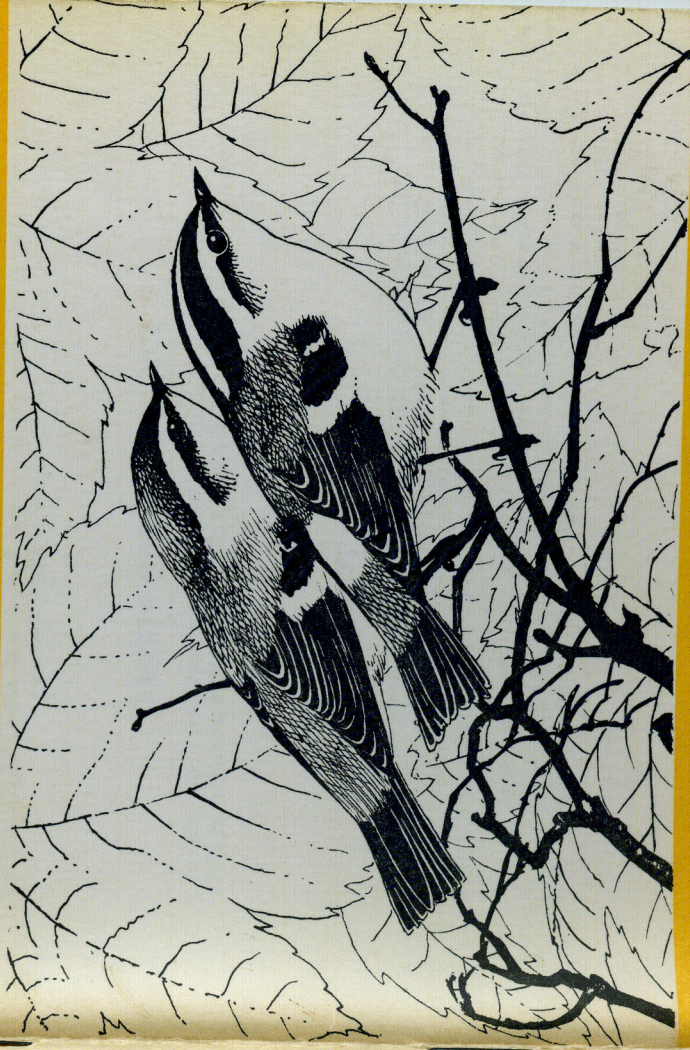


The
Sussex
Bird Report

1968



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The Sussex
Ornithological Society

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Dr. John A. Newnham
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WORTHING
West Sussex
Home Tel: (0903) 47596

THE SUSSEX ORNITHOLOGICAL SOCIETY

The Society was founded in 1962, the objects being:

- (a) To record and study wild birds in the County of Sussex.
- (b) To assist in the preservation of wild birds in Great Britain.
- (c) To encourage by the use of films, books, meetings, outings and other means (i) the study of birds in the field and ornithological science generally and (ii) the education of its members and the general public in ornithological science and the need for protection of wild birds and their habitats.

The Society is administered by a Council consisting of honorary officers and not more than six members. The Sussex Bird Report and Quarterly Newsletters are issued free to members.

Full membership is one guinea per annum. There are reduced rates for additional members of a family, students and intermediate members all at 10/6. Junior Members pay 5/- and members joining after the 1st November are treated as members for the whole of the following year provided they paid the full rate of subscription. Further details of the Society and subscriptions may be obtained from: *D. J. Taylor, 80 Cleveland Road, Worthing.*

THE SUSSEX BIRD REPORT

Copies of Reports Nos. 15 (1962), 5/- post free and Nos. 17-21 (1964-68), 7/6d. post free may be obtained from: *A. B. Sheldon, 113 Holmes Avenue, Hove, BN3 7LF.*

CONTRIBUTIONS

These are welcomed from all observers but the decision on what shall be published rests with the Editorial and Records Committee. All records are, however, kept on separate species sheets and much that is not referred to in the Report may prove of value in the future. Care is taken to assess the accuracy of records but observers would greatly assist if they would particularly study the note on this subject which appeared on pp. 557-560 of *Brit. B.*, vol. 55.

Entering up records involves a great deal of work which can be minimised if contributors send in records periodically, but not more often than at three monthly intervals, using the *standard Recording Sheets issued by the Society*. These are obtainable from the Hon. Recorder or the Hon. Assistant Recorder. Observers are particularly asked to avoid sending in a large volume of notes after the end of the year when the Report is being drafted. **All records for publication must be in not later than 1st February.**

The names of all those contributing records will be included in the Report.

Cover Drawing of Pallas's and Yellow-browed Warblers by Ian Willis

THE SUSSEX BIRD REPORT

NUMBER TWENTY-ONE, 1968

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Published September, 1969

by

THE SUSSEX ORNITHOLOGICAL SOCIETY

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THE SUSSEX BIRD REPORT, 1968

THE SUSSEX ORNITHOLOGICAL SOCIETY COUNCIL

- President:* Guy Mountfort, Plovers Meadow, Possingworth Park,
Blackboys, Nr. Uckfield
- Vice-President:* Dr. M. Hollings, 20 Hillside Avenue, Worthing
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- Hon. Treasurer:* R. E. Goddard, 7 Pavilion Parade, Brighton, BN2 1SD
- Hon. Recorder:* M. Shrubbs, Fairfields, Sidlesham, Nr. Chichester
- Hon. Editor:* A. B. Sheldon, 113 Holmes Avenue, Hove, BN3 7LF
- Hon. Assistant Secretary:* C. F. Helyer, 55 Bramble Rise, Westdene, Brighton, BN1 5GE
- C. G. des Forges, Prospect Cottage, Balcombe
S. W. M. Hughes, Tiercel, 6 West Way, Slinfold, Nr. Horsham
C. M. James, 21 River Mead, Horsham
D. C. Lang (*Conservation Secretary*), 20 Ferrers Road, Lewes
R. J. Sandison, 32 Maytree Avenue, Worthing
Dr. A. B. Watson, 83 Buckingham Road, Shoreham-by-Sea,
BN4 5UD
- Membership Secretary:* D. J. Taylor, 80 Cleveland Road, Worthing
- Committees:*
- Editorial and Records:* M. Shrubbs (Chairman), Dr. M. Hollings, S. W. M. Hughes,
B. A. E. Marr, R. F. Porter, A. B. Sheldon
- Programme:* B. A. E. Marr (Chairman), R. E. Goddard, C. E. Hope,
Miss V. Newton

The above list of Council Officers and Members shows all those holding office at the 30th June, 1969.

