apr. A hundred at Beachy Head on 27 Apr. may be an unprecedented count for spring, at least since the 1969 population crash. Less unusual were 15 at Selsey Bill on 24 Apr., 18 in the Lower Cuckmere Valley on 29 Apr. and 11 at Pagham Hbr on 1 May.

Breeding season counts included 27 pairs at Rye Hbr (16 in 1988), 17 pairs at Thorney Deepes (19 in 1988) and 15 pairs in the Lower Cuckmere Valley.

As usual the highest autumn numbers were recorded at Beachy Head with 45 in Whitbread Hollow on 29 July, 75 there on 3 Aug., 300 on 18 and 19 Aug. and 100 on 1 Sept. Meanwhile 60 were at West Beach, Littlehampton on 20 Aug. At Whitbread Hollow 394 were ringed, the highest autumn total since 1977. The only Oct. records were of 2 in the Lower Cuckmere Valley and 1 at Cissbury Ring on 7th.

399. **GARDEN WARBLER** (*S. borin*):—The earliest reports were of singles on 9 Apr. at Pagham Hbr and Lower Cuckmere Valley and on 14 Apr. at Sompting Brooks. Few others arrived before the end of the month, 6 at Bewl Water on 1 May being the largest count.

In the breeding season there were 2-3 pairs in the Wood at Rye Hbr and 15 on the 7 km from Balcombe to Ardingly.

Autumn emigration was again early, as in the last 2 years, with by far the largest numbers recorded at Whitbread Hollow — 120 on 5 Aug. and 110 on the following day, 100 on both 10th and 19th, 80 on 1-2 Sept. and 20 on 24th; 317 were ringed there, the best autumn total ever. The last in the county was on 1 Oct., again at Whitbread Hollow.

400. **BLACKCAP** (*S. atricapilla*):—Wintering numbers were again very small with only 5 in Jan. — at Horsham, Seaford, Worthing (2) and Hursipierpoint — and an additional bird at Winchelsea Beach in Feb. One on 6 Mar. at Burgess Hill had probably wintered but 1 on 21

Mar. at Pett Level was more likely to be the first spring migrant. The only records in double figures were on 27 Apr. with 12 at Climping and 50 at Beachy Head.

In the breeding season there were 16 on the 7 km from Balcombe to Ardingly (cf. Garden Warbler).

Autumn passage became evident on 29 Aug. with 23 ringed at Cissbury Ring, but as usual the large numbers were estimated at Whitbread Hollow with 300 on 1 Sept. and 200 the following day, 350 on 14th, 250 on 19-20th, 500 on 24th (when 112 were ringed), and 200 on 30th and on 1 and 8 Oct. Other sites with good numbers were Hollingbury Camp with 80 on 14 Sept. and Cissbury Ring with 36 trapped on 16 Sept. and 33 trapped on 30 Sept. At Whitbread Hollow the autumn ringing total of 849 was the highest since 1980. Single birds were recorded at 7 sites in Nov. with 2 at Paghams Hbr on 1st and 3 at Whitbread Hollow on 7th. In Dec. singles were at Runcton and Fairlight with 2 each at Worthing and Horsham.

404. **YELLOW-BROWED WARBLER** (*Phylloscopus inornatus*):—One was reported from Beachy Head on 27 Sept. (CFW), while others were seen at Charleston Reedbed on 18 Oct. (GCG), Belle Tout, Beachy Head on 3 Nov. (NJT) and Aldwick, Bognor Regis on 5 Nov. (DH, JH, CRJ). These take the county total to 50, of which 33 have been during the 1980s.

408. **WOOD WARBLER** (*P. sibilatrix*):—Only 6 were noted on spring passage, the first being at Selsey on 21 Apr. Breeding season records totalled 16 (17 in 1988). More than usual were recorded in the autumn, with 16 between 1 Aug. and 10 Sept. when the last was seen at Brighton.

409. **CHIFFCHAFF** (*P. collybita*):—Wintering birds in Jan. and Feb. numbered 17 at 15 sites, many more than in early 1988 but only half the number in early 1987. But what does one make of 5 at Sidlesham Mill Pond on 1 Mar.: very early migrants or perhaps birds that had been wintering farther west? Certainly not many were recorded in early Mar. but on 11th records were received from over 20 localities, including 15 at Beachy Head and 18 in Lower Cuckmere Valley, the first major spring movement. There was a steady arrival throughout Mar., the maximum reported being 46 at Beachy Head on 30th. Not many records were received in Apr. although migration continued through the month with 10 at Selsey Bill on the 24th.

Insufficient breeding counts were received to give a clear picture of trends. On the 7 km between Balcombe and Ardingly 13 were counted.

Although this species does not normally begin its migration early, 1 on 23 July that landed on a boat 11 km south of Brighton was obviously moving. It spent an hour catching insects blown past!

The first significant autumn movements were on 2 Sept. with 18 at Shoreham Sanctuary and 100 at Whitbread Hollow. Some substantial numbers occurred later in Sept. with 100 + at Rye Hbr on 13th, 200 in Whitbread Hollow on 14th (when there were 700 on Beachy Head as a whole) and 19th, and 400 there on 23rd. A very large fall occurred at Beachy Head on 24th when 750 were estimated (with 147 ringed) in Whitbread Hollow, 100 within Horseshoe Plantation, Belle Tout and 2000 estimated for the Head as a whole. At West Beach, Littlehampton on the same date there were 120. On 28th there were 200 at Beachy Head; thereafter numbers declined rapidly. In Nov., 19 were recorded at 14 sites and in Dec., 11 at 4 sites including 4 together at Ifield Mill Pond on 26th.

410. **WILLOW WARBLER** (*P. trochilus*):—An exceptionally early arrival was signalled by the first on 14 Mar., trapped at Icklesham, followed by 1 near Arundel on 17th and 2 in the Lower Cuckmere Valley on 19th. On 20th 1 was singing in Horsham and another was in Lewes on 25th. On 26th birds were at 6 sites and on 27th no fewer than 10 were at Cissbury Ring. There was a wide scatter of birds throughout the county in the next few days with 10 in song at Arlington Res. on 29th and 22 at Beachy Head on 30th. After this early burst, arrivals slowed down considerably, with no sites recording double figures until 15 Apr. except Bewl Water.

Major arrivals took place from 19th onwards when there were 120 at Paghams Hbr with 100 there on 20th; on 23rd 125 were at Beachy Head. The following day 150 were at Selsey Bill with the same number at Beachy Head on 27th.

Despite the large numbers seen in spring, the records received did not suggest a particularly successful breeding season and the autumn migration was generally poor with low numbers, in marked contrast to the other warblers. Indeed at Whitbread Hollow the ringing total was the lowest since 1983. The largest autumn gatherings were 400 at this site on 29 July, 350 at Old Lodge, Ashdown Forest on 8 Aug., 100 at Climping on 19 Aug. and 80 and 100 at Beachy Head on 28 and 31 Aug. respectively. Very few birds were seen in Sept., with 14 in the Lower Cuckmere Valley on 3rd and 12 on 23rd the only double-figure records. Singles at 6 sites were recorded up to 7 Oct.

411. **GOLDCREST** (*Regulus regulus*):—Reports of good numbers in Jan. included 25 at Old Lodge, Ashdown Forest and 35 in the 7 km from Greattham to Wiggonholt. A reasonable spring passage produced 10 or more at 3 sites in Mar. in addition to 20 at Beachy Head and 46 in the Lower Cuckmere Valley on 11th and 24 at Hollingbury Camp on 20th.

Almost no breeding information was received, though success must have been high and an excellent autumn passage was witnessed as in 1988. The major movements started in late Sept. with 28 at Moulsecroomb Wild Park, 60 at West Beach, Littlehampton, 100 at Beachy Head and 19 trapped at Cissbury Ring, all on 24th. The following day 30 were at Littlehampton GC, on 26th 80 at Hollingbury Camp, and on 28th 50 at Belle Tout. On 30th over 20 were recorded at Rye Hbr, Cliff End (Pett), Wild Park (Moulsecroomb) and Goring Wood; at Cissbury Ring no fewer than 95 were trapped and an astonishing 1000 thought to be in the general area. High numbers continued throughout Oct. with 63 at Seaford Head on 1st, 100 at Beachy Head on 5th, 70 in Whitbread Hollow on 7th and 60 there on 14th. At Cissbury Ring 27 were trapped on 11 and 14 Oct. with 25 on 24th. Good numbers continued in Nov. with up to 30 at Rye Hbr from 1st to 3rd and 95 at Beachy Head also on 1st. Much smaller numbers were reported for the rest of the year except for 48 at Old Lodge, Ashdown Forest on 10 Dec.



412. **FIRECREST** (*R. ignicapillus*):—A good spring was followed by an average showing in autumn, the approximate monthly totals, away from breeding areas, being:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2	36	5	—	—	—	—	34	39	39	3

One was seen erratically at Church Norton in Jan. and early Feb. with 1 at Crowborough on 12 Feb. Singles at Cliff End, Cuckmere Haven on 4 Mar. and at Church Norton from 4-11th (with 2 on 9th) were probably early migrants and were followed by singles at Rye Hbr on 9th, Hollingbury Camp, Newhaven, Cuckmere Haven, Beachy Head and Pett Level on 11th

and 5 at Beachy Head on 12th. Singles were recorded from 19-31 Mar., with 5 at the Severals on 29th, while those recorded away from the coast were seen at Lullington Heath on 20th, Newmarket Hill and Hassocks on 25th, Bewl Water and Glynde Levels on 26th, Icklesham on 27th and Shoreham Airport on 30th. The last passage birds seen were at Woods Mill on 16 Apr., Arundel from 23-26th, Beachy Head on 24th, Rye Hbr on 28th and Cissbury Ring on 3 May.

Between late May and mid Aug. reports were received of 4 individuals in potential breeding habitat but only 1 of these was recorded on more than one date.

Autumn passage commenced in early Sept. with 3 at Beachy Head on 4th followed by singles at Newhaven and Church Norton on 7th, Hollingbury Camp on 8th with 2 there, 5 at Beachy Head and 1 at Climping on 9th. Beachy Head was, as usual, the most regular locality for the species throughout the autumn, 7 of a further 20 reported in Sept. being there. Others of note in this period were singles at Icklesham on 11 Sept., Hurstpierpoint on 12-13th, Chalvington on 17th, West Dean on 24th and Marley Common on 25th. Records were slightly more numerous in Oct., with 4 at Beachy Head, 2 at Hollingbury Camp, 2 at Littlehampton GC and 2 at Pagham Hbr on 7th and singles at Ardingly Res. on 8th and in Brighton on 9th. Only 6 were then seen up to 22nd including 1 in Lewes on 18th. One or 2 were seen at Beachy Head and Pagham Hbr between 22-29th while 2 were recorded at Cissbury on 24th and 1 at Littlehampton GC from 24-31st. On 1 Nov one was seen in Haywards Heath and 7 were present across Beachy Head with 4 there on 5th, 5 on 7th and 2 on 12th. Elsewhere 5 were seen at Hollingbury Camp on 5th, 2 at Storrington on 7th, 5 at the Severals on 11th and 2 at Church Norton on 13th. Elsewhere in Nov. singles were recorded from Rye Hbr on 4th and 29th, Icklesham on 5th, Money Penny GP on 11th, Runcton on 19th and Pett Level on 25th. At the end of the year 1 was recorded at Lewes on 2 Dec., while singles in Stanmer Park (from 29 Nov.) and at Church Norton/Severals were seen intermittently in Dec. and into 1990.

413. **SPOTTED FLYCATCHER** (*Muscicapa striata*):—First recorded on 9 May at Church Norton, followed by another there on 13th and also at Belle Tout, Beachy Head on the same date. More arrived on 14th with 6 being seen at Beachy Head. Very few breeding data were received.

Autumn passage began with 1 at Bewl Water on 9 Aug. and 10 at Church Norton on 21st. Passage was heaviest in Sept. with maximum counts of 20 at Belle Tout, Beachy Head on 1st, 20 at Bognor GC on 2nd, 40 at Cissbury Ring on 3rd, 30 at Beachy Head on 24th and 26 at Hollingbury Camp on 25th. A total of 16 were recorded in Oct., 11 of which were in the Lower Cuckmere on 1st, the last being 2 at Winchelsea on 7th.

414. **RED-BREASTED FLYCATCHER** (*Ficedula parva*):—Individuals were trapped at Icklesham on 21 Sept. (DB, DJP, JW) and Hodcombe, Beachy Head on 29 Sept. (RHC) while at Belle Tout, Beachy Head one was present on 7-8 Oct. (DC, JFC, TWP *et al.*). Only in 1968 have as many been seen in a single autumn. The county total moves to 19 of which 8 have been during the 1980s. The Icklesham individual is the first to be recorded east of Langney Point.

416. **PIED FLYCATCHER** (*F. hypoleuca*):—Recorded in very similar numbers to 1988, a good spring followed by a poor autumn. The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
			18	4					12	33	1

First recorded on 14 Apr. at Church Norton, the earliest arrival since 1981, closely followed by 1 at Ashcombe Farm, Lewes on 15th. On 20th 1 was seen at Beachy Head and 3 in the Pagham area where there was a further 3 on 23rd. Between 24 Apr. and 1 May scattered singles were recorded, around Pagham Hbr on 4 dates, Woodingdean on 24th, Balsdean on 24-25th, Littlehampton GC on 27th and 1 May, Eastbourne on 29th and Beachy Head and Kingley Vale on 30th. Last migrants were at Hollingbury Camp on 5 May and Beachy Head on 10th.

One seen at Beachy Head on 8 Aug. was the first of the autumn, none then being recorded until 18-20th when singles were recorded at Balcombe, Darwell, Church Norton, Beachy Head, Shoreham Sanctuary, Adur Recreation Ground and Chichester GP. Peak autumn counts were of only 4 at Beachy on 2 Sept. and 5 at Hollingbury Camp on 8th. Most other

records were of singles, the more interesting being at Wakehurst Place on 1st, Warmham Mill Pond on 2nd, Marley Common on 18th and 2 at Church Norton on 20th. Only 7 were seen after this, at Beachy Head on 21st and 25th, Selsey on 24th, 2 at Church Norton on 26th and at the Severals on 27 Sept. and 1 Oct.