Mr. M. A. Jennings did not stand for re-election as Assistant Secretary in 1969 and Mr. C. F. Helyer was elected in his place at the Annual General Meeting held on March 15th, 1969. Mr. Jennings had held the position for five years and the Council recorded its appreciation of all his hard work during that period.

Mr. G. R. Gervis died suddenly in March, 1969, and the vacancy of Assistant Recorder remains unfilled. Mr. Gervis had since 1966 worked tirelessly in the tasks of collating and abstracting the ever increasing volume of records received by the Society. His contributions to the efficient running of the Editorial and Records Committee, which he served as Secretary, will be sorely missed, and the Council extends its condolences to his widow and family.

SECRETARY'S REPORT

The year proved to be in many ways the most successful of the Society's life, and at the end of 1968 membership totalled 685, a net increase of 165 over the previous year.

The Officers and Council of the Society during 1968, together with subsequent changes, are set out at the beginning of the report. Other posts during the year, although not Council positions, were: Membership Secretary, Mr. D. J. Taylor; Lecture Secretary, Miss V. Newton; and Field Outings Secretary, Mr. C. E. Hope. The Council expressed its greatest thanks to these for their considerable hard work during an exceptionally busy year. In particular Mr. Taylor coped uncomplainingly with a huge rush of new members in the last three months of the year, when he dealt with some 200 or so applications in a period during which he also moved home.

The excess of income over expenditure for the year amounted to £103 16s. 3d., to which was added the balance brought forward from 1967 of £454 13s. 10d., making a figure of £558 10s. 1d., which was carried forward to 1969. The satisfactory surplus shown by the accounts resulted largely from the Film Show profit, backed up by very careful control of expenditure and the welcome increase in membership. These factors gave rise to the surplus, which enabled the Council to keep the subscriptions unchanged for 1970.

The Junior Section of the Society continued to thrive under the Secretaryship of Miss Mary Greenhalf, whose hard work in guiding the enthusiasm of these young people is so very worthwhile. Newsletters were produced and special Junior Field Outings arranged during the course of the year. The Junior Section is a welcome source of new members for the senior society each year.

The Records and Editorial Committee had a very busy year, with the same members remaining as in 1967: Mr. M. Shrubbs (Recorder and Chairman), Mr. G. R. Gervis (Assistant Recorder and Secretary), Dr. M. Hollings, Mr. S. W. M. Hughes, Mr. B. A. E. Marr, Mr. R. F. Porter and Mr. A. B. Sheldon (Editor). Particular emphasis was laid on securing earlier publication of the 1967 Sussex Bird Report, which appeared in September, some three months earlier than in the previous year. The use by members of the printed recording sheet continues to be a great help to the Recorder and Assistant Recorder in entering the records in the files. The Committee concerned itself during the year principally with the consideration of members' records, the scientific surveys instituted by the Society and the preparation of the Sussex Bird Report.

Progress is being made gradually towards the creation of a reserve in the Rye Harbour area, where the nesting Common Terns had a reasonably successful season. This was due principally to the great efforts of members who, under the organisation of the Conservation Secretary, watched over the terneries at every weekend during May, June and July, together with several days in the middle of the week. This intensive wardening, and the creation of a reserve, are our two main hopes of maintaining the Common Tern as a nesting species in East Sussex.

Five meetings were held during the year, three in Brighton, one in Arundel and one in Eastbourne. One of the Brighton meetings was at the Dome in November, when the Society combined very successfully with the R.S.P.B. to show their four latest colour films. 1,400 people attended and the evening was so successful from every point of view that it is hoped to make this an annual event. Co-operation with the R.S.P.B. over this helped the membership drive considerably, and they were kind enough to circulate the Society's leaflet to

their members in Sussex when advising them of the film show. Miss Veronica Newton, who undertook all the local organisation, deserves our greatest thanks for working so very hard to ensure the success of the venture.

Nineteen Field Outings were arranged in the year, and gave members a wide variety of choice in dates and in places to visit. There was, as part of our policy, a concentration of outings in the spring and the autumn months, by far the best for bird-watching in Sussex, and there were some memorable days, particularly in the autumn, when a Tawny Pipit, Richard's Pipit, Bluethroats, Pectoral Sandpiper and Pallas's Warbler were among the rarer birds encountered.

The Society published four printed Newsletters during the year, each one illustrated by Mr. Ian Willis. He acted as an unofficial "Society artist" during the year, and his help in illustrating the new Society leaflet, the cover of the Sussex Bird Report, and in helping stage our exhibit at EXPO '68 was very much appreciated.

The Conservation Secretary, Mr. David Lang, was active in many fields. With the Secretary, he represents the Society on the Nature Conservancy's Waterfowl Liaison Panel, and he kept in close touch with the owners of Barcombe Mills Reservoir. He has been involved in discussions with the National Trust and Eastbourne Corporation over bush-clearance work at Beachy Head, and various matters in Rye and Chichester Harbours required his attention.

Particular mention must be made of the considerable help given to various officers of the Society during the year by Mrs. Iris Simpson and Mrs. Norma Petrie-Hay with typing aid, and Messrs. C. F. Helyer and Tom Palmer, who again dealt with the packing and posting of the literature sent out during the year.

REVIEW OF THE YEAR

The year was a vintage one for birds and for bird-watchers. A brief perusal of the systematic list in this report reveals a fairly constant refrain, under a wide range of species, of "many more records than usual". This applies to a number of commoner migrants and wintering species as well as many unusual and some distinctly rare birds. The migration periods were particularly interesting, with outstanding movements and a large variety of rarer species, including 3 additions to the Sussex list.

THE LATE WINTER 1967/68

The weather in the first three months of 1968 was very similar to 1967, with a cold snap in the first half of January, but otherwise mild and fairly dry weather, followed by an early start to spring in March.

The January cold spell caused the usual westerly movements involving considerable numbers of Lapwings and Redwings. The largest movements were noted over 10th/11th at Worthing and involved c.1,500 Lapwings and very large numbers of Redwings, estimated at 1,000 per hour over both days. There were also large roosts of Fieldfares and Redwings at this time in the East Sussex levels, with 2,000+ Fieldfares on both Glynde and Pevensey levels and c.2,500 Redwings at Combe Haven. Apart from these flocks both species were rather scarce.

A considerable influx of wildfowl also occurred with this cold spell and counts included a peak of 800 Mallard at Weir Wood Res. and c.3,000 Wigeon

at Pagham. Both these species and Teal were generally more numerous during the period compared with 1967. Most of the 48 Bewick's Swans noted in these months also appeared in January and only 10 stayed for any time, rather fewer than in most recent years. Geese were scarce but records included a single Barnacle at Selsey Bill on Jan. 12th. Other less common species to appear with this cold spell were 4 Avocets—one at Newhaven from Jan. 10th to 15th and 3 at Sidlesham Ferry from the 15th to Feb. 18th, and 3 Bitterns—at Weir Wood Res., Hartfield and Rye.

Many of the ducks which appeared with the cold dispersed rapidly with the thaw and numbers thereafter were unremarkable; Pintail and Shoveler continue to be very scarce. Shellduck, on the other hand, are clearly increasing and the peak count of 760 in February in Pagham Harbour compares very favourably with the maximum of c.100 there annually prior to 1963; this population has shown a consistent increase in the past 4 years. Similar comparative data for Chichester Harbour are lacking but the March count of 4,900 there was the highest ever recorded. The Brent Goose population remains at a high level and, although the February peak of 2,000 was rather lower than in 1967, a new high was to be reached in December (*gy*). With the present threat to Foulness, the principal wintering area of the dark-breasted form in Britain, it is of increasing importance to make some provision to protect Chichester Harbour, which could provide an alternative wintering area for the Foulness birds.

Goldeneye and Long-tailed Ducks were also unusually abundant in the first three months of the year. Nearly 200 Goldeneye were wintering in the county, mainly in Chichester Harbour, where the records indicated a population of c.105 birds. But they were also widespread inland and the total of 33 in 9 localities included a flock of 10 at Barcombe Res. during February and March. More Long-tailed Ducks were seen in early 1968 than in the whole of any previous year in Sussex. Most were noted off Selsey Bill, where 20 flew W. between Jan. 1st and Mar. 17th, but the records also included parties of 4 in Chichester Harbour and 3 at Rye.

The most interesting events with the waders were the remarkable wintering flock of Ruff at Bracklesham and the number of Purple Sandpipers at Newhaven. The peak count of the latter was 25 on Mar. 20th but other counts revealed a regular flock of c.20 there throughout the period. The Ruff at Bracklesham were first noted in December 1967 and the flock increased steadily until there were 120 in mid-February. These remained until at least mid-March and this is by far the largest flock to be noted in Sussex in recent years.

Finally Hen Harriers should be mentioned. This species has been wintering in rather unusual numbers since 1966 and in early 1968 at least 8 were present. With the increase in breeding birds in Britain it is possible that this trend will continue.

SPRING MIGRATION

It was a notable spring migration although there were few large falls of common night migrants.

The generally fine warm weather in March produced, as in the previous 3 years, a number of early arrivals. The most striking of these was a Whinchat at Weir Wood Res. on Mar. 17th, the earliest county record, and Blackcap and Yellow Wagtail on the 24th, Swallow and House Martin on the 25th, Willow Warbler on the 27th, Sedge Warbler on the 29th and Redstart on the 31st were all earlier than usual. In April Hobby and Black Tern on the 16th and Swifts on the 19th were also early arrivals.

After this early start little happened in the first half of April when consistent N. winds and rather low temperatures discouraged movement.

On Apr. 15th a period of predominantly easterly winds with higher temperatures began, which was to last well into May and with this the main movements of the spring took place. Without doubt the outstanding features of these movements were the large up-Channel passage of divers, ducks, skuas and terns and the flight of Avocets and Hoopoes which were recorded.

Sea passage started in late March with a large diver movement on the 24th, when 94 flew E. off Beachy Head. But, as with other birds, there was then little further passage until mid-April. Both Selsey Bill and Beachy Head were manned continuously during much of April and May and the record of the movements is thus fairly complete. The totals of divers, Shoveler, Scoter, Red-breasted Mergansers, Whimbrel, Bar-tailed Godwits, Arctic Skuas, Common/Arctic, Little and Sandwich Terns were all well above average; indeed for all these species except Shoveler, Bar-tailed Godwits, Common/Arctic and Little Terns they were probably the highest ever recorded. The figures indicate a marked peak for many species between Apr. 11th and 21st. Thus at Beachy Head all the 100 Shoveler, 13,360 out of 22,800 Scoter, 488 out of 525 Mergansers, 470 out of 566 Whimbrel and 3,140 out of 4,280 Sandwich Terns moved through in this period, and the figures from Selsey Bill show a similar pattern. Arctic Skua and Common/Arctic Tern passage peaked over May 9th/10th, with a large movement of the latter at both Selsey Bill and Beachy Head early on the 9th and a steady passage of Arctic Skuas at Beachy Head over both days.