417. **BEARDED TIT** (*Panurus biarmicus*):—The approximate monthly totals were as follows:

No. of sites	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No. of birds	1	1	4	1					2	3	3	2
	4	1	18	12					9	19	10	8
									See text			

Generally fewer birds were in the county than in the last 2 years and the well known localities of Arundel WWT and Pagham Hbr only held birds in Jan. and Nov. respectively. Pett fared slightly better with up to 7 from 7 Oct. to the end of the year. Five at Warmham Mill Pond on 18 Mar. was an unusual inland record as were singles at Ifield Mill Pond in Nov. and Dec.

At one site at least 4 or 5 pairs bred and were double-brooded, rearing at least 30 young.

418. **LONG-TAILED TIT** (*Aegithalos caedatus*):—Largest groups reported were at Darwell Res. with 27 on 12 Feb. and 33 on 12 Nov. In the breeding season there were 4 pairs in 13.3 ha of farmland at Haywards Heath.

419. **MARSH TIT** (*Parus palustris*):—From Jan.-Mar. the highest counts were of 8 at Ashcombe Bottom on 20 Feb. and 6 at Darwell Res. on 12th. At Greatham 4 were recorded in 7 km on 19 Jan. Singles and pairs were widely reported in the breeding season, and nestbox use occurred in one locality. Post-breeding maximum count was 21 at Ardingly on 13 Aug.

420. **WILLOW TIT** (*P. montanus*):—Recorded throughout the year in small numbers from 15 inland locations. A Whitbread Hollow, 1 on 1 Sept. was the first since 1983, but ringing totals for the county remained below average.

422. **COAL TIT** (*P. ater*):—Few reports were received, although at Old Lodge, Ashdown Forest 45 were counted on 15 Jan. and 100 on 1 Oct. County ringing totals were low and nestbox usage sparse for the second successive year.

423. **BLUE TIT** (*P. caeruleus*):—On 26 Jan. 120 were recorded at Cuckmere Haven but elsewhere the highest concentrations were 42 at Old Park Wood, Bosham on 1 June and 38 at Darwell Res. on 17 Sept.

424. **GREAT TIT** (*P. major*):—The largest concentration was 100 at Cuckmere Haven on 26 Jan. (*cf.* Blue Tit). Melanistic individuals were reported from Upper Beeding on 11 Mar. and Shoreham Sanctuary on 2 July.

425. **NUTHATCH** (*Sitta europaea*):—Breeding was recorded from 156 tetrads in 28 10 km squares. The only breeding concentration recorded was 4 pairs in 13.3 ha at Haywards Heath.

427. **TRECREPPER** (*Certhia familiaris*):—Reported widely in singles and pairs, 6 at Darwell Res. on 15 Jan. being the highest count. At Beachy Head 6 trapped in autumn was the most since 1975, but ringing totals for the county were the lowest for 5 years.

429. **PENDULINE TIT** (*Remiz pendulinus*):—At Icklesham a first-winter bird was trapped on 7 Oct. and a male was trapped on 24 Oct. (JW *et al.*), then an adult and a juvenile were seen beside Pagham Hbr on 1 Nov. (BJ, CMJ). All have been accepted by *British Birds*. Nine have now been recorded in the county, all since 1987, but these are the first for Nov. (just) and the first in West Sussex, previous records falling between 4-27 Oct.

430. **GOLDEN ORIOLE** (*Oriolus oriolus*):—A male was present at Icklesham on 26 May (SJRR). A below-average showing, 25 being recorded during the 1980s.

432. **RED-BACKED SHRIKE** (*Lanius collurio*):—An immature at Belle Tout, Beachy Head on 2 Sept. (MK *et al.*) was the only one reported, the worst showing since a blank in 1966. The 1980s total is 34.

434. **GREAT GREY SHRIKE** (*L. excubitor*):—One at the Hollies, Ashdown Forest on 3 Jan. (PJB), BMM, DCM) was seen in Wren's Warren Valley, Ashdown between 13-20 Mar. (BMM, DCM). In the autumn one seen at Belle Tout, Beachy Head on 26-27 Sept. (TJT *et al.*) was probably the bird present at Charleston Reedbed/Cuckmere Valley from 30 Sept. to 20 Nov. (SP, TWP, PJW). One was again seen at Wren's Warren Valley, Ashdown on 16 Nov. (BMM, DCM). Probably 3 individuals involved, an average showing.

435. **WOODCHAT SHRIKE** (*L. senator*):—1988:—One was seen near Sidlesham Ferry on 16 May (PFBu, RJF, PJ, BDJ *et al.*).

1989:—One was seen at Westmeston, near Ditchling on 20 May (GBL). Both these records have been accepted by *British Birds*. The county total is now 32, of which 9 have been seen during the 1980s and 7 of those between 16 May-20 June.

436. **JAY** (*Garrulus glandarius*):—Widespread resident. No real evidence of migrants was recorded in the autumn.

437. **MAGPIE** (*Pica pica*):—The largest numbers recorded were 38 at Darwell Res. on 12 Mar., 19 in the Wood at Rye Hbr on 16 Oct., and 20 at Shoreham Sanctuary on 18th.

438. **JACKDAW** (*Corvus monedula*):—The largest concentrations were 500 at Darwell Res. on 1 Jan. and 300, including a partial albino, at Amberley Wildbrooks on 24th. A roost count of 2000 was recorded at Cattlestone Farm, West Chilmington on 2 Feb. and 4 Oct. Finally, 320 were at Darwell Res. on 17 Dec.

441. **ROOK** (*C. frugilegus*):—Fewer counts at rookeries were recorded; in Hassocks village a new site in 1988 with only 6 nests had increased to 15, whilst at Gatwick Airport, the South Terminal site was reduced to only 3 nests. The only significant roost counts received were of 1000 and 2000 at Cattlestone Farm, West Chilmington on 2 Feb. and 4 Oct. respectively.

442. **CARRION CROW** (*C. corone*):—The only notable counts received were of 57 at Goring Gap on 4 June, 198 at Washington Refuse Tip on 17 June and 95 at Warnham Mill Pond on 27 Aug. In a study area from Brighton to Portslade, breeding was very much in evidence again after 'post-hurricane' inactivity in 1988, and a greater diversity of sites was noticed although there were still sufficient elms available to maintain its position as the most favoured tree.

444. **STARLING** (*Sturnus vulgaris*):—One of the regular roost sites at Rye still had 2000 roosting there on 8 May. Also at Rye breeding season records showed at least 1 pair nesting in boxes provided for Wheatears, and near the old Lifeboat House one box contained 7 young which successfully fledged and was attended by 3 adults. The reedbed roost on Little Deeps, Thorney Island had c.5000 in Aug. Other notable concentrations were 2000 at Horse Eye Level, and at Chyngton Farm, Cuckmere, where 12000 were present on 1 Jan., 8000 on 22 Oct. and 3500 on 1 Dec.

446. **HOUSE SPARROW** (*Passer domesticus*):—The only significant record was of a flock of 20 in Whitbread Hollow, Beachy Head on 8 Aug., a rare sighting at this site.

448. **TREE SPARROW** (*P. montanus*):—Slightly better figures were recorded than in 1988 in the first months of the year. At Icklesham 80 were present on 1 Jan. and remained all year. Also on 1 Jan., 18 were at Chyngton Farm, Cuckmere and 15 at Pett. At Rye 65 were recorded on 4 Jan., declining to 55 by 26th, and 35 were at Wiggonholt Common on 19th. Barnhorn Level held a flock of 50 on 19 Mar.

There were few confirmed breeding records but at a nestbox colony at Sidlesham 84 nestlings were ringed.

In Aug., 15 were at Climping on 24th, the peak count there for the year, and 60 were at Wallers Haven, Pevensey on 29th. Autumn passage was very light: Sept. produced 40 on 17th at Bewl Water, and in Oct., 14 were observed roosting in the Lower Cuckmere on 13th, 25 were at Manxey Levels on 15th, and 20 in the Wood at Rye Hbr on 26th increased to 50 by the end of the year. The only other large flocks were 50 at Pagham Hbr on 19 Dec. and 72 at Chyngton Farm on 22nd.

451. **CHAFFINCH** (*Fringilla coelebs*):—The Jan., Feb. and Mar. totals submitted were 514, 195 and 149 from 5, 3 and 3 localities respectively, including 214 ringed at Icklesham on 1 Jan., and flocks of 150 at Faygate on 2 Jan., 100 at Sharpthorne on 9 Feb. and 100 at Barnhorn Level on 19 Mar.

The only flock recorded in Oct. was 260 at Chyngton Farm, Cuckmere, on 7th. During Nov. 1518 were recorded from 5 localities including 200 at Whitbread Hollow on 1st, 290 at Chyngton Farm on 3rd, 400 at both Cissbury Ring and Steyning on 17th, and 207 in Lower Cuckmere Valley on 18th.

452. **BRAMBLING** (*F. montifringilla*):—The Jan., Feb. and Mar. recorded totals were 42, 29 and 124 from 2, 7 and 3 locations respectively, including 40 at Madehurst on 2 Jan., 10 at Haywards Heath on 1 Feb., 70 at Brantridge Park, Balcombe on 12 Mar., and 40 at West Dean on 21 Mar. During Apr. 6 singles were recorded from 5 localities, the last at Selsey Bill on 28th.

The first autumn record was 2 at Belle Tout on 10 Oct. The totals for the remainder of Oct., Nov. and Dec. were 25, 46 and 23 from 10, 11 and 2 localities respectively, including 10 at Icklesham on 1 Nov., 19 at Wiggonholt Common on 26 Nov. and 15 at Coates Common on 24 Dec.

455. **GREENFINCH** (*Carduelis chloris*):—The only early month records were 30 at Seven Sisters Country Park on 3 Jan., 101 at Hollingbury GC on 5 Feb. and 150 at Greatham Common on 25 Feb.

On 20 Aug. 120 were recorded at Climping, thereafter during Sept., Oct. and Nov., 990, 790 and 291 were recorded from 4, 3 and 3 localities respectively, the monthly maxima being 500-700 at Rye Hbr in Sept. and Oct., and a roost count of 171 at Wild Park, Moulsecocomb on 14 Nov.

456. **GOLDFINCH** (*C. carduelis*):—The Jan., Feb., Mar. and Apr. totals were 39, 40, 112 and 40 from 4, 2, 3 and 2 localities respectively, the maximum being 60 at Pulborough Brooks on 23 Mar.

The Sept., Oct. and Nov. totals were 1163, 2874 and 674 from 9, 12 and 3 localities respectively, 55% being recorded from the Beachy Head - Lower Cuckmere - Seaford Head area with maxima of 1520 during 30 Sept-1 Oct. and 1400 during 5-7 Oct.

457. **SISKIN** (*C. spinus*):—An even better year than 1988; during Jan., Feb. and Mar. 487, 258 and 298 were recorded from 19, 14 and 18 localities respectively throughout the county, including 100 at Midhurst on 26 Jan., 60 at Milland on 6 Feb. and flocks of 50 at Pulborough, Wiggonholt Common and Ashurstwood in March. In Apr. and early May 16 were recorded from 7 localities.

At East Grimstead 110, 74 and 26 new birds were ringed during Feb., Mar. and Apr. respectively.

During Sept., after 20 at Cissbury Ring on 20th, out of a total of 440 from 7 localities, 369 were recorded on Sat. and Sun. the 23rd and 24th including 100 in Ashdown Forest and 121 during a seawatch at Worthing beach.

During Oct., Nov. and Dec., 578, 340 and 82 were recorded from 15, 14 and 3 localities respectively, including flocks of 100+ at Icklesham on 11 Oct., Ardingly Res. on 14 Oct. and the Lower Cuckmere on 3 Nov.

458. **LINNET** (*C. cannabina*):—In Jan., Feb., Mar. and Apr. 574, 550, 100 and 509 were recorded from 7, 3, 1 and 7 localities respectively, including 100 at Icklesham on 1 Jan., 120 at Southbourne on 8 Jan., 200 at Bury Hill on 14 Feb., 100 at Bewl Water on 16 Mar. and 200 at Rye Harbour LNR during Apr. At Worthing beach 471 were counted on spring seawatches. During the breeding season it was reported as very common and widespread at Rye Hbr LNR with a population within the SSSI probably 100+; at Thorney Island a very common colonial breeding species.

The first autumn flock was 150 at Selsey Bill on 2 Sept.; thereafter from 17 Sept. until 12 Nov. the monthly totals were 830, 2683 and 468 respectively, predominantly from coastal and downland areas between 23 Sept. and 14 Oct.

459. **TWITE** (*C. flavostris*):—Records for the early part of the year were as follows: 8 in the Lower Cuckmere on 14 Jan. declining to 4 by 4 Mar., 3 at Swanbourne Lake, Arundel on 6 Feb. and 6 at East Head, West Wittering on 14th.

Good numbers were recorded early in the autumn at Rye with 25 on 14 Oct. and in the Lower Cuckmere with 38 on 3 Nov. Elsewhere numbers were low with 2 at Newhaven Tide Mills on 9 Oct., 3 at Camber on 19 Nov. and 3 at Pagham Hbr on 3 Dec., when only 5 remained at the Lower Cuckmere.

460. **REDPOLL** (*C. flammea*):—Another poor year, with only 28 reported in Jan., 35 in Feb. and 93 in Mar. Migration appeared sparse, with only 6 singles reported at the coast and a further 17 inland up to 20 May.

A total of 66 birds were noted in the breeding season, 53 of these being in Ashdown Forest.

A single at Slinfold on 21 July and 4 at Tilgate on 4 Aug. were probably local birds and it was not until 23 Sept., when a single was at Pett, that autumn passage became evident. A further 44 birds were recorded in Sept., 259 in Oct. and 131 in Nov. At the end of the year only 2 flocks were reported, 60 at Crowborough on 12 Dec. and 130 at Balcombe on 17th.

463. **COMMON CROSSBILL** (*Loxia curvirostra*):—Only one record was received, of a single bird at Tilgate Forest GC on 4 Aug.

467. **SCARLET ROSEFINCH** (*Carpodacus erythrinus*):—An immature male was singing at Icklesham on 2 July (DB, SJRR), a very unusual date, other records falling between 29 May-2 June or 24 Sept.-21 Oct. It is the 9th county record, the 6th in the 1980s and only the 2nd away from Beachy Head (the other was the first British record—at Brighton in Sept. 1869).

469. **BULLFINCH** (*Pyrrhula pyrrhula*):—Throughout the year the only records received amounted to 44 birds recorded from only 4 localities.