These movements were not, of course, confined to the species mentioned and smaller numbers of Teal, Garganey, Pintail, Tufted and Long-tailed Duck, Velvet Scoter, Eider, Brent Geese, Knot, Dunlin, Little Gulls and Black Terns were also involved, as were some rarer species. These included Spoonbills off Beachy Head on May 9th and 12th, an extraordinary number of Avocets and about 13 Great Skuas. Roseate Terns were recorded off Beachy Head on Apr. 17th and 19th and off Worthing on the 21st and were exceptionally early arrivals. Only 2 Pomarine Skuas were seen, which is a little surprising in such a good spring for skuas; both were off Beachy Head in early June and they were the first June records for the county. No Gull-billed Terns were seen, although this species had been recorded annually since 1958.

The exceptional number of Avocets has already been noted and 1968 was by far the best year for the species since detailed records have been kept. Out of the spring total of 60 birds 34 were seen on sea-watches in parties of 10 W. off Beachy Head on Mar. 31st, 7 E. there on May 9th and 17 E. off Selsey Bill on Apr. 28th. Such records are rare and it will be interesting to see if this occurs again. The peak Avocet day of the spring was on May 9th with parties of 8 at Pagham and the Wicks, one at the Cuckmere and the 7 at Beachy Head.

Hoopoes were also abundant. The first was seen on Mar. 31st and the final total was 29 by June 1st, a record. Eighteen of these were seen between Apr. 15th and 24th and birds were widespread over the whole county. Such Hoopoe years occur from time to time and the last was in 1952, when 20 were seen in the spring between Apr. 9th and May 11th.

Another species which was unusually numerous in the spring was the Firecrest. The last 2 years have seen a sudden increase in records of this species on spring passage, which may be related to recent breeding in Southern England. A similar increase has occurred in the autumn (*gy*) which appears to have been consistent over a longer period. The rise of spring records seems a very recent phenomenon and, apart from exceptional numbers in 1958, there was little variation in the annual average between 1948 and 1966. The 1968 total was 54

and it is known at the time of writing that the species was also numerous in early 1969. Correlated with this increase has been an extension of the spring passage period and birds are now being seen well into May.

As already noted there were few major falls of the common summer visitors during the spring and the only really notable one was of 150 Whitethroats at Beachy Head on Apr. 21st. But an interesting selection of rarer birds occurred which included a Little Crane at Beachy Head on April 15th and a Savi's Warbler at Devil's Dyke on the 26th. Also of considerable interest was the second spring record of Icterine Warbler, at Church Norton on May 7th and the first spring record of Melodious Warbler, at Beachy Head on May 27th and 28th. There was also a Lapland Bunting there on Apr. 15th; spring records of this species are very rare.

Finally raptors should be mentioned since 1968 appeared to be an outstanding year for them. The spring records included 5 Marsh Harriers, an exceptional number, 3 Montagu's Harriers and a Honey Buzzard.

THE BREEDING SEASON

It is very satisfying to note that increases in some of our breeding birds continued in 1968. Indeed where useful comparative figures are available the present trend is for more species to show increases than decreases. However, it is still difficult to detect changes for many species.

Once again water birds did well. The annual Heron census showed a total of 137-142 pairs, the highest known population since 1961. But this was wholly due to the discovery of 34 nests at Fittle, now our largest colony. Without much doubt recent counts there have been too low, and elsewhere in 1968 Herons were somewhat fewer than in 1967. There was little change in either grebe species but Tufted Ducks continue to increase and one new breeding site was found. The Kingfisher population had also improved, but perhaps the most outstanding bird in this category was the Grey Wagtail. One hundred occupied Grey Wagtail territories were found in the breeding season, the largest known population for the county, and the total population is almost certainly higher, since 13 known sites were not visited in 1968.

At the coast the most significant event was an increase of Little Terns to a total of 101-106 pairs, from c.80 in 1966 and '67. This species' present status in Britain was fully described by Norman and Saunders in *Brit. B.* 62: 4-13, and it is evident that its future as a British breeding species is precarious. It is of interest here that Sussex now holds more breeding Little Terns than any county except Dorset, Essex and Norfolk and it is fortunate, therefore, that many Sussex sites are in Local Nature Reserves. Two Sussex colonies are among the 10 largest in the country.

Predators also continue to do well, although the volume of information received was rather less than in 1966 or '67. This accounts, for example, for the decline in Kestrel records, the breeding survey was discontinued in 1968. But more Sparrowhawks were reported and the number of pairs of Barn Owls found rose from 15 or 16 in 1966 and 1967 to 23 in 1968. On the other hand the opinions of several experienced observers point to a decline in Little Owls. Five pairs of Buzzards were present and a pair of Long-eared Owls was found breeding for the first time for 20 years, with another pair present.

The Society's surveys made good progress, with much useful new information being received. Woodlarks were still very scarce, with only one pair located, although 6 other singing males were reported. Of particular interest was the large concentration of Redstarts reported from the NW. of the county. A further spread of Collared Doves was also evident and new localities were recorded.

Increases were noted in certain other species; notably Stock Doves, Green Woodpeckers and Stonechats and there was also a very satisfactory increase in Nightingale records. But on the debit side decreases were noted in Lapwings, which may only be local, and Wheatears. The latter species has now almost vanished as a breeding bird and only the Rye area holds more than the odd pair.

Once again some very useful data on breeding success were received from the Plumpton area. Out of 271 nests of 27 passerine species examined there 116 (43%) were successful, a marginal improvement compared with 41% successful in 1967. Some species had a much better season as the table below shows, but the figures for Duncock and Chaffinch suggest that both species have had 2 successive bad years.

BREEDING SUCCESS, PLUMPTON 1967 AND 1968

	1967		1968		Average brood size
	Nests	% successful	Nests	% successful	
Swallow	8	>66	13	61	2.4
Blue Tit	6	>66	6	50	3.5
Mistle Thrush	4	>66	8	37.5	1.2
Song Thrush	48	>30	65	38.5	1.4
Blackbird	56	<30	69	23.4	1.1
Robin			8	62.5	3.1
Duncock	13	<30	26	30.7	0.9
Greenfinch	11	<30	9	55.5	2.4
Goldfinch	9	>66	8	50	2
Linnets	8	<30	11	73	3.4
Chaffinch	5	<30	4	25	0.25

Note: Average brood size, given only for 1968, is calculated from the total young reared in all nests found.

More information on this subject from other areas of the county would be very valuable. The current level of breeding success of many of our birds is not well understood and it is important to know more of this subject.

Rarer species included a few Garganey, 3 pairs being found but only one of these pairs certainly breeding. Quail were also scarce and were found in only 3 areas. One pair of Black Redstarts probably bred on the cliffs and Dartford Warblers bred in another new site. This species has now been reported in 4 sites in the last 3 breeding seasons, but the total population is still probably less than 10 pairs. Redpolls were present in 4 localities and an interesting concentration of Gull Buntings was found in the Alfriston area.

AUTUMN MIGRATION

A notable spring was followed by an extraordinary autumn, remarkable both for the plethora of rare birds seen and for some unusually large movements of common species. In fact so much happened that it is only possible to deal with the highlights in these notes.

The first major movements of chats, warblers and flycatchers occurred, as usual, during early August, with falls at Beachy Head of 600 *phylloscopi* on the 8th, 400 Whitethroats on the 11th and the autumn peak of 30 Garden Warblers on the 12th. The winds during this period were predominantly NE, and associated with these falls were exceptional numbers of Wood Warblers and Pied Flycatchers. The peak count of the latter at Beachy Head was 50 on the 10th and a total of 65 were ringed there in the first fortnight of the month. The species was fairly numerous until late September and at least 40 were seen

elsewhere along the coast during the whole period. Numbers were almost certainly higher than the previous best total of c.120 in 1966. Wood Warblers are curiously uncommon birds on passage at the coast and the total of 10 at Beachy Head between Aug. 2nd and 18th was of particular interest.

Later in August some very large movements of Tree Pipits and Yellow Wagtails also developed at Beachy Head, with totals of 930 of the former and 1,700 of the latter moving E. between the 18th and 31st. Yellow Wagtails were also moving in strength at Selsey Bill at this time, but very few Tree Pipits were noted there.

The main movements of the common summer visitors occurred, as they almost invariably do, between late August especially on the 31st and about Sept. 15th. The weather at this time is fairly consistent; in most autumns a period of settled weather with mainly E. to SE. winds develops, which often continues through the first 2 weeks of September, and 1968 was no exception. No particularly outstanding falls took place, although there were 200 Blackcaps and 400 Whitethroats at Beachy Head on Sept. 13th. Numbers of some species, for example Redstarts and Lesser Whitethroats, were rather lower than in many years and hirundine passage, often a feature at this time, was very poor.

An excellent variety of rarer species were seen. The first of the 3 Nutcrackers to be seen in Sussex, part of the large invasion of this species into Britain during the autumn, was seen at Hailsham on Aug. 25th. Wrynecks were especially numerous with 24 recorded between Aug. 21st and the end of September, mainly along the coast. Other rarities were Tawny Pipits on Aug. 24th and 25th and Sept. 4th, 8th (2) and 11th (there had also been one on Aug. 10th), 6 Bluethroats between Sept. 7th and 17th, Corncrakes on Aug. 31st and Sept. 4th, 8th and 18th, a White-winged Black Tern at Chichester G.P. from Sept. 11th to 16th and a Barred Warbler at Beachy Head and a Red-breasted Flycatcher at Seaford Head on Sept. 4th. There was also a Cetti's Warbler at Beachy Head on the 25th and, at Selsey Bill, a Sabine's Gull on the 26th and a Richard's Pipit on the 29th.

Raptors

An outstanding feature of the autumn movements, particularly in September, was the number of raptors seen, especially at Beachy Head, where movements comparable to those of 1965 took place. It is possible that this is a more regular autumn passage feature at this locality than our records suggest. Certainly this group is often prominent there as the table below, summarising records of c.105+ birds of 13 species indicates; only passage Kestrels are included.

AUTUMN PASSAGE RAPTORS AT BEACHY HEAD 1965-1968

Species	1965	1966	1967	1968	Species	1965	1966	1967	1968
Buzzard	4	3	0	12	Montagu's Harrier	2	2	1	2
Rough-legged Buzzard	0	7	0	0	Osprey	5	3	0	2
Sparrowhawk	5	4	3	> 5	Hobby	2	3	2	5
Goshawk	0	0	0	2	Persephone	1	1	0	1
Honey Buzzard	6	0	0	4-6	Merlin	0	0	3	8
Marsh Harrier	0	1	0	0	Kestrel	6	1	1	4
Hen Harrier	0	2	1	1					

Of the more regular species most Buzzards, Honey Buzzards, Montagu's Harriers, Ospreys and Hobbies have occurred in September and Hen Harriers and Merlins in October. Sparrowhawks and Kestrels were about equally

common in both months. It seems evident that regular observations for raptors every autumn, particularly in September, which accounts for over 55% of the records, may produce some striking results.

Other raptor records during 1968 included another Honey Buzzard at Sidlesham on Sept. 18th, Marsh Harriers at Bexhill on Aug. 23rd and Selsey Bill on Oct. 6th, 7 Hen Harriers, 4 Ospreys between Aug. 28th and Sept. 24th and a Red-footed Falcon at Sidlesham on Sept. 8th.

October

October is often the most interesting month of the autumn, but October, 1968, was remarkable by any standards. The month started comparatively quietly with a long spell of westerly winds and unsettled weather until the 18th. The first thrush movements started early in the month and associated with these was the peak count of 60 Ring Ouzels at Beachy Head on the 6th. The second Nutcracker of the autumn was also seen there on the 2nd.

The wind moved E. on the 18th and remained between E. and S.E. for the remainder of the month. There was an enormous arrival of thrushes, mainly Redwings, on the 19th. This arrival was widely reflected over the whole county, but the largest numbers were seen at Beachy Head. Movements there over the 18th/20th are, in fact, worth giving in some detail. Records included counts of 50-100 Wrens, 400 Fieldfares, 250 Song Thrushes, c.5,000 Redwings, 150 Blackbirds, 50 Robins, 7 Firecrests, 200 Chaffinches and 30 Bramblings, together with single Woodlark, Pallas's Warbler (first Sussex record), Great Grey Shrike, Lapland Bunting and White-throated Sparrow (first Sussex record), with 2 Yellow-browed Warblers, 2 Red-breasted Flycatchers and 2 Richard's Pipits. Curiously, although extensive movements took place elsewhere (there were c.1,000 Redwings at Sidlesham on the 19th), Beachy Head scored all the rarities.