470. **HAWFINCH** (*Coccothraustes coccothraustes*):—The year's total of 35 was about the average annual figure since 1980 with the exception of 1985 and 1988 when it fell to 12-13. The monthly totals were:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
2	12	11	3	1	3	—	1	—	1	1	—

Apart from 3 at Harting Down on 3 June and singles at Kingley Vale, West Dean Woods, Worthing, Cripps Corner and Rye Hbr LNR, north-central Sussex recorded the remainder from Bewbush, Faygate, Gosops Green, Haywards Heath, Ifield, Slinfold and Wakehurst Place. All were single birds other than 2 at Haywards Heath on 2 Feb., 9 at Wakehurst Place on 19 Feb. and 6 at Ifield Mill Pond on 12 Mar.

Please note that *all records* of this species will be welcome.

493. **LAPLAND BUNTING** (*Calcarus lapponicus*):—One was seen at Icklesham on 12 Nov. (CHD, JW) while two were present at Telcombe on 1 and 3 Dec. (MJH). The poorest showing since 1984. Observers are reminded that this is a description species, although a few lines is often all that is required for acceptance.

494. **SNOW BUNTING** (*Plectrophenax nivalis*):—At the beginning of the year 3 were recorded at Shoreham Hbr on 8 Jan., 2 staying at least until 5 Feb., and Pilsey Island produced 2 on 20 Jan.

The first of the autumn was an immature on the tideline at Rye on 29 Sept., followed by a single on Worthing beach on 28 Oct., with 3 there from 30th until 9 Nov. A single at Pagham Hbr on 25 Nov. and one on the Crumbles on 30 Nov. stayed until 2 Dec.; Pilsey Island had 2 on 3 Dec. but only 1 on the 10th. West Wittering had 2 on 16 Dec. and at Shoreham Hbr a single on 18th, with 3 there on 23-26th. Winchelsea Beach recorded 4 on 27-29 Dec. and these were also seen at Pett and Rye Hbr. The largest number was 6 at the Waider Pool at Rye on 12 Nov.

496. **YELLOWHAMMER** (*Emberiza citrinella*):—At Pagham Hbr 32 were on the west side on 20 Jan. with 20 at Sidlesham on 24th. April saw 50 at Maidenbower, Three Bridges and 30 at Cattlestone Farm, West Chilmington.

In the latter part of the year 60 were reported at Icklesham on 1 Nov. and 60 also at Cattlestone Farm on 16th. A flock of 77 was at Newmarket Hill on 29 Dec.

499. **ORTOLAN BUNTING** (*E. hortulana*):—At Hodcombe, Beachy Head reports were received of a male on 27 Apr. and one on 23 Sept. (RHC). In all, 53 have now been recorded in the county, 31 in Sept. and 15 since 1980.

506. **REED BUNTING** (*E. schoeniclus*):—In the early part of the year 40 were observed at Pagham Hbr in Jan., 80 on Camp Hill, Ashdown on 3rd, 25 on the Adur at Shoreham on 11th and 18 at the Lower Cuckmere on 11 Feb.

In the breeding season there were only 31 pairs on Thorney Deepes compared with 49-51 in 1988. At Rye singing males totalled 38 and the first fledged young were seen on 19 May. At least 8 young fledged in the Lower Cuckmere.

Very little passage was noted in the autumn but 234 were ringed at Icklesham, 10 were noted at Beachy Head on 12 Oct., 37 at Darwell Res. on 12 Nov. and finally 25 at Holmbush Tip, Faygate on 31 Dec.

510. **CORN BUNTING** (*Miliaria calandra*):—Flocks reported outside the breeding season included 50 at East Head, West Wittering on 7 Jan., 120 at Pulborough Brooks on 22nd and 70 on the Upper Adur Levels also on 22nd. February produced 47 in the Lower Cuckmere on 11th and 33 on downland near Woodingdean. Pulborough Brooks still held 50 on 25 Mar. and 50 were feeding in barley at Rye, including a white-headed individual which was still in the area in Sept. There was a large roost at Strivens Reedbed, Steyning with 350 there on 30 Aug. declining slightly to 300 on 9 Sept., and 115 were roosting at Pagham on 19 Dec.

In the breeding season there were again 12 singing males on Thorney Island airfield. With 16 at Rye and 12 at Beachy Head, these were the largest concentrations.

ESCAPES AND FERAL BIRDS

All records of B.O.U. Category C species, of apparently feral individuals of other species, and of other 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 especially welcome. Such records should be submitted in the normal way but on separate recording forms from the main bulk of records. Incidentally, by way of an erratum, the 1988 Sussex Bird Report was not the first to list escapes and ferals as implied therein; this feature appeared previously from 1978 to 1981. Ed.

The following escaped or feral birds, other than those Category C species in the main list, were recorded in the county in 1989:

CHILEAN FLAMINGO (*Phoenicopterus ruber*):—One at Thorney Island on 28 Mar. and Dell Quay on 3 June.

BLACK SWAN (*Cygnus atratus*):—Singles at Thorney on 10 Feb. and Pilsey on 15 Apr. At Rye Hbr 1 on 6 Mar. and 3 adults on 22 Aug.

PINK-FOOTED GOOSE (*Anser brachyrhynchus*):—The feral bird at Bewl Water again remained throughout the year.

LESSER WHITE-FRONTED GOOSE (*A. erythropus*):—One at Petworth Park on 23 Mar.

SNOW GOOSE (*A. caerulescens*):—One at Thorney Island on 1 Apr., 2 at Weir Wood Res. on 9 Apr., 1 at Rye Hbr on 27 May and a blue-phase with Canada Geese there from 21-24 Aug., and 1 at Scotney Court GP on 4 and 17 Sept.

BAR-HEADED GOOSE (*A. indicus*):—One at Warnham Mill Pond from 10 Feb. to 31 Mar.

BARNACLE GOOSE (*Branita leucopsis*):—Once again numerous reports were received of feral birds associating with flocks of Canada Geese: up to 10 at Arlington Res., 3 at Bewl Water, 2 at Coldwaltham Brooks, and singles at Pagham, Barcombe Res., Pippingford and flying past Splash Point and Birling Gap. Nine also flew past Worthing beach on 27 Dec.

RED-BREADED GOOSE (*B. ruficollis*):—One at Barcombe Res. on 31 July.

WOOD DUCK (*Aix sponsa*):—Reported from 5 localities: 2 at Swanbourne Lake, Arundel on 25 Jan., 1 at Ardingly Res. on 26 Feb., a male at East Beach, Selsey from 2 Oct. to 7 Dec., a pair at Icklesham on 18 Nov., and a male at The Pells, Lewes, from 22 Nov. to 26 Dec.

CAPE TEAL (*Anas capensis*):—1 at Weir Wood Res. on 17 Sept.

RED-CRESTED POCHARD (*Netta rufina*):—The male in abnormal plumage present in 1988 remained at Brooklands again throughout the year.

ROSBYBILL DUCK (*N. peposaca*):—An immature male and female at Barcombe Res. on 13 Aug.

HARRIS' HAWK (*Parabuteo unicinctus*):—A male at Weir Wood Res. on 14 Jan.

CROWNED CRANE (*Balearcica pavonina*):—One at Beachy Head on 14 Sept.

COCKATIEL (*Nymphicus hollandicus*):—Singles at Pilsey Island on 25 Apr. and at Nutbourne Marsh on 23 June.

YELLOW-CROWNED PARROT (*Amazona ochrocephala*):—One in the Selsey area between 7 Mar. and 14 Apr.

EAGLE OWL (*Bubo bubo*):—The bird at Chichester Cathedral was sadly recaptured during March.

SUDAN GOLDEN SPARROW (*Auripasser luteus*):—A male at Selsey Bill from 21 Aug. to 15 Sept.

RINGING IN SUSSEX IN 1989

by Derek Crawley

'But that was always the problem with facts and figures: they never made anything more comprehensible, merely tinged wonder with boredom.'

Geronitus, James Hamilton Paterson (1989)

I have received details from 18 ringers and 7 groups that 49,065 birds of 121 species were ringed. Once again this represents a new record for the county. The Rye Bay group contributed 31,564 towards this total. In the region of 600 birds were the subject of a report either from other ringers or from members of the public, both here and abroad. Of the reported birds 160 or more were Sand Martins and about 150 were gulls. These figures cover the majority of birds ringed in Sussex and most of the birds reported but they are limited to the information that is passed to me. If there are any ringers in Sussex reading this who have not or do not regularly report their activities for inclusion in the annual report, I would like to take this opportunity of asking them to send me their records as early as possible each January. The increased activity generating more reports means having to be even more selective than has been the case in the past.

To start the report proper I mention the following late records from previous years. A young **Canada Goose** ringed in Petworth Park on 28 June 1984 was shot near Knighton (Staffordshire) on 29 December 1988. Another **Lesser Whitethroat** has been reported in Egypt. This bird had been ringed on 19 June 1988 at Cissbury and was released alive on 14 October 1988 near Alexandria (31°13'N, 29°55'E), a distance of 3325 km. This is the only British species to be regularly recovered in Egypt and the total is now eleven (Mead and Clark, 1989). A **Starling** was found dead on 10 October 1988 at Pinsk, Brest, USSR, 1845 km east of West Worthing where it had been ringed on 1 February 1987. Nearly 500 British-ringed Starlings have been reported from the Soviet Union; some have been much further east than this individual. A **Siskin** ringed in East Grinstead on 19 March 1986 was controlled at Rutten, Limburg, Belgium, 941 days later on 15 October 1988.

The **Reed Bunting** carrying a Swedish ring which I mentioned briefly in the 1988 report, as being at Icklesham on 30 October 1988 had been ringed on 10 September 1988 at Edsjeön Rotebro (Stockholm), Sweden (59°29'N, 17°53'E). Between 21 October and 14 November 1988 two others were recorded in Britain, representing the third and fourth records of this species from Sweden; to emphasise the exceptional nature of these reports, during the same period the first **Reed Bunting** from Denmark and the first from Finland were also reported. I do not know of any circumstances existing at the time to suggest this movement is in any way unusual. Therefore it seems likely that the British population of **Reed Buntings** is augmented by birds from Northern Europe in some if not all winters (Mead and Clark, 1989).

Throughout the rest of this report dates refer to 1989 unless otherwise stated. A modest number of ducks, mainly **Teal** and **Mallard**, continue to be ringed and as last year the birds that have been reported (one **Teal** and five **Mallard**) were all shot. The **Teal** was ringed on 26 September 1985 at Farlington Marsh, Hampshire and died near Chichester on 12 January 1989. The **Mallard** were all ringed in the east and shot within 40 km of the ringing site.

Three species of raptor were ringed: **Sparrowhawks** numbered 21, **Kestrels** 37, and on 11 September at Icklesham a single **Hobby**. These are the best figures for 7 years and certainly reflect at least stability in the county's raptor population. A **Sparrowhawk** ringed as a chick at Bosham, Chichester on 30 June 1988 was found freshly dead at Purton, near Swindon (Wiltshire), a distance of 111 km, on 13 April. This was the only raptor reported.

Four species of **owls** were ringed: **Barn** (21), **Little** (3), **Tawny** (10) and **Long-eared** (2). No fewer than 18 of the **Barn Owls** were nestlings. Two **Tawny Owls** ringed in 1988 were found dead locally.

Among 12 species of wader ringed during the year was a **Pectoral Sandpiper** at Icklesham on 13 August, the first in the county since 1968. This North American species is seen most years in Sussex. Fourteen **Little Ringed Plovers** were ringed and a bird ringed as a chick at Thelsford Gravel Pits, Warwickshire on 2 June was retrapped on passage by the Rye Bay group on 15 July after 43 days. Only one other wader was reported: a **Snipe** that had moved the short distance from Icklesham to Rye Harbour where it was shot. It was a first-year bird.

A colour-ringed **Sanderling** seen at Pilsey on 26 July and 1 August (presumably the same bird) was one of 75 ringed with yellow over red on the left leg, and metal on the right, at Sandgerdi, Gullbringusysla, south-west Iceland (64°02'N, 22°43'W) between 21 and 28 May 1989. Dr G. A. Gudmundsson of Lund University in Sweden, whose group is conducting this ringing programme, has heard of at least two other sightings from this particular project: on the River Exe in Devon on 5 September 1989 and in Ghana on 12 November. Since 1985 he has also observed during May over 30 marked **Sanderlings** on their way through Iceland to high Arctic breeding grounds in Greenland and possibly north-west Canada, most having been ringed as wintering birds at Dundee and Teesmouth. Any reports of colour-ringed **Sanderlings** would be very welcome.

Fewer gulls were ringed in 1989 than for many a year but there was an increase in the number of **Herring Gulls**. Dr J. A. Newnham has sent me the details and I can do no better than to quote from his report:

Black-headed Gull: During the year there were controls from Lithuania (2), Estonia (2), USSR (2), Poland, Denmark and England (2).

This species continues to produce a large number of recoveries with 122 generated in 1989. Interestingly 75% of these were from foreign countries and comprised Finland (13), Sweden (11), Norway (1), USSR (15), Baltic States (4), Poland (1), Denmark (250), Germany E&W (7), Netherlands (10), Belgium (2) and France (2).

Those reported from within England came from Sussex (13), Hampshire (1), Surrey (1), Dorset (1), Devon (9), Cornwall (1), Greater London (1), Essex (2), Buckinghamshire (1) and Tyne & Wear (1). It is interesting to reflect that there is more chance of a recovery in other European countries than within neighbouring counties. A more detailed appraisal of movements can be found in the Sussex Bird Report for 1985.

Common Gull: There were summer/early autumn recoveries from the USSR (2), Norway (2) and Finland. Earlier movements are plotted in *The Birds of Shoreham*.

Herring Gull: There were 7 recoveries reported which reaffirmed that this is the least migratory of our gull species; apart from birds in Cornwall and Norfolk the others were found in Sussex.

Three **Wrynecks** were ringed in the county during the year. Two of them were caught together at Icklesham on 5 September. Six days later one of the Icklesham birds died when it hit a window 176 km WNW at Coldblow near Marlborough, Wiltshire: an unfortunate end for this comparatively uncommon species, though not a surprising method of recovery as they are regularly reported in gardens during passage. Just why it had moved in this north-westerly direction can only be guessed at, but not all migrants passing through Kent and Sussex take what would seem to be the shortest sea crossing to the Continent.