Thrush movements continued strongly during the rest of the month and Fieldfares were abundant up to early November, although Redwing passage had declined. Ring Ouzels were also well represented and a roost of up to 40 was noted near Cissbury from Oct. 27th. The peak movement of 12 Firecrests was also noted at Beachy Head on the 27th.

Firecrests

Firecrest passage was at a record level once again, with c.55 noted between Sept. 18th and the end of the year. As with the spring a marked increase has been noted in recent autumns but this has been apparent for a longer period than in spring.

Thus in the decade 1948-1957 a total of only 13 were noted in autumn; in 5 of these years none was seen and the maxima were 4 in 1952 and 1955. In the decade 1958-1967 c.95 were seen and the species was recorded each autumn, averaging nearly 10 annually. Most were seen in 1960 (19) and 1967 (30). As with the spring this increase has been most striking in the last 2 years and the combined totals for 1967 and 1968 (c.85) exceeded that for the entire period 1948-1966. The period of passage has also changed markedly. Between 1948 and 1957 69% of all autumn records occurred in November, 15% in October and 15% in December. Between 1958 and 1968 there was one August record, 28% of the records occurred in September and 43% in October, with only 19% in November and 7% in December.

The spate of October rarities continued to the end of the month. The third Nutcracker was shot at Coldwaltham on the 16th, a third Yellow-browed

Warbler was found at Beachy Head on the 26th and 2 more Pallias's Warblers were seen there on the 27th and 30th, the latter arriving with a small party of Goldcrests. Further Richard's Pipits were seen at Sidlesham Ferry on the 21st and at Beachy Head from the 26th to Nov. 3rd.

THE EARLY WINTER 1968/69

The generally fine weather of late October continued well into November and the last two months of the year produced, among other records, a very interesting crop of late migrants, including several rarer species. There was a Turtle Dove at Seaford Head until Nov. 9th, a Swift at Newick on Oct. 31st (latest county record), the last Swallow was seen on Dec. 5th, a Wheatear was seen on the 7th, a Whinchat on Nov. 9th and 2 Redstarts were noted between the 14th and 23rd, which were again the latest for the county. Garden Warblers were also very late, 5 being seen in late October, and one at Beachy Head on Nov. 7th. The latter area also recorded a Ring Ouzel on Dec. 8th, a Pied Flycatcher on Nov. 1st and an Ortolan Bunting on the 3rd and 4th, a quite exceptional record. A very late Bluethroat was seen at Selsey Bill on the 2nd and 3rd, a Hoopoe at Wilmington between the 11th and 13th and, finally, the fourth Yellow-browed Warbler of the autumn was seen at Beachy Head on the 30th. Such late records of summer visitors have been a feature of several recent autumns but the 1968 crop was most unusual both for the number and the species involved.

Movements in November were unremarkable, but a third new bird to be added to the Sussex list was a Snowy Owl at Seaford Head on the 8th. There were sizeable influxes of thrushes in the middle of the month and some Woodlark passage was noted, with parties of 10 at Beachy Head on the 3rd and 3 at Selsey Bill on the 11th.

December produced interesting movements of geese and an influx of Goosanders. The geese were mainly Whitefronts, although only a proportion of the birds were definitely identified, the majority were described as probably this species. The movement started with 200 flying SW. at Aridge on Nov. 28th and between then and the end of December 17 parties totalling c.600 birds were seen, mainly at the E. end of the county. Most, c.400, were recorded between Dec. 21st and 31st, and, where the direction was noted, all parties save one were moving W. or SW.

The first Goosanders were noted off Selsey Bill on Nov. 16th but most were seen in December and the total was 13 in 5 localities, considerably higher numbers than are usually seen at present except in very cold weather. Records included a party of 7 at Chichester G.P. in late December.

There were also very large numbers of Brent Geese in the Chichester Harbour area. The peak count, which included Langstone Harbour in Hampshire, was of 3,380 on Dec. 22nd. The actual count included only 635 in Sussex but the counter at Pilsey Island noted a very large flock, of c.2,000+ departing rapidly W. out of Chichester Harbour on his arrival! These birds were presumably the 2,155 subsequently noted in Langstone, a most frustrating piece of behaviour.

These months were otherwise fairly quiet. Wildfowl numbers were about average, although some quite large flocks of Teal were present around the west end of the county in late December and a large concentration of Pochard was found at Rye Harbour G.P. at the same time. Several Hen Harriers were wintering, continuing the trend of increase noted earlier in these notes. But very few Short-eared Owls were present. It is of interest that the latter species appears to have declined at the same time as Hen Harriers have increased, but whether this correlation is more than coincidental remains to be seen.

OILED BIRDS

By contrast with 1967 there was no really severe oiling incident off Sussex in 1968, although the fairly large number of oiled birds in December was a dismal portent for early 1969. The table below summarises the records received by months; figures in brackets are of birds found dead. It is intended to make this table a regular feature of the Report, in the hope of providing some useful data for conservation bodies fighting this very serious problem.

Interesting points which emerge from the records are the wide range of species affected, including 5 waders, and the marked disparity between the numbers of Razorbills and Guillemots, which suggests that the latter is the more abundant bird off Sussex. In time these records, melancholy though they are, may yield useful data on the comparative abundance of sea-birds off our coast.