The number of **Blackbirds** (448) ringed was the lowest in the last 11 years. I know of no reason to suspect anything other than a modest fluctuation in their numbers and that this drop only represents a reduction in ringing activity. There is certainly a downward tendency in the number of **Song Thrushes** ringed, accounted for by a real drop in the number of birds on autumn passage in recent years. One of that diminishing number was ringed on 17 October 1988 at Hodcombe, Beachy Head and was found dead on New Year's Day 1989 at Minto-Mir-Velho, Coimbra, Beira Litoral, Portugal. A first-year male **Fieldfare** ringed at Icklesham on 18 January 1987 was shot also on New Year's Day 1989 at St Eutrope de Born, Lot-et-Garonne, France (705 km, 44°34'N, 0°41'E) suggesting flexibility in its movements not entirely governed by climatic conditions, in view of recent mild winters in western Europe. As far as ringing is concerned the **King Ouzel** returned to more normal numbers (21) after an exceptional 1988 (*SxBR* No. 41).

For the first time in many years the number of **Sedge Warblers** ringed in the county exceeded the number of **Reed Warblers**. The difference was 132 over the county as a whole but for the Rye Bay Ringing Group at Icklesham the difference was 407, with 3983 **Sedge Warblers** and 3576 **Reed Warblers**. The first news from the BTO's Constant Effort Site (CES) scheme for 1989 indicates a 'breeding bonanza' for both species, with increases of 62% and 51%, respectively, in the numbers of juveniles caught over the 1988 figures (*BTO News* No. 167, 1990). The CES scheme aims to standardise the catching at member sites throughout Britain during the main breeding season so that an accurate picture of songbird populations can build up from year to year. The **Sedge Warbler** had the benefit of heavier rainfalls at its West African winter quarters in 1988, a probable contributory factor in the greater numbers of breeding adults (*BTO News* No. 167, 1990). Thirty-six **Sedge Warblers** and 39 **Reed Warblers** were reported. Of those, three **Reed Warblers**, ringed in the 1989 autumn passage period, were found at different locations in Morocco between 1757 and 2340 km from their Sussex ringing sites. Only one was alive. An **Aquatic Warbler** was caught at Icklesham on 25 September, the first to be ringed in the county since 1984.

Two **Barred Warblers** were ringed in East Sussex, the first since two were caught in 1986.

Another species that seems to have benefited from the rains in West Africa is the **Whitethroat**. The figure of 1281 ringed is over 800 more than the 10-year average of 430. Even taking the Rye Bay group's effort into account it is still a very good indication of better times for this species. It does not, however, seem to have had as good a breeding season in 1989 as its *Acrocephalus* cousins (*BTO News* No. 167, 1990).

A **Blackcap** ringed at Beachy Head on 4 August 1985 was found freshly dead at Tassadort, Tizi-Ouzou, Algeria (1602 km, 36°35'N, 4°05'E) on 8 February 1989. No wintering **Blackcaps** were ringed but over 4000 birds were caught in the autumn.

September saw eight days with over 100 ringed at the Rye Bay sites and an exceptional 321 on the 25th. By a large margin most of the Blackcaps caught were those born during the 1989 breeding season. However, CES reports show that there was a significant decline in the number of juvenile Blackcaps caught by scheme members in 1989 and therefore a comparatively poor breeding season (*BTO News* No. 167, 1990). The high numbers caught in Sussex do not necessarily dispute this conclusion, as overnight weather conditions on more than one occasion precipitated a 'fall' of migrants into the ringing sites in the Rye Bay area.

The **Chiffchaff** arrives earlier and leaves later than the **Willow Warbler**. Figure 1 shows how marked is that difference. It represents the catching that took place at two adjacent sites at the eastern end of the county between 24 July and 22 October. Catching was consistent throughout the period with only minimal interruption due to adverse weather conditions and therefore represents an accurate picture of autumn passage through the area in 1989.

Only one foreign control of a Chiffchaff was reported. This was ringed at Hodcombe, Beachy Head on 7 October 1986 and was released alive by ringers at Surhuisterveen, Friesland, The Netherlands (53°11'N, 6°11'E) on 13 July 1989. A Chiffchaff ringed on 1 October at Newcastle, Co. Wicklow, Eire (53°05'N, 6°04'W) covered the 504 km to Hodcombe, where it was retrapped, in no more than four days.

The longest surviving **Willow Warbler** reported last year was one ringed on passage, in its first year, at Beachy Head on 17 August 1986 and retrapped on 28 April 1989 at Great Saltee, Co. Wexford, Eire (52°07'N, 6°38'W) where it was no doubt seeking a suitable breeding site.

Looking at autumn controls of **Goldcrests** mentioned in the BTO's annual reports, most involve those moving in a south-westerly direction from Scandinavia but there are easterly movements too, almost certainly involving birds native to the British Isles. Some seem to move across the Channel or North Sea to winter. One likely candidate was the young male that was ringed at Icklesham on 29 September and was caught on 13 October and on at least three more dates that month at Kroonspolders West, Vlieland, The Netherlands (390 km, 56°32'N, 3°22'W).

Two **Red-breasted Flycatchers** were ringed in East Sussex in the autumn. Up to the end of 1988 531 birds of this species had been ringed in Britain. None has ever been recovered. In fact the only report in Britain concerns a Finnish-ringed bird in 1975 (Mead and Clark, 1987, 1989).

A male and a female **Bearded Tit** were ringed on the same date, 31 October 1988, at Titchfield Haven, Hampshire and were retrapped together 307 days later at Icklesham on 5 November 1989. Ringing has established that Bearded Tit pairs move about in close proximity as they are quite often caught and retrapped together outside the breeding season. Trapping has established a similar pattern for **Long-tailed Tits**.

The full details of the **Penduline Tit** reported in a 'Stop Press' to last year's report are given in a note on page 73. Two more were ringed in 1989, again in East Sussex where most of the recent sightings have occurred, but at the western end of the county two were seen near Sidlesham Ferry on 1 November. Hopefully movement along the Sussex coast is becoming an annual event, leading to birds wintering and then breeding — if they have not already done so!

The furthest travelled **Greenfinch** moved between Icklesham and Dorchester. A young male ringed on 26 August 1988 was retrapped in Dorset on 4 March 1989. East Grinstead garden ringing of **Siskins** resumed in earnest after a quiet 1988. Reports confirmed the established movement of birds between breeding sites in Scotland and southern England wintering grounds. Most of the birds are caught

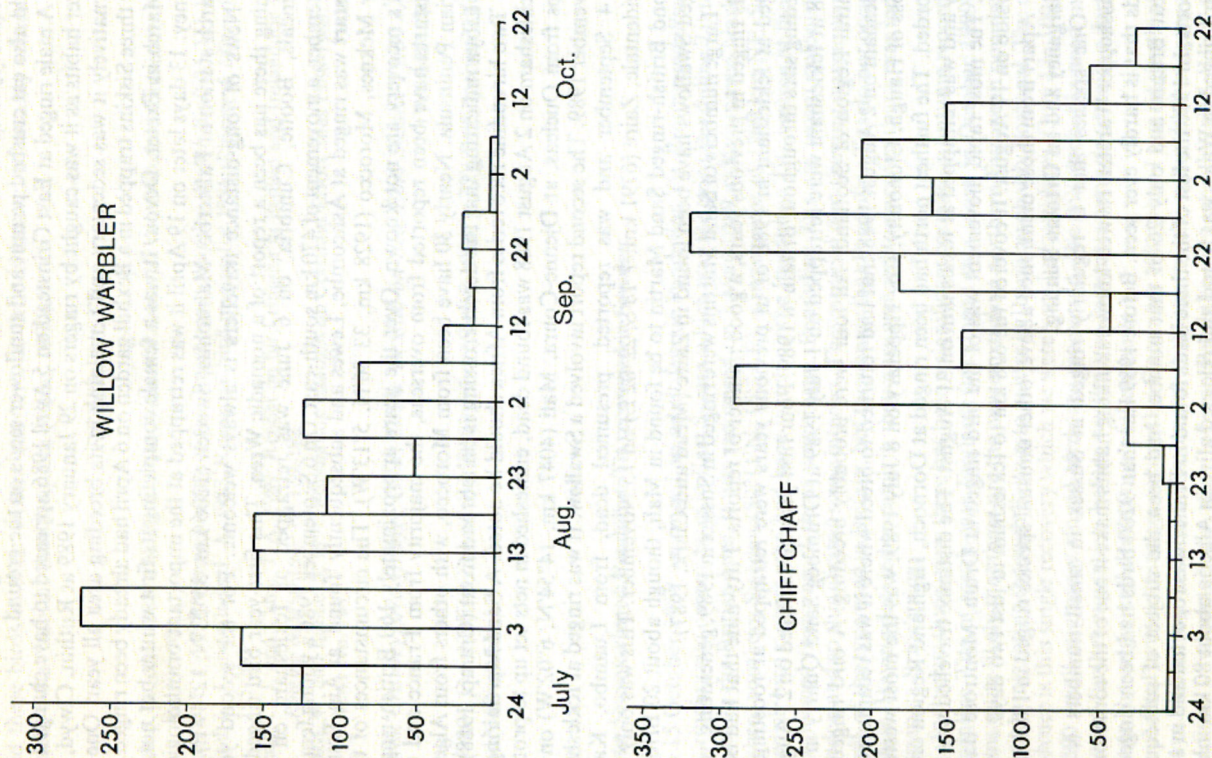


Fig. 1. Numbers of Willow Warblers and Chiffchaffs caught during 5-day periods on autumn passage through 2 adjacent coastal sites in East Sussex between 24 July and 22 October 1989.

towards the end of the winter when they come to garden peanut feeders, perhaps when their natural diet of alder and birch seeds is less plentiful. I did notice during my recent sojourn in Scotland that as well as feeding on hanging peanut feeders they would also eat crushed peanut and sunflower seeds on the ground.

A male ringed at East Grinstead on 5 April 1986 appeared to have changed its winter habits as it was caught by ringers on 29 January 1989 at Ruthin, Clwyd, or alternatively it was sedentary and remaining in its breeding area all year. One of only three Siskins trapped in a Bexhill garden on 6 April had already been ringed on 17 March in Exeter, Devon. It was a female completing its first winter but not its journey: 13 days later on 19 April it was retrapped at the important ornithological research station at Falsterbo, Malmöhus, Sweden (1206 km, 55°23'N, 12°49'E).

News of long-distance travellers is always welcome. For the second year running there has been a report of a nomadic Wren. This first-year bird ringed at Eskmeals, Bootle, Cumbria, on 6 June was retrapped at Icklesham on 24 September, a movement of 470 km south-east. On 6 September 1986 a young female Redstart was ringed at Ashcombe, Lewes and subsequently 'found' at Ain Toujat near Meknes, Morocco (1928 km, 33°56'N, 5°13'W). The circumstances of this bird's recovery are not known. Over the years approximately 160 British-ringed Redstarts have been reported from overseas, the majority from France and the Iberian Peninsula. Nearly 30 have been from Morocco, with others from Algeria and Libya indicating that the desert crossing is on a broad front (Cramp, 1988).

Two hirundine recoveries from Africa should be noted. A Sand Martin ringed at Icklesham on 2 August 1988 was found dead, enmeshed in nets set up to protect crops from Queleas, at Djenne-Coura, Mali (4047 km, 14°54'N, 6°02'W) on 14 November 1989. The second report involved a Swallow. It was ringed at Icklesham on 4 September and was reported, presumed dead, from Luambo, Kasai Occidentale, Zaire (6791 km, 7°18'S, 22°02'E) on 15 November. This was only the second British-ringed Sand Martin to be found in Mali, though about 20 British-ringed Swallows have been found in Zaire (Mead and Clark, 1987).

Large numbers of Sand Martins were ringed in Sussex in 1989, generating, with birds ringed in previous years, a good number of reports. Fifty-nine that had been ringed at Icklesham in 1988 or in previous years were retrapped at roosting or breeding sites throughout Britain in 1989. Four first-year birds were ringed on 27 August 1988 at Icklesham and retrapped on 1 July 1989 at Drumbeg Sand Quarry in the Central Region of Scotland. All four were probably breeding. A bird ringed at Icklesham on 2 August 1988 that had returned to breed where it was recaptured at Cross of Haugh, Clonoulty, Co. Tipperary on 8 July 1989, was the most westerly recorded. The furthest north had been ringed at Dormoch, Highland Region on 25 July and was retrapped at Icklesham on 31 August. The distance travelled was 830 km. The most rapid movement was of the bird ringed at Drum, Montrose Basin, Tayside on 17 August. It covered the 678 km to Icklesham in just two days.

Apart from those mentioned above, other unusual species ringed in 1989 were a Garganey and an Ortolan Bunting.

One species that is regularly ringed in Sussex in small numbers is the Grasshopper Warbler. Its well-known skulking habits make it one of the commonest birds that is hardly ever seen. Before 1989 less than 9200 birds had been ringed in Great Britain and only 26 of that number had been the subject of subsequent reports. In 1970 the last of the three birds found in France was reported and in 1986 a bird ringed in Wales was found and released alive in Algeria about 80 km inland from the Mediterranean Sea. Due to the success of the Rye Bay group 140 were ringed in 1989, only one less than the previous 10-year total for the county. No special methods were used, these birds being captured as a part of standard ringing

activities. In view of the decline in numbers over the past 20 years it is hoped that a greater number ringed will lead to an improvement in the number reported and to a better understanding of the reasons for this decline. It would be especially helpful to find these birds in their winter quarters, as little is known of exactly where and exactly what habitat they frequent (Glue, 1990).

REFERENCES

- Cramp, S. (ed.). 1988. *The Birds of the Western Palearctic*. Vol. 5. Oxford University Press, pp. 695-708.
- Glue, D. E. 1990. Breeding biology of the Grasshopper Warbler. *British Birds* 83: 131-145.
- Mead, C. J. and Clark, J. A. 1987. Report on bird-ringing for 1986. *Ringings & Migration* 8: 135-200.
- Mead, C. J. and Clark, J. A. 1989. Report on bird-ringing in Britain and Ireland for 1988. *Ringings & Migration* 10: 159-188.
- Peach, W. and Baillie, S. 1990. Population changes on Constant Effort Sites 1988-1989. *BTO News* No. 167.
- Derek Crawley. *67a Grange Court Drive, Bexhill-on-Sea, East Sussex TN39 4AY.* (Tel: 0424 210874)
- Erratum On the first line of the 1988 report (*SxBR* 1988, p.72), '188 species' should read '118 species'.