OILED BIRDS ON THE SUSSEX COAST IN 1968

Species	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
Black-throated Diver	1	—	—	—	—	—	—	—	1
Red-throated Diver	—	1	—	—	—	—	—	—	—
Slavonian Grebe	—	—	—	—	—	—	—	—	—
Gannet	—	—	—	—	—	—	1	—	2
Velvet Scoter	—	—	—	—	—	—	—	—	3
Scoter	—	—	—	—	—	—	—	—	(1)
Oystercatcher	—	—	—	—	—	—	—	—	several
Ringed Plover	—	—	—	—	—	—	—	—	1
Turnstone	—	—	—	—	—	—	—	—	(1)
Purple Sandpiper	—	—	—	—	—	—	—	—	4
Sanderling	—	—	—	—	—	—	—	—	3
Great Skua	—	—	—	—	—	—	—	—	—
Great Black-backed Gull	—	—	—	—	—	—	—	—	—
Herring Gull	—	—	—	—	—	—	—	—	17
Common Gull	—	—	—	—	—	—	—	—	3
Glaucois Gull	—	—	—	—	—	—	—	—	—
Black-headed Gull	—	—	—	—	—	—	—	—	2
Razorbill	—	—	—	—	—	—	—	—	8
Little Auk	—	—	—	—	—	—	—	—	(1)
Guillemot	—	—	—	—	—	—	—	—	(2)
Puffin	—	—	—	—	—	—	—	—	8

Note: Figures in brackets are of birds found dead. In addition there were single Black-headed Gulls in June and July and a Cormorant in August.

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*K. G. Adsett	*R. B. Barstow	E. S. Binns
J. S. M. Albrecht	R. Batchelor	Miss R. Bird
L. P. Alder	Beachy Head	J. Bodle
*J. Ashbee	Ringling Station	*K. Bolingbroke
Miss J. Baggallay	B. Belcher	*Miss P. M. Bond
*J. T. A. Bagley	P. J. Beaman	P. F. Bonham
T. Baker	C. L. Bergne-Coupland	*J. H. Boon
*P. C. Bance	R. M. Billings	J. D. Box

D. J. Britton
 J. A. Burfield
 *Miss K. Burgoine
 E. B. Bushby
 Mrs. Butler
 T. N. Buttle
 B. Cave
 D. Carr
 T. J. Carrington
 Mrs. L. H. Charlwood
 R. H. Charlwood
 *Mrs. A. M. Chase
 J. F. A. Chase
 Chichester Ringing Group
 *H. A. C. T. Clark
 *J. W. Clark
 *Mrs. D. R. Clarke
 P. Clement
 Dr. K. S. Cliff
 D. R. Coda
 P. R. Colston
 *Dr. L. A. Collins
 P. R. Cooke
 B. E. Cooper
 K. G. B. Crittall
 J. C. Cummings
 G. Cunningham
 Rev. J. H. K. Dagger
 T. P. Dale
 *Miss H. Davidson
 A. H. Davis
 *P. G. Davis
 P. D. Daughrey
 *F. W. Dougharty
 B. S. Duffin
 R. D. Dumbrel
 Mrs. J. H. M. Edom
 J. H. Elgood
 R. E. Emmett
 C. Evans
 H. Everts
 *Brig. J. Faviell
 *J. F. M. Fennell
 D. S. Flumm
 J. Fowler
 I. Frenguelli
 Mrs. A. K. Frost
 N. T. Fryer
 J. Gallagher
 Maj. M. D. Gallagher
 D. Garne
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 *R. Gilbert
 *M. Glaister
 M. S. J. Goddard
 *R. E. Goddard
 L. Gover
 P. J. Greenhalf
 *Miss M. R. Greenhalf
 *R. R. Greenhalf
 S. Greenwood
 *G. H. Gush
 E. M. Haes
 *Mrs. H. T. Hassall
 W. E. Haines
 Mrs. E. H. Halahan

*Miss V. Newton
 M. E. Nolan
 *A. L. Norman
 S. G. Oddy
 D. R. Park
 *J. Parkhurst
 *Miss O. B. Parks
 *R. B. Parks
 T. Palmer
 *G. Peate
 J. Pelling
 *F. P. Penfold
 *Mrs. N. Petrie-Hay
 G. Philcox
 Maj. W. W. A. Phillips
 *J. Pike
 M. H. Port
 *R. F. Porter
 *Mrs. A. Preston
 S. Potter
 A. Quinn
 J. Reaney
 S. K. Reeves
 S. Richardson
 *S. W. Rickards
 C. Robinson
 H. P. K. Robinson
 M. C. Robinson
 J. E. Robson
 *Mrs. E. Rogers
 M. J. Rogers
 T. H. Rose
 Miss K. M. Rosher
 Mrs. A. Ross
 L. Salmon
 *R. J. Sandison
 R. E. Scott
 Rev. P. Secretan
 F. Severs
 A. G. Shaw
 A. B. Sheldon
 B. C. Shergold
 G. W. Short
 *M. Shrubbs
 P. L. Simmonds
 *G. W. Skinner
 *Mrs. N. T. Smith
 *Miss B. M. Spencer
 Miss J. V. Stacey
 Miss L. Stack
 C. R. Stubbs
 G. A. Sutton
 J. B. Tatum
 P. H. R. Taylor
 *C. F. Tebbutt
 B. W. Thomas
 M. W. Thompson
 *P. G. Thompson
 *G. Tomalin
 E. P. Thorne
 F. H. Tilbury
 E. Tull
 *J. M. Twort
 K. Verrall
 *C. M. Veysey
 *Mrs. B. Vine
 M. K. Walker

*P. C. Waring
 Mrs. M. E. A. Watkinson
 *Dr. A. B. Watson
 *E. T. Welland
 T. P. Wells
 J. B. Whitby
 R. V. White
 *Miss W. P. White
 J. A. Wigzell
 *R. Williamson
 *I. R. Willis

Miss D. A. Wilson
 *P. J. Wilson
 *Mrs. V. A. Wilson
 S. R. Woods
 M. M. Yorwerth

Breeding Surveys

During the year the Society's breeding surveys of Collared Dove, Swift, House Martin, Woodlark, Nighthjar, Redstart and Tree Pipit were continued. S. W. M. Hughes organised the surveys and prepared the summaries for the systematic list. No new surveys were started in 1968, but M. Glaister, Miss M. R. Greenhalf, R. R. Greenhalf and W. Merritt continued and extended the Grey Wagtail survey they started in 1967.