Note: Sussex-ringed Penduline Tit recovered in Sweden

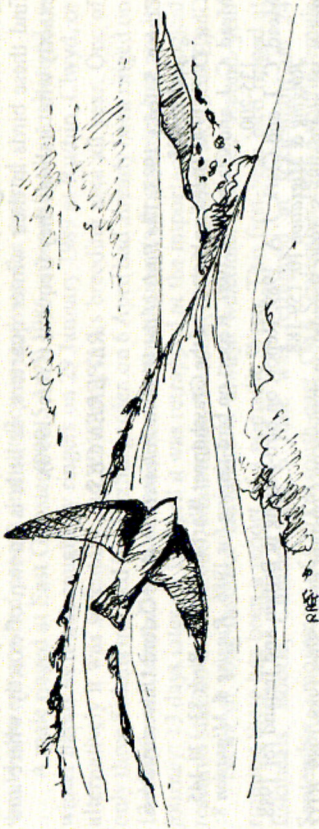
On 15 October 1988 we ringed an adult female Penduline Tit *Remiz pendulinus* at our ringing site on our farm in East Sussex which was the third Penduline Tit to be ringed in the British Isles. It was recovered on 3 May 1989 at Kvismaren Narke in Örebro, southern Sweden (59°11'N, 15°24'E), a movement of 1309 km NE. Some Swedish bird ringers who had been watching the Penduline Tits nesting at the site had noticed that one of them was ringed. Penduline Tits are recent colonists in Sweden and so this elicited some interest. They noticed that the ring was unusually small, of the type used in Britain, but they knew that Penduline Tits do not occur in Britain. Having decided to catch it, they were amazed to discover that it was indeed carrying a British ring.

In the last three years there has been a significant increase in autumn records of Penduline Tits in south-east England (we ringed two more in October 1989). It seems quite likely that these are the new expanding northern European population possibly migrating through Britain to winter in Iberia, probably Portugal. The only evidence is this single recovery which we were very lucky to have. Only 1 in 100 to 1 in 500 small migratory ringed birds are recovered. We will probably need many years of further expansion before we shall be fortunate enough to have a further clue to the origin and destination of these birds.

A final twist to this saga occurred in December 1989 when I was ringing birds in Kenya. When we arrived I discovered that one of the other bird ringers was Swedish. I recounted the story of our Penduline Tit and he said 'How very interesting, it was me who caught the bird in Sweden'.

S. J. R. Rumsey

Elms Farm, Icklesham, Winchelsea, East Sussex



Note: Crag Martin at Beachy Head, July 1988 — new to Sussex

At 0910 BST on 9 July 1988 I was returning along the cliff path running above Cow Gap to the car park at the top of Beachy Head. I stopped for one last scan of the steep, grassy scarp and plateau that forms Cow Gap. At 0915 BST I noticed a single brown hirundine pass approximately 50 feet below me, going from east to west close to the grassy slope. On checking through binoculars (Hartmann 9x40) I realised that this bird was considerably larger and bulkier than any hirundine I had seen in Great Britain, and that it had conspicuous white spots or windows in its tail. Its overall colour appeared a greyish brown, paler than a Sand Martin (*Riparia riparia*) and I was immediately reminded of an African Rock Martin (*Ptyonoprogne fuligula*), a species I am very familiar with due to my frequent visits to South Africa and Zimbabwe. However, this bird appeared paler brown than that species. The bird turned at the western edge of Cow Gap and returned some 30 feet below me, passing west to east, and continued passing to and fro below me at ranges varying from 20-80 feet.

With continued observation I was able to observe the bird's overall colour on the upper parts as being grey-brown, with darker primaries, secondaries and tail feathers and with very conspicuous elongated white spots on the tail feathers when the tail was spread. Its mode of flight was more measured and heavy than Sand Martin, although still fluent and graceful, and it would glide often, turning and banking, relatively slowly. From this viewpoint the bird was observed for 7 minutes before it disappeared, at 0922 BST, around the eastern slope of Cow Gap towards Eastbourne. The bird returned some 2 minutes later and carried on behaving as before. I had by this time tentatively reached the conclusion that this bird was a Crag Martin (*P. rupestris*).

Realising that I should endeavour to get views of the bird from below, I scrambled down the slope some 80 feet from my original position. From here I was able to view the bird from below as it passed backwards and forwards between me and the cliff path. The undersides of the body appeared superficially a drab, uniform pale brown apart from the undertail coverts which were a darker brown. I was also struck by a marked contrast between the blackish brown of the underwing coverts and axillaries and the grey-brown of the blackish brown of the underwing secondaries. The tail, from below, still appeared dark brown again with very conspicuous elongated white spots when spread. From chin to vent appeared a dull

dirty brownish white with the sides of the head a dull smudgy brown, slightly darker around the eye.

The following description is based on my original field notes:

Size and shape: Superficially similar to Sand Martin in shape but overall much larger, chunkier and heavier looking with broad head, body, wings and tail.

General colouration: Overall greyish brown being paler whitish brown underneath with darker brown flight feathers. No obvious distinguishing features of plumage apart from conspicuous elongated white tail spots visible from both above and below.

Head: Crown and nape greyish brown. Sides of head appeared smudgier brown, slightly darker around the eye. Chin and throat dull dirty brown.

Body: Mantle, back and rump greyish brown. Breast and belly dull, dirty, whitish brown. Undertail coverts darker brown.

Wings: Broad, especially towards body, tapering to a point. Upperwing coverts greyish brown. Primaries and secondaries appearing darker brown and contrasting with upperwing coverts. Underwing coverts and axillaries dark brown possibly black contrasting with paler undersides of primaries and secondaries.

Tail: Shortish, broad and square ended when spread. Marginally forked when closed. Tail feathers dark brown both above and below with conspicuous elongated white tail spots when tail spread, visible from both above and below.

Bare parts: Bill dark.

Call: None heard.

Flight and behaviour: Flight typical, accomplished hirundine but noticeably with slower measured wingbeats interspersed with glides and slow turns. Never appeared to be in a hurry or perform any very rapid turn or change of direction. Patrolled an area of steep grassy scarp face from heights varying from almost grass level to 50 feet above the scarp, although slope some 300 feet above sea level. Never rose above the top of the slope or the position on which I was originally standing on the cliff path, which was some 30 feet from the top of the scarp face. Seemed almost 'grooved' into a band 60/70 feet wide stretching from one side of Cow Gap to the other.

The bird showed no signs of anxiety at my presence, and indeed on one memorable occasion showed evidence of curiosity, approaching to within approximately 10 feet, circling over my head and seizing an insect with an audible snap of its bill. After approximately 10 minutes, I returned to my original vantage point and watched the bird continue its leisurely feeding. As the bird appeared set to stay and there were no other birdwatchers around at 0945 BST, I went in search of R. D. M. Edgar, a colleague of mine in the Beachy Head Ringing Group who was nearby at Whitbread Hollow. I returned with him at 1005 BST but sadly the bird was nowhere to be seen and further visits during the day at 1050 BST and 1700 BST failed to locate it. The weather conditions at the time the bird was seen were very good, being warm and sunny, cloud 4/8 with a south-west wind, force 4-5.

There had been a movement of Swifts (*Apus apus*) and a single Sand Martin south-west along the cliffs of Beachy Head when I arrived at 0600 BST but this had ceased by 0800 BST. At the time I viewed the Crag Martin there was no other hirundine or Swift in evidence.

11 The Twitten, Ditchling, Hassocks, West Sussex

E. D. Urquhart

THE LESSER SPOTTED WOODPECKER IN SUSSEX, 1964-1988

by F. W. Dougharty and S. W. M. Hughes

The Lesser Spotted Woodpecker *Dendrocopos minor* is an inconspicuous species which is easily overlooked and as a consequence very much under-recorded. The Sussex Ornithological Society (SOS) receives approximately 100 records annually, nevertheless it is difficult to produce a meaningful summary for the *Sussex Bird Report* which acknowledges the dedication of the observers concerned. Furthermore, when considered in isolation, the records for a single year provide only minimal information on the distribution and status of the species. Thus it was with these problems in mind that we decided to review all the information available over the 25-year period, 1964-1988.

INFORMATION SOURCES AND METHODS

A thorough search was made of the SOS files as the principal source of information. In addition we examined the detailed results of an ecological survey of woodlands in north-west Sussex carried out in 1982 on behalf of the Royal Society for the Protection of Birds and the Sussex Wildlife Trust. The results of this survey, which included 15 woods north of Midhurst and 25 woods in the area between Horsham, Crawley and Haywards Heath, have been summarised previously (Bealey and Sutherland, 1983). Unpublished information for several nature reserves and local projects performed by individual members was also examined. Finally these sources were supplemented with our own observations at Cattlestone Farm, West Chiltington (FWD) and in the parish of Slinfold (SWMH) over the same 25-year period.

Records from the SOS files were classified into those relating to the breeding season which, for the purpose of this paper, was defined as March to August (inclusive) and those at other times of the year. The definition of the breeding season in Sussex was based on the observations of Walpole-Bond (1938) who reported nest excavation at the end of March and on our own experience of display at the end of February and territorial behaviour early in March. At the end of the season family parties can still be very much in evidence during August.

The breeding season records for each year, and those at other times, were recorded on a tetrad (2-km square) basis and these annual reports used to produce summaries for five periods, each of five years, and maps for the overall period of 25 years (Figs 1 and 2). An additional composite map (Fig. 3) was compiled from records, from all sources at all seasons, for the entire 25-year period. The results of these mapping exercises and other observations were compared with the previously published accounts of Walpole-Bond (*loc. cit.*), des Forges and Harber (1963) and Shrubb (1979) and are reported in the subsequent sections.

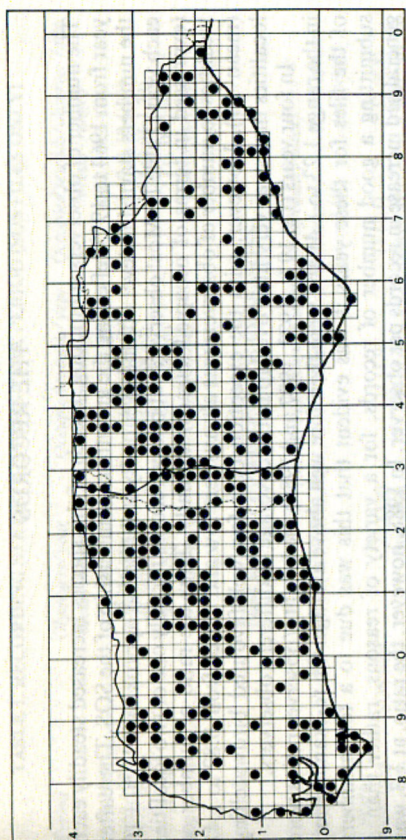


Fig. 1

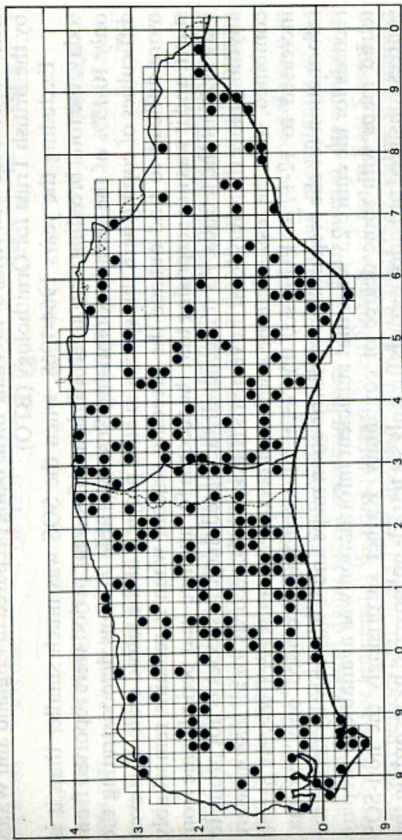


Fig. 2

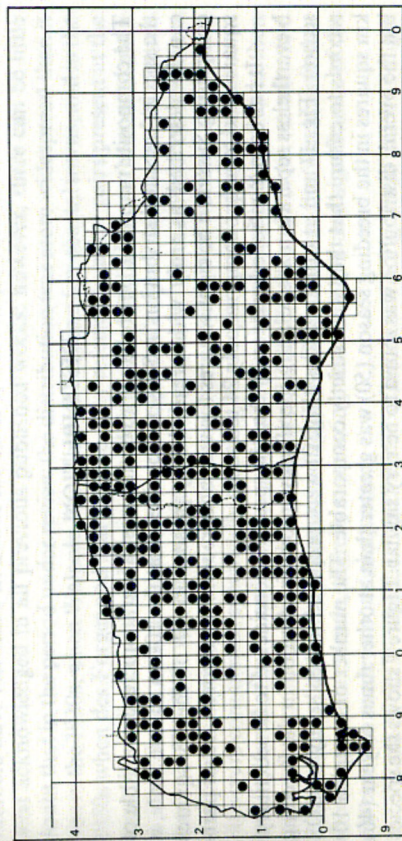


Fig. 3

Figs 1-3 (opposite). Distribution of the Lesser Spotted Woodpecker in Sussex, 1964-1988: fig. 1 — during the breeding season (i.e. March-August), SOS files; fig. 2 — all other times of the year (September-February), SOS files; fig. 3 — all records from all sources at any season.

THE RECORDS

The number of observers submitting records of this species increased steadily each year from 1964 to 1973 reflecting the growth in membership of the SOS. Thereafter the numbers started to level off and eventually stabilised at approximately 50 ± 10 each year (Table 1). Most observers submitted records for only one or two localities (expressed in terms of occupied tetrads) annually. Thus the ratio of number of localities to number of observers was always very low and varied from 0.82 to 1.41 (mean 1.1). However, with the exception of a few well-favoured birdwatching localities there was very little overlap in the coverage of different observers.

In four years (i.e. 1971, 1973, 1977 and 1980) the locality/observer ratios were in the range 1.23 to 1.41 and were therefore well above average. On re-examination of the files for these years it was evident that this was due to a few members submitting a good number of records, for a variety of reasons, rather than a generalised increase in records per observer. In 1988, however, the ratio, at 1.3, was again high and this appeared to be a more generalised increase probably due to the field work for the *New Atlas of Breeding Birds* being prepared in England and Wales by the British Trust for Ornithology (BTO).

Excluding the years 1964-1968, when the SOS was much smaller than it is today, the total breeding season records in any five-year period were reported from only 10-13% of the tetrads comprising Sussex (Table 2), thus demonstrating the difficulties of coping with this species in atlas projects at the tetrad scale. It is even more difficult to find outside the breeding season, when it remains remarkably silent, and it was not surprising that the records for any five-year period came from only 5-9% of the tetrads. As it is generally accepted that the species is not prone to anything more than very local movements (Lack, 1986), records for all seasons were combined, with the result that the number of occupied tetrads per five-year period increased to 12-17%. Even so, this level of recording provided only minimal information for the preparation of distribution maps and it was only by taking the records for the entire 25 years that sufficient information was available to prepare tetrad maps with some degree of continuity. Rather surprisingly the non-SOS sources consulted provided records for only six tetrads not covered by records in the SOS files.

DISTRIBUTION

The composite map (Fig. 3) probably gives the most accurate picture available of the species' recent distribution in Sussex. Considered at the 10-km square scale, it can be described as truly widespread, being present in 50 of the 58 squares comprising Sussex. The eight squares for which there were no records are all part-squares and together comprise only 24 tetrads.

It has been mentioned previously that the species is considered to be sedentary. Nevertheless separate maps relating specifically to the distribution in the breeding season (Fig. 1) and at other seasons (Fig. 2) were prepared, based solely on SOS records to ensure that they were strictly comparable. The number of occupied 10-km squares in the breeding season (50) was greater than at other times of year (46) but the overall distribution was found to be very similar. Figure 1 shows the species present in nine 10-km squares (i.e. SZ 79, 89, 99; TQ 10, 20, 80, 91, 92 and TV 59) in which it was not recorded during the field work in 1968-1972 for the BTO *Atlas of Breeding Birds* (Sharrock, 1976). It is possible that the species was truly absent from

TABLE 1. RECORDING STATISTICS PER 5-YEAR PERIOD (SOS FILES ONLY)

Period	Observers/year		Occupied tetrads/year		Occupied tetrads/observer ratio	
	Mean	(range)	Mean	(range)	Mean	(range)
1964-1968	13	(5-23)	11.8	(5-19)	0.94	(0.82-1.0)
1969-1973	32	(24-36)	37.8	(27-46)	1.19	(1.12-1.31)
1974-1978	45	(40-47)	48.2	(38-54)	1.08	(0.95-1.23)
1979-1983	50	(44-56)	59	(48-76)	1.17	(1.09-1.41)
1984-1988	51	(40-60)	56.6	(44-64)	1.14	(0.98-1.30)

TABLE 2. OCCUPIED TETRADS BY SEASONS

Period	Source	Numbers of occupied tetrads (% of county total)		
		(a) Breeding	(b) Winter	Both seasons (a) and (b)
5 years	SOS files	41 (3.8)	21 (1.9)	11 (1.1)
	SOS files	105 (9.8)	49 (4.6)	26 (2.4)
	SOS files	71 (6.6)	44 (4.1)	147 (13.8)
	SOS files	134 (12.5)	96 (9.0)	50 (4.7)
	SOS files	136 (12.7)	87 (8.2)	48 (4.5)
25 years	SOS files	332 (31.1)	219 (20.5)	161 (15)
	All sources	338 (31.6)	219 (20.5)	161 (15)

some of these squares at that time, though in retrospect the records in the SOS files indicate that it was certainly present in others, but probably in such small numbers that it was overlooked.

Shrubb (*loc. cit.*) was aware of an increase in records on the coastal plain in West Sussex in 1975-1976, which he attributed to the species' exploitation of the abundant dead and dying wood resulting from Dutch Elm disease. An analysis of the records for ten coastal 10-km squares in West Sussex and ten in East Sussex, in five-year periods starting in 1969, showed that in both areas the number of occupied tetrads during the period 1974-1978 was double that in 1969-1973. Since then the numbers have remained at about the same level. The presence near the coast has been acknowledged in all previous published works; however, there can be little doubt that in the period under review the distribution was more widespread than it was in the 1930s, when Walpole-Bond knew it only in a few coastal towns, and in the 1950s when des Forges and Harber (*loc. cit.*) referred to a few pairs present at the coast. We believe that Fig. 3 depicts a real change in distribution on the coastal plain in West Sussex and elsewhere at the coast, particularly as the increase in records during 1974-1978 was greater than the increase in the numbers of observers concerned. Furthermore the coastal areas were always well watched and several observers commented specifically that they were reporting the species in their own locality for the first time. The changes appeared more marked in West Sussex than in East Sussex and particularly so in squares SZ 89, TQ 00 and 01. An examination of the records for 15 10-km squares north of the Downs, across the Weald, failed to show any similar trends, thereby supporting the credibility and significance of the observation made in coastal squares.

North of the Downs the overall distribution shown in Fig. 3 was much as might have been expected from earlier published works. The presence on the forest ridges in the north (TQ 23, 33, 43, 53 and 63), the greensand north of the Downs (in TQ 11 and 21, and SU 82 and 92) and in the extreme north-west, as described by Shrubb

can be seen very clearly. However, Fig. 3 also shows the species to be well distributed in other areas of the Weald (e.g. TQ 01, 12, 22 and 32). Walpole-Bond considered it to be more common in the west than in the east and in terms of occupied tetrads Fig. 3 tends to support this, but some caution is necessary. Whilst some present-day observers agree that the species is relatively scarce in central East Sussex (e.g. TQ 61, P.C. Turner, pers. comm.) it is difficult to be confident that the apparent patchiness of the distribution in areas such as TQ 43, 52, 61 and 62 is due to anything more than a lack of members resident in those areas. However, there is a similar paucity of members in the north-west, where the composite records show a much less patchy distribution.

Walpole-Bond mentioned the absence of the species from the Downs. Figure 3 certainly shows this, at the tetrad scale, on areas above the 400-ft contour which, except for the conifer forests in the west, are virtually treeless. Nevertheless Fig. 3 also shows the occupied squares on both the southern and northern slopes, both of which are probably more heavily wooded now than they were in the 1930s. Walpole-Bond also commented specifically on the absence in the river valleys where they cut through the Downs but Fig. 3 shows an almost continuous string of occupied tetrads down each of the lower valleys. These changes may have been forerunners of the subsequent developments in coastal areas.

Shrubbs has suggested that the species may be more widespread on the coast during the winter months. However, the number of occupied tetrads in the coastal 10-km squares, as a percentage of the total occupied squares, was found to be very similar both in the breeding season and at other times of year. Over the county as a whole there were 46 tetrads in which the species was reported only outside the breeding season. Of these, 15 were in coastal 10-km squares but only one actually in a coastal tetrad. Nevertheless in the SOS records there is some evidence that in winter the species may leave the immediate vicinity of its breeding area and wander locally to feed in scrub and reeds where it may be more conspicuous. There is a small increase in numbers of records per month (as opposed to occupied tetrads) at a few localities near the coast. This may be due to increased conspicuousness or an increased number of observers in some of these areas during the winter months.

STATUS

Counting this species, with any accuracy, is only possible in very small areas. Thus there is no way of performing a countywide survey to attempt an accurate assessment of its status. We have therefore attempted to arrive at a rough estimate based on three approaches utilising combinations of published work, the distribution shown in Fig. 3 and fragments of information available from local studies.

Firstly the BTO Breeding Atlas suggests that nationally the average number of pairs per occupied 10-km square might be between 5 and 10 (i.e. 0.2-0.4 per tetrad). On this basis the 28 full and 22 part 10-km squares occupied in Sussex might support 195-390 pairs, assuming that on average a part-square equates to half a 10-km square. A second estimate can be derived from the ecological survey of woodlands in West Sussex in 1982 and from a Forestry Commission survey of woodlands of 0.25 ha and above in 1979-1982. The former gave a density of 0.9 pairs per km square (100 ha) of woodland surveyed and the latter found 18,500 ha and 10,976 ha of broadleaved high forest in West Sussex and East Sussex respectively. Assuming the species has the same density in East Sussex as in West

Sussex, the broadleaved high forest alone would support 265 pairs. However, the species is definitely not confined to this specific habitat and will be equally at home, if not more so, in other areas of broadleaved woodland too small to be included in the Forestry Commission's survey, and in many other wooded habitats. Furthermore, as all woodlands of 0.25 ha and over, irrespective of type, account for less than 20% of the land area of Sussex, it does not seem unrealistic that the estimate of 265 pairs for the broadleaved high forest should be doubled to take account of all potential habitat. Thus lower and upper figures for Sussex could be 265-530 pairs. As explained later, we have come to believe that an average density for the species in Sussex is likely to be nearer 1-1.5 pairs per occupied tetrad. Utilising these figures and the distribution in Fig. 3 provides a third estimate of 396-594 pairs. Averaged lower and higher figures based on the three estimates are 285 and 504 pairs respectively which, for convenience, we have further approximated to 300-500 pairs.

Such large numbers may be difficult to accept initially, particularly when most observers, like ourselves, only manage to find the species in a very few localities each year. Our own very conservative estimate of 1-1.5 pairs per occupied tetrad (400 ha), which produced the highest of the three estimates, was based on several fragments of information. For example, over 15 years, we have estimated the number of pairs in the Mens and surrounding ancient woodland near Wisborough Green, at 3-4 pairs on c.200 ha. However, only single pairs have been found in woodland surveys at Ebernoe Common (c.100 ha) in recent years (L. Manns, on file) and at Pippingford Park (c.200 ha) in 1988 (J.E.S. Cooper, on file). In areas of Wealden farmland, a survey of the Brinsbury Estate, near Billingshurst, found one pair on 235 ha (Prater, 1982); whilst 25 years of intensive observation of c.100 ha at Cattlestone Farm, West Chilington have revealed one pair in 8 years, 2 pairs in 16 years and 3 pairs in one year (1978). Over a similar period casual observations at Slinfold have regularly produced 2 pairs in an area of c.800 ha and a third in at least 6 years. In contrast, in 1979 and 1980 only 2 pairs could be found on 1600 ha of farmland near East Hoathly (P.C. Turner, pers. comm.).

Despite the obvious difficulties involved in making population estimates, they are necessary to appreciate the importance of the Sussex population. Taking a figure of 300-500 pairs, which may be a considerable underestimate, Sussex could be supporting $6.5 \pm 3.5\%$ of the national population as estimated by Sharrock (*loc. cit.*) or $10.5 \pm 5.5\%$ according to the more recent estimate of Cramp (1985). Nationally the species appears now to be in decline (Marchant *et al.*, 1990) following a large population peak during the period 1975-1985, and there is therefore a special need to monitor and protect it in Sussex, not only in the remaining ancient woodlands but also in other habitats such as riverside willows and alders, whose removal may have adverse effects (Edgar, 1987).

All published accounts on the status of this species conclude that, notwithstanding its inconspicuousness, it is undoubtedly the least numerous of the three woodpeckers. It is, however, difficult to quantify these differences. During 1976-1979, in a project in the East Grinstead area, the Lesser Spotted Woodpecker was found in 31% of 39 tetrads visited whereas the Great Spotted Woodpecker, *D. major* and Green Woodpecker *Picus viridis* were present in 77% and 67% respectively (D. J. W. Smith, on file). Comparative figures for the three species in four small survey areas are given in Table 3, together with figures from a less intensive, but nevertheless systematic, sampling of a comparatively large area of north-west Sussex (M. J. Rogers, on file). A more detailed examination of the latter area would almost certainly have produced greater numbers of all three species;

nevertheless it is of interest that the ratios between the species were similar in all the areas. The figures suggest that the Lesser Spotted Woodpecker is between 5 and 10 times less numerous than the Great Spotted Woodpecker and on a casual birdwatching basis this situation may be further exaggerated.

Other data allowing comparisons of the three species are provided in Tables 4 and 5. Table 4 gives the results of point counts in the Mens woodland and at Ebernoe Common. It should be noted that the Lesser Spotted Woodpecker was not recorded, during the counts, in either woodland in 1988, probably because they were not started until late April by which time most territorial display had ceased. Shrubbs has provided data on birds counted in 23 Sussex woodlands, grouped on a geographical basis, and the figures for the woodpecker species have been abstracted to prepare Table 5. The method used has been described previously in the *Sussex Bird Report* (Scientific Sub-committee, 1965); although its reliability has always been considered somewhat limited for a number of reasons, the data serve to remind us that the distribution and abundance of a species is unlikely to be uniform throughout the county and may depend on many factors. Thus in the absence of site-specific survey data, population estimates based on any kind of extrapolation should err very much on the side of caution. It should also be noted that the results given in Tables 3, 4 and 5 cannot be compared directly because they are derived from studies utilising very different survey methods.

HABITATS AND NEST SITES

We have found that some observers, with little experience of this species, have a preconceived idea that it occurs almost exclusively in ancient broadleaved high forest. This is far from the truth as the species is catholic in its choice of habitat. Indeed, following our review of the records in the SOS files, we believe it would be safe to state that it can occur anywhere there are broadleaved trees, irrespective of their size or maturity. In Sussex it seems to avoid conifers of any kind. This is not true in parts of mainland Europe where the species often feeds in coniferous forests, particularly in winter (Cramp, *loc. cit.*). The traditional habitats in Sussex were described by Walpole-Bond as 'Park and chase abounding in rotting timber, old orchards, shrubberies, even small gardens and avenues of ancient trees, though, besides, it likes the margins of even big hursts, trees aligning swamp and stream and those in hedgerows, especially should the last named foster elms'. Whilst today it is a little difficult to identify with some of these scenarios, the majority are still relevant. We would emphasise that the species appears to favour open areas of woodland and is usually found at the edges of the more dense stands.

To bring the habitat scenarios up to date it is necessary to include golf courses, and gravel pits and reservoirs with scrubby margins. We have been impressed by the number of records from sites closely associated with fresh water of some kind. These included reedbeds, where the birds were observed in the reeds themselves as often as in the associated carr. The more unusual sightings included birds in scrub on cliff tops and adjacent to beaches, with one record of a bird feeding in a tamarisk tree. Others were reported from allotments and at a vineyard and there were two particularly unlikely records, one from the confines of a holiday camp and another on equipment in a children's playground.

It is impossible to determine if the use of rural and suburban gardens is increasing but some observers have had the majority of their annual sightings in their gardens. Furthermore these records frequently involved family parties and

were often the only indication that the species occurred and bred locally. Where details were given, approximately 60% of records in gardens mentioned birds visiting apple, cherry or pear trees. Other trees identified included wild cherry, walnut, willow and oak and the species was also reported visiting runner beans and broad beans. One exceptional record was of a bird on a very small clump of reedmeads growing in a garden pond in Worthing (J. Newnham, pers. comm.).

TABLE 3. COUNTS OF WOODPECKER SPECIES IN STUDY AREAS IN SUSSEX

Locality	Year	Area studied	Unit	Lesser Spotted	Great Spotted	Green
Pippingford Park	1988	200 ha	pairs	1	11	5
Brinsbury Estate	1982	230 ha	pairs	1	7	2
East Sussex TQ51	1979/80	1600 ha	pairs	2	10	5
NW Sussex Ecol. Survey	1982	1800 ha	pairs/km ²	0.9	5.1	2.5
NW Sussex	1980	11600 ha	pairs	2	10	5

TABLE 4. WOODPECKER SPECIES STATISTICS FOR THE MENS AND EBERNOE COMMON IN 1988 AND 1989 (POINT COUNT METHOD)

	The Mens		Ebernoe Common	
	1988	1989	1988	1989
Percentage frequency*				
Lesser Spotted	0	2.5	0	0.5
Great Spotted	50	55	40	20
Green	10	20	30	10
Relative Abundance†				
Lesser Spotted	0	0.2	0	0.12
Great Spotted	2.6	3.3	2.28	1.01
Green	0.4	0.83	1.52	0.6
1988 counts	30/4/88-28/5/88		24/4/88-5/6/88	
1989 counts	27/3/89-13/5/89		21/4/89-29/5/89	

* Number of samples in which species present as a percentage of total samples.

† Percentage of total bird contacts represented by each species.

TABLE 5. WOODPECKER SPECIES STATISTICS FOR 23 SUSSEX WOODLANDS CLASSIFIED ON A GEOLOGICAL BASIS (1963-1974)

	Time Quadrat Method; adapted from Shrubbs (1979)			
	Sand	Chalk	Clay	Coast
Percentage frequency*				
Lesser Spotted	2.0	0	0.8	1.4
Great Spotted	7.0	2.1	12.3	1.4
Green	7.0	3.2	8.0	0.7
Relative Abundance†				
Lesser Spotted	0.2	0	0.04	0.06
Great Spotted	1.1	0.2	0.7	0.1
Green	0.9	0.4	0.3	0.03
Contacts per hour				
Lesser Spotted	0.1	0	0.05	0.1
Great Spotted	0.6	0.1	0.8	0.1
Green	0.4	0.6	2.0	3.2

* † See footnotes to Table 4.

Garden records occurred in every month but c. 70% of the 182 records in the SOS files were for the June-August period. In Fig. 4 the monthly pattern of these garden records is compared with the monthly pattern of all records at Cattleston Farm, West Chiltington, over 25 years. Although the species is recorded on the farm in every month, it is interesting to note that it is most conspicuous during July and August when birds visit an orchard near the farmhouse. Also there is a secondary peak in April at the time when the species is most vocal.

The species shows the same catholic tastes for nest sites. These may be well hidden, or totally exposed, and sometimes very public by a road or a dwelling. Although sometimes regarded as a bird of the high timber nesting in excess of 50 feet (15 metres) from the ground, it is equally at home lower down and there are several records in the SOS files of nests as low as 3 feet (1 metre). However, the majority of nests reported were higher at 20-30 feet (6-9 metres). No particular species of tree was favoured. There were records for 15 species ranging from large oaks, beech and ash to the smaller willow, alder and crab apple. Similarly there appeared to be no preference for sites on either the main trunk or lateral branches. It was not uncommon for the same tree to be used in consecutive years but with a new hole being bored each year; good examples of trees with at least four holes exist at Woods Mill and in the Mens woodland.

FOOD AND FEEDING HABITS

There is a substantial literature on the food and feeding habits of this species but much of it relates to observations made in mainland Europe (Cramp, *loc. cit.*). It is well known that a wide variety of insects, larvae, nuts and soft fruits are taken and the SOS files were unlikely to provide any information unique to Sussex.

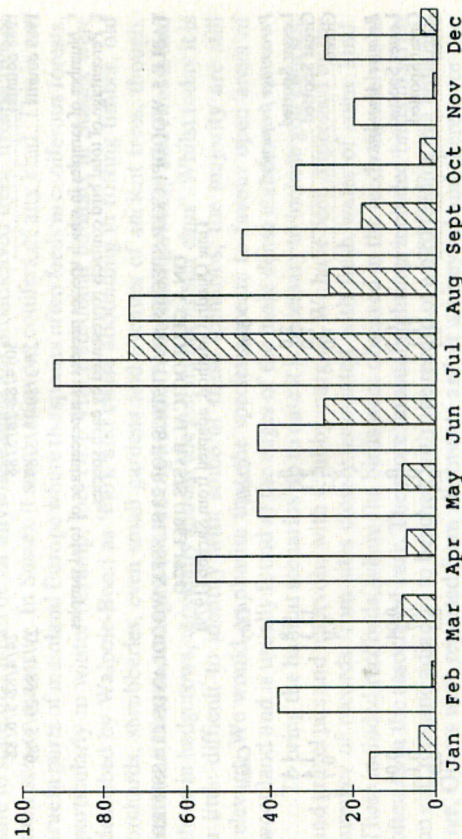


Fig. 4. Comparison of monthly patterns of records of the Lesser Spotted Woodpecker in gardens in Sussex from the SOS files (hatched columns) with records on a Wealden farm at West Chiltington (open columns), 1964-1988. The vertical scale shows the total number of birds reported in each month over the entire 25-year period.

Nevertheless in the files it was very clear that it is aphids which attract the species to gardens and hence the attraction to fruit trees and vegetables. Surprisingly there was no record of the species taking fruit of any kind, even in gardens, although we have two records of a bird boring into apples to retrieve larvae from the core. The details of the unusual method used to achieve this have been recorded elsewhere (Hughes, 1990). Several observers have commented that, if undisturbed, the species may remain at a source of food for prolonged periods; 20 minutes would not be exceptional and there was one record of a bird staying in a favoured area over a period of two hours.

With the frequent use of gardens it is interesting to note that, unlike the Great Spotted Woodpecker, the species has not yet shown widespread adaptation to the use of feeding stations. To date there are two winter records of occasional feeding at fat baskets: one at an unspecified locality in 1970 and one at Findon in 1988. There is also a single record of a bird feeding from hanging suet in East Grinstead in August in 1973. In addition there are two records, both in May, of bird tables being used, at Fontwell in 1974 and at Fernhurst in 1979, but these appear to have been one-off random occurrences at both sites. In view of the apparent tameness of the species and the fact that it is not an uncommon visitor to bird tables on mainland Europe (Cramp, *loc. cit.*), it is surprising that it has been so slow to adopt a similar strategy in Britain.

SUMMARY

The Lesser Spotted Woodpecker *Dendrocopos minor* is one of the most inconspicuous species resident in Sussex. The records submitted by members of the SOS over 25 years (1964-1988) and other information indicate that it is widely distributed and has probably increased its range south of the Downs and in other coastal areas, during the period under review. It is catholic in its choice of broadleaved wooded habitats but appears especially attracted to open woodland, particularly if damp and containing rotting timber. It avoids conifers and really dense stands of any species. The Sussex population has been estimated at 300-500 pairs, and as such may constitute approximately 6-10% of the national population, which is now in decline following a population peak in 1975-1985. The species visits rural and suburban gardens at all times of year but is most frequent in the summer months when it is particularly attracted by aphids on fruit trees and vegetables. Unlike the Great Spotted Woodpecker (*D. major*) it is only rarely seen at garden feeding stations in Sussex.

ACKNOWLEDGEMENTS

We wish to thank Mrs. Sheila Allwood for typing the manuscript and David Codd for drawing Figures 1 to 3. As always a review of this kind would be impossible if it were not for the dedication of the relatively small number of members who have submitted their records annually over many years.

REFERENCES

- Bealey, C. T. and Sutherland, M. P. 1983. Woodland birds of the West Sussex Weald. *Sussex Bird Report* 35: 69-73.
 Cramp, S. (ed.). 1985. *The Birds of the Western Palearctic*. Vol. 4. Oxford University Press.
 des Forges, G. and Harber, D. D. 1963. *A Guide to the Birds of Sussex*. Oliver & Boyd, Edinburgh.
 Edgar, R. D. M. 1987. Habitat changes. In *Birds of Sussex 1962-1987*. Sussex Ornithological Society.

Forestry Commission. n.d. *South East England Census of Woodland Trees 1979-1982*.
Hughes, S. W. M. 1990. Lesser Spotted Woodpecker extracting larvae from apples. *British Birds* 83:23.

Lack, P. 1986. *The Atlas of Wintering Birds in Britain and Ireland*. Poyser, Calton.
Marchant, J. H., Hudson, R., Carter, S. P., and Whittington, P. A. 1990. *Population trends in British breeding birds*. BTO, Tring.

Prater, A. J. 1982. The birds of Brimsbury Estate, West Sussex. *Sussex Bird Report* 34: 60-64.
Scientific Sub-Committee 1965. Survey of Woodland Birds 1984. *Sussex Bird Report* 17: 50-51.

Sharrock, J. T. R. 1976. *The Atlas of Breeding Birds in Britain and Ireland*. Poyser, Calton.
Shrubb, M. 1979. *The Birds of Sussex: their present status*. Phillimore, Chichester.
Walpole-Bond, J. 1938. *A History of Sussex Birds*. Witherby, London.

F. W. Dougharty, *Cattlestone Farm, West Chiltington, West Sussex*.
S. W. M. Hughes, *6 West Way, Slinfold, Horsham, West Sussex*.



PASSAGE RING OUZELS IN SUSSEX, 1962-1988

by R. Leverton

INTRODUCTION

The English name of the Ring Ouzel *Turdus torquatus* has been known since before 1450 (Greenoak, 1979), far longer than most of our birds. In Sussex Ring Ouzels were first recorded as passage migrants by Gilbert White in 1770. During the present century they have declined, at least in Britain, but are still regular in Sussex in spring and autumn. As fairly scarce, distinctive and charismatic birds they tend to be noticed, and reported, by most observers who encounter them. This paper uses the large body of records which has built up in the files of the Sussex Ornithological Society since its inception in 1962 to investigate their passage in detail, concentrating especially on the distribution of migrants in the county.

Endless effort goes into the collection, submission and storage of members' records, but comparatively little analysis is done. Are data based largely upon casual observations of much value when modern studies insist on standardised fieldwork? Does the rather rigid format in which records are submitted (species, date, number, locality) have drawbacks as well as advantages? My secondary aim was to use this species as a test of how well the Society's recording scheme works, and see whether aspects of it could be improved.

METHODS

Using the original files, I analysed all records of Ring Ouzels reported to the Society from 1962 to 1988. Obvious duplicate sightings of the same bird on the same day were easily excluded; in less obvious cases a precise location rather than a vague general area was sometimes helpful, as was the sex of the bird if given. Because passage migrants often stop over for several days or even longer, as many observers noted and as a ringing study at my own site near Lewes confirms, I made some allowance for this when assessing records. While this allowance was necessarily subjective, I believe it was consistently applied. Not to have made it would have exaggerated the numbers of birds involved, and compounded the bias which already exists in favour of well-watched sites compared with those visited only infrequently.

As spring birds were fewer, and always reported individually, it was relatively easy to determine the totals. This was much harder in autumn, especially for the Beachy Head area, where for a few years only first and last dates with perhaps one or two peak counts were submitted, making it impossible to estimate the true numbers involved in the passage there in such autumns. By contrast the most helpful observers were those who stated whether, in their view, repeated sightings in the same area represented long-staying birds or new arrivals: they were in the best position to judge this.

Inevitably my estimates of passage totals frequently differed from those published in the *Sussex Bird Report*, depending on how generously or stringently the previous assessor had regarded possible duplicate sightings. Also, regrettably, in the 1960s some records used in the Report seem not to have been deposited in the files — for example, the earliest-ever spring record, on 5 March 1967 at Beachy Head (Shrubb, 1979), does not appear therein. To ensure uniformity of treatment, I analysed only those records surviving in the files, hence my totals are slightly conservative. Finally, the gradual increase in the Society's membership over the

period must have had a complex but unquantifiable effect on the numbers of reports submitted. Fortunately the picture of Ring Ouzel migration through Sussex which emerges from the analysis is so clear-cut that it is unlikely these minor uncertainties have caused much distortion.

RESULTS

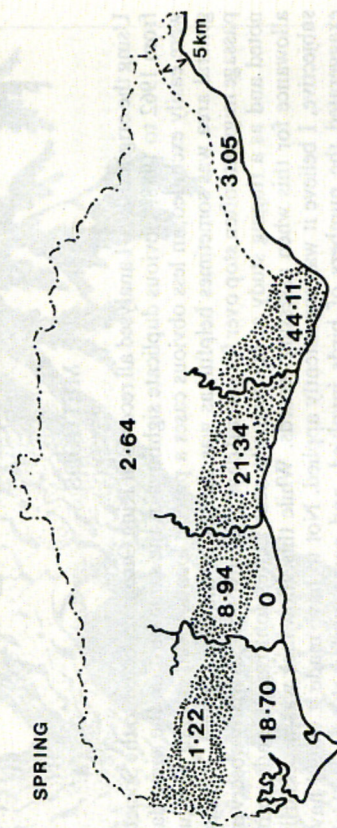
Numbers in spring

During spring passage, which occurred mainly between late March and early May, 492 birds were reported in the 27-year period covered by the records, giving an average of 18 birds per spring. According to the files the worst springs were 1966 and 1968, with only 4 birds in each, but the surviving data for those years are incomplete. More reliably 1982, with just 5 birds, was the poorest spring. Strangely, the previous one was the best of the survey, with 43 birds.

In spring, 73.6% of reports were of single birds, 24.9% were of 2-5 birds together, and only 1.5% involved parties of more than this, the largest being a flock of 9 at Newmarket Hill in mid-April 1988.

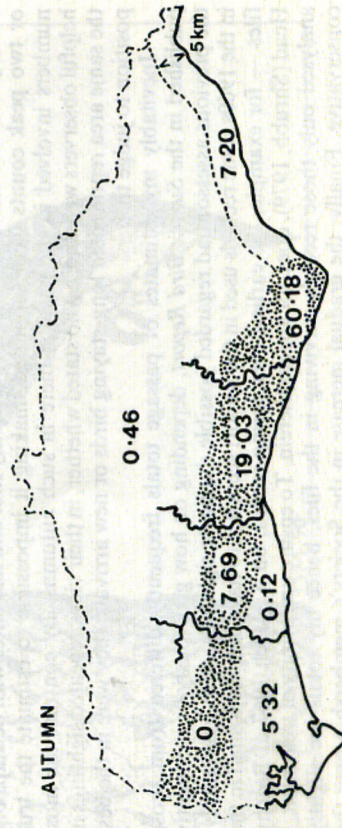
Numbers in autumn

During autumn passage, which occurred mainly from September to early November, 3458 birds were reported, giving an average of 128 birds per autumn.



Figs 1 (above) and 2 (below). The percentages in different regions in spring and autumn of all records of Ring Ouzels in Sussex, 1962-1988.

Key: Stippled areas and percentages represent the Downs plus their intervening valleys and coastal fringe. The rivers, from west to east, are the Arun, Adur and Ouse.



Numbers fluctuated even more than in spring, with a low of only 20 birds in 1978 and a run of poor autumns in the 1980s until the record total of 497 in 1988, easily beating the previous high of 275 in 1966.

Because records were often submitted in less detail than in spring it was not possible to analyse flock size, but small parties of 2-5 birds were more frequent than single birds. During major falls up to 200 were seen at Beachy Head (9 October 1966), while in mid-October 1988 groups of between 40 and 50 were found in the Castle Hill/Newmarket Hill area, at Hollingbury and at Cissbury.

Distribution

As Shrub (1979) pointed out, nearly all sightings of Ring Ouzels are from the Downs or the coast. My analysis found that 96.14% of all spring birds and a remarkable 99.48% of autumn ones were seen within 10 km of the coast, although this represents only about a third of the total land area of Sussex. Furthermore, 74.80% of spring birds, and 86.64% of autumn ones, were reported from the Downs. Even here Ring Ouzels were not evenly distributed, becoming increasingly numerous towards the east. Figures 1 and 2 give a breakdown by region of all records for spring and autumn.

The maps also show that there is a definite tendency for spring birds to be relatively more frequent compared with autumn ones in the west, the proportion gradually decreasing eastwards as shown in Table 1. Secondly, birds in the Weald more than 5 km from the coast were decidedly scarce, especially in autumn.

TABLE 1. THE NUMBERS AND RATIO OF SPRING:AUTUMN RING OUZELS REPORTED FROM DIFFERENT REGIONS OF SUSSEX, 1962-1988

Region	Number		Ratio spring:autumn
	spring	autumn	
Thorney Is. to R. Arun (Downs and coastal strip)	98	184	1: 1.88
R. Arun to R. Adur (Downs and coastal strip)	44	270	1: 6.14
R. Adur to R. Ouse (Downs)	105	658	1: 6.27
R. Ouse to Eastbourne (Downs)	217	2081	1: 9.59
Pevensye to Midrips (coastal strip)	15	249	1:16.60
The Weald (over 5 km from coast)	13	16	1: 1.23
Overall	492	3458	1: 7.03

Comparison with other counties

Table 2 puts the Sussex totals in perspective. Our spring passage is unremarkable, averaging less than half that seen in Kent, where large falls sometimes occur as in 1988. However, in autumn Sussex is paramount: only Kent approaches our figures and there Dungeness accounts for the bulk of the records. Hampshire has rather few birds in spring or autumn but the Isle of Wight does well considering its small area. Rather surprisingly, spring passage averages higher than autumn in Essex. The inland counties have very few birds at either season.

TABLE 2. NUMBERS OF RING OUZELS RECORDED ON PASSAGE IN SUSSEX AS COMPARED WITH OTHER SOUTH-EASTERN COUNTIES, 1962-1988

County	Spring		Autumn		1988 only	
	average	range	average	range	spring	autumn
Sussex	18	4-43	128	20-497	31	497
Kent	39	10-150	67	10-340	150	195
Isle of Wight	4	0-20	22	0-120	10	120
Hampshire	4	0-16	9	0-65	14	65
Essex*	14	2-40	9	3-32	40	32
Surrey	5	0-39	2	0-9	16	3
Berkshire	2	0-6	2	0-33	6	0

*Essex figures are for 1978-1988 only.

DISCUSSION

The scale of Ring Ouzel passage through Sussex fluctuates so wildly, especially in autumn, that numbers must be determined largely by the chance effects of weather conditions rather than breeding success and population size. Two overlapping waves of migrants are involved, with British breeders passing through earlier in both spring and autumn than Scandinavian ones. Durman (1976) believed that passage birds in late April and May, and all autumn birds after 8 October, can safely be considered Scandinavian in origin, while those seen earlier may be from either population. By this yardstick many of the spring birds in Sussex, and most (over 70%) of autumn ones, would qualify as Scandinavian. My own impression is that the passage of British birds in both seasons is small but relatively constant from year to year, whereas numbers of Scandinavian migrants vary erratically, occasionally producing large falls in October as happened in 1965, 1966 and 1988.

While the numbers of Ring Ouzels reaching Sussex may be due largely to chance, there is nothing random about their distribution: most are found on the eastern Downs. Even here, certain traditional areas are favoured. Beachy Head is predominant in spring and autumn, with lesser concentrations at Lullington Heath, Cuckmere Haven and Seaford Head, Balsedean and the Castle Hill/Newmarket Hill area, Hollingbury and Cissbury. The true extent to which Ring Ouzels use these Downs may even be understated by the records. There must be many isolated coombes which regularly harbour Ring Ouzels but are never visited by observers. Between 1975 and 1988 I reported 243 birds from my own sites around Ashcombe near Lewes (admittedly on private farmland) and only 3 of these were independently sent in by another watcher. By contrast, a large proportion of the birds visiting the Selsey Peninsula must be seen and reported.

Because virtually none of the eastern downland is more than 10 km from the sea it is hard to decide whether location or habitat is the prime reason why Ring Ouzels favour it over all other parts of Sussex. High ground and steep slopes seem important to them (pers. obs.), yet in the west the low flat Selsey Peninsula is chosen rather than the Downs, which here are some 20 km from the coast. Although Gilbert White in 1770 specifically stated he found autumn parties of Ring Ouzels 'all along the Sussex-downs . . . from Chichester to Lewes' this is no longer the case today. During the 27-year period of the survey there were hardly any downland sightings west of Cissbury, and none at all in autumn from the Downs west of the Arun, even though some areas such as Kingley Vale NNR are well watched. Besides their distance from the coast these Downs are considerably more wooded and have less short unimproved grassland and low scrub than those in the east, so habitat change since White's time may be one factor.

East of Beachy Head, most Ring Ouzels are seen in the Firehills area of the Hastings Country Park, confirming the preference for coastal high ground. Perhaps because of the closeness of the Downs there was only a single record for Pevensey Levels, yet some of the habitat is similar to that used in the Pagham area. Parts of the high Ashdown Forest would seem to approximate more closely than the Downs to the Ring Ouzels' moorland breeding haunts, but hardly any have been seen there.

Thus it appears that both a coastal location and suitable habitat are important requirements for Ring Ouzels pausing while on passage. Their scarcity elsewhere suggests migrants are highly capable of finding such areas — either they have ways of locating them whatever the weather conditions, or they are strong enough fliers not to need to stop unless they are passing over suitable terrain. Otherwise, many more reports of birds grounded away from the Downs and the coast would be expected.

Yet I feel there must be a further explanation of why only one in every 200 autumn birds in Sussex is found more than 10 km from the coast. I suspect that the Scandinavian birds which make up the bulk of autumn records usually arrive not overland from the north, but from the south-east and the sea. Ring Ouzels normally leave Scandinavia on a South to SSW heading, taking them mainly east of Helgoland on their way to southern France (Cramp, 1988). I suggest that, especially with easterly winds and poor visibility, some birds tire as they near the end of the North Sea crossing and are drifted through the Straits of Dover into the Channel, whereupon they make for the nearest land. Hence the falls in autumn at Dungeness and, more so, along the eastern South Downs — these, rising to over 600 ft (180 m), would be visible from much further out into the Channel than the lower ground on either side. Having turned north solely to reach land, birds might be disinclined to fly further inland (in the 'wrong' direction) than absolutely necessary.

The figures for autumn 1988 shown in Table 2 lend support to this hypothesis. Whereas 877 Ring Ouzels were recorded between Hampshire and Kent, only 3 were seen in Surrey and Berkshire combined; while of perhaps 400 Sussex birds involved in the main mid-October falls only two (singles at Bewl Water and Burgess Hill) were found more than 10 km from the coast. Thus it seems almost inconceivable that many of these birds had arrived on the South Coast by an overland route.

Spring birds, though also arriving from the sea, should have fewer reservations about continuing northwards, and indeed the percentage found in Sussex more than 10 km from the coast, though still small, is nearly 8 times higher than in autumn. Similarly, Ring Ouzels are slightly more numerous and regular in spring in the inland counties of Surrey and Berkshire than in autumn.

CONCLUSION

The simple and standardised format in which the Society's records were submitted made them easy to analyse. They provided clear answers to the 'when, where and how many?' questions of Ring Ouzel passage in Sussex. Their weakness was that they gave less indication of 'why'. Although the recording forms had space for comments, little information on behaviour or habitat choice or weather patterns was submitted. Now that the basic status of nearly every species in Sussex is increasingly well known, the task will be to identify the factors behind this. While such studies may be the province of the trained ecologist, there is no reason why the files of the SOS should not contain a wealth of casual notes and comments which, taken together, would provide strong clues at least to the underlying causes which influence the numbers and distribution of our birds.

SUMMARY

The Sussex Ornithological Society's records of passage Ring Ouzels show an average of 18 birds per spring and 128 per autumn over the period 1962-1988. Sussex receives far more autumn Ring Ouzels than any other south-eastern county; probably most are Scandinavian birds drifted into the Channel. 96.14% of spring birds and 99.48% of autumn ones were found within 10 km of the coast. 74.80% of spring birds and 86.64% of autumn ones were found on the Downs, almost all between Cissbury and Beachy Head. Both the direction of arrival and a strong habitat preference for steep open hillsides seem to be responsible for this localised distribution. Some strengths and weaknesses of the standardised format in which records were submitted are discussed.

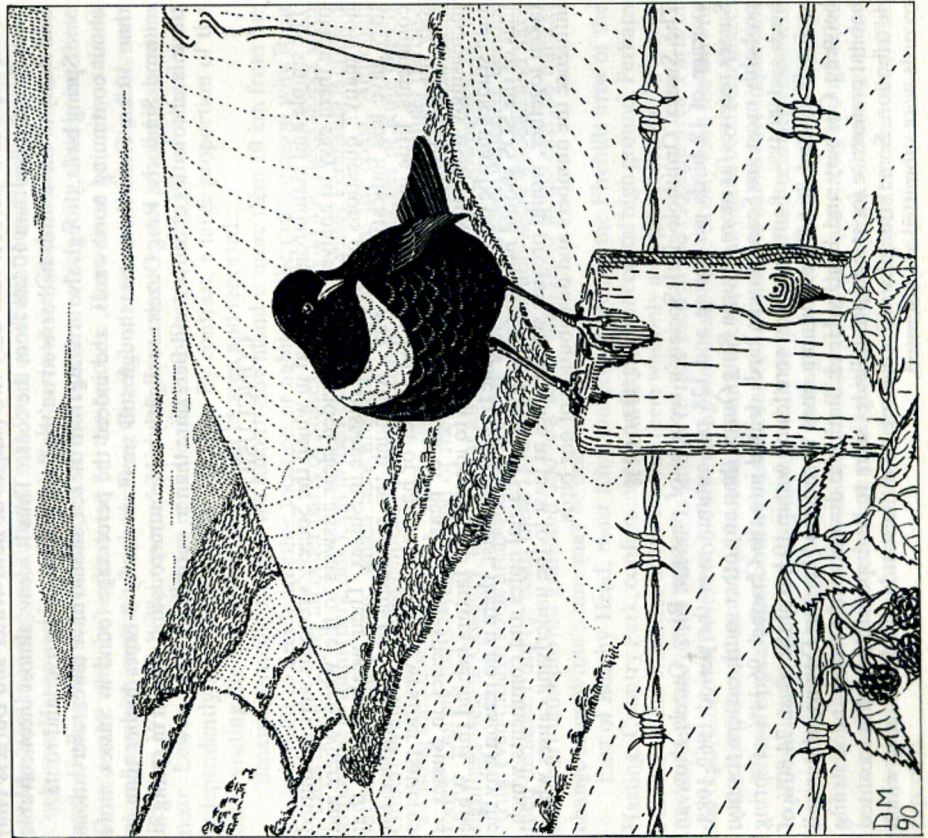
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REFERENCES

- Cramp, S. (ed.). 1988. *The Birds of the Western Palearctic*. Vol. 5. Oxford University Press.
 Durman, R. F. 1976. Ring Ouzel migration. *Bird Study* 23: 197-205.
 Greenoak, F. 1979. *All the Birds of the Air*. Deutsch, London.
 Shrubbs, M. 1979. *The Birds of Sussex, their Present Status*. Phillimore, Chichester.

R. Leverton, Whitewells, Ordiquhill, Cornhill, Banffshire, Scotland.



UNUSUAL RECORDS

All records of unusual species are considered by the Records Committee and it may be assumed that those published have been fully authenticated. Such reports should be submitted on separate sheets or 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 obtainable from the Secretary to the Rarities Committee. The following list embodies those unusual species in Sussex for which descriptions are normally required. The Recorder may seek supportive evidence in the case of other species occurring under unusual circumstances. This list is not exclusive and any observer in doubt or needing advice on any species should send details accordingly:

- All divers (except Red- and Black-throated on the coast)
 Red-necked and Black-necked Grebes
 All shearwaters and petrels (except Fulmar)
 Shag (inland records only)
 Bittern
 Purple Heron
 White Stork
 Spoonbill
 Whooper Swan
 Bean and Pink-footed Geese
 Garganey
 Red-crested Pochard
 Ferruginous Duck
 Honey Buzzard
 Red Kite
 Marsh and Montagu's Harriers
 Goshawk
 Rough-legged Buzzard
 Osprey
 Peregrine
 Spotted Crane
 Cormorant
 Crane
 Stone Curlew
 Kentish Plover
 Dotterel
 Temminck's Stint
 Pectoral Sandpiper
 Buff-breasted Sandpiper
 Phalaropes
 Pomarine and Long-tailed Skuas
 Sabine's, Ring-billed, Iceland and Glaucous Gulls
 Roseate Tern
 Black Guillemot
 Little Auk
 Puffin
 Hoopoe
 Wryneck
 Woodlark and Shore Lark
 Richard's, Tawny and Water Pipits
 Waxwing
 Dipper
 Bluethroat
 Warblers: Cetti's, Savi's, Aquatic, Marsh, Icterine, Melodious, Dartford, Barred, Yellow-browed
 Red-breasted Flycatcher
 Golden Oriole
 All shrikes
 Raven
 Serin
 Scarlet Rosefinch
 Lapland, Gull and Ortolan Buntings

In addition: all unusual races of Yellow Wagtail and Rock Pipit.