Wader Counts

Wader counts were continued in the main estuaries (see page 70) and Dr. M. Hollings organised the counts. We wish to thank all the observers for their valued help with the project.
 Counters were:

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Wildfowl Counts

J. W. Clark (32 Gundreda Road, Lewes) has now taken over the organisation of the National Wildfowl Counts from A. B. Sheldon. We are grateful to the organiser for making the records available to the Society.
 Counters were:

R. B. Barstow (Powdermill Res.), D. R. Coda (Glynde), A. J. Cooke (Cuckmere Valley), J. Fowler (Chichester G.P.), D. C. Lang (Barcombe Res.), Miss V. Maxse (Burton Pond), G. M. Moll (Knepp Lake and Warming Mill Pond), D. R. Park (Swarbourne Lake), J. Reaney (Darwell Res.), A. B. Sheldon (Amberley/Pulborough marshes), C. F. Tebbutt (Weir Wood Res.), D. S. Flumm, T. C. Hale, Dr. M. Hollings, M. A. Jennings (Chichester Harbour), H. P. K. Robinson, M. Shrubbs (Pagham Harbour).

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The volume of routine work involved in preparing the Report increases annually and we also wish to acknowledge considerable assistance from R. J. Sandison, who has again gathered much valuable information on predators and prepared the summaries for the systematic list. D. S. Flumm who has helped with much of the routine work of filing records, and P. J. Wilson, who has dealt with the ringing report. Their help is greatly appreciated. Spreading the work in this way is now inevitable, but it should be noted that any confidential records received are handled only by the Recorder. We would also like to thank A. Quinn for all his help in preparing the ringing report in past years.

CLASSIFIED RECORDS FOR 1968

Recoveries of birds ringed have not been cross-referenced to the ringing report. The wildfowl tabulation and the report on Wader Counts should be read in conjunction with the notes under individual species for a complete picture.

Abbreviations: "G.P."—grave pits. "S.F."—sewage farm. "E." "W." etc.—cardinal points of the compass are intended only to give a general direction unless the context indicates otherwise. In particular this applies to birds going up or down the Channel and which are referred to as flying E. or W. "s/p, w/p"—summer or winter plumage. "c."—clutch size in nest found.

Definition: "Days watching"—the number of days in which watching was done in an area.

Initials: Observers' initials are given only with those species which are rarely recorded in the county, except in the case of very rare breeding species. For other unusual records the statement is made that satisfactory details have been received, as they have. Anyone wishing further details of any record may obtain these from the Recorder unless such information is confidential.

1. **BLACK-THROATED DIVER** (*Gavia arctica*).—A slightly oiled bird at Chichester G.P. on Jan. 2nd and 7th (JVS, MS). One flew W. at Selsey Bill on Jan. 13th (DSF, HPKR); one flew E. over Newhaven beach on Feb. 10th (ARK); one at Cuckmere Haven on Mar. 8th (AJC).

At the end of the year an oiled bird at Climping on Dec. 22nd (CMI). See also under Diver species (*Gavia sp.*)

2. **GREAT NORTHERN DIVER** (*G. immer*).—Two in Chichester Harbour on Jan. 6th (BAEM) and one on the 16th (CMI). One off Beachy Head on Mar. 10th departed W. (BEC, AQ *et al.*). In April single birds flew E. close to Selsey Bill on the 20th and 27th (DSF, BAEM, HPKR). See also under Diver species.

4. **RED-THROATED DIVER** (*G. stellata*).—Only c.9 recorded along the coast in January and February, except at Selsey Bill where 5 flew E. and 5 W. in 23 days watching. Singles at Rye on Jan. 21st and Goring on Feb. 9th were oiled. In the spring, totals of 20 E. and 3 W. off Selsey Bill in 50 days watching from Mar. 1st to June 2nd and 15 E. off Beachy Head in 24 days watching in April, with one likewise on May 24th.

In the autumn 26 E. and 32 W. off Selsey Bill in 23 days watching from Oct. 30th to Dec. 31st. Otherwise at the end of the year only 4 birds recorded.

DIVER SPECIES (*Gavia sp.*)—The only records away from Selsey Bill in the early months were 12 off Bexhill on Jan. 12th and 5 off the Midrips on the 21st. Records from Selsey Bill and Beachy Head for the period January to June are tabulated below.

	Jan.		Feb.		Mar.		Apr.		May		June	
	E	W	E	W	E	W	E	W	E	W	E	W
Selsey Bill	34	80	18	22	40	6	105	7	37	1	3	16
Days watching	13		10		12		23		14		15	
Beachy Head					95		23		59		29	
Days watching					6		24		29			

The spring movements were the largest yet recorded and peaks were: at Selsey Bill 30 E. and 3 W. on Mar. 24th and 22 E. on Apr. 17th and at Beachy Head 94 E. on Mar. 24th and 68 E. on Apr. 17th.

Identifying divers in flight is notoriously difficult, particularly to separate with certainty *arctica* and *immer*. But the following figures, based on the records of very experienced observers, are of interest. At Selsey Bill 109 out of 353 divers recorded between January and June were named. Of these 69 were considered to be *arctica*, 7 to be *immer* and 33 *stellata*. Of those considered to be *arctica* 56 were recorded during the spring passage, as were all those thought to be *immer*. At Beachy Head 52 birds out of 403 were named, with 36 considered to be *arctica* and 16 *stellata*. Since experienced observers feel they can identify *stellata* at ranges up to 800 yards in good light conditions with reasonable certainty, records ascribed to this species are also included under the specific heading above.

The first autumn bird was one W. off Langney Point on Sept. 29th. At Selsey Bill totals of 15 flew E. and 32 W. in 25 days watching from Oct. 20th to the end of the year. Elsewhere 15 E. off Beachy Head on Nov. 10th and c.8 in Rye Bay during December.

5. **GREAT CRESTED GREBE** (*Podiceps cristatus*).—Between January and March totals of c.135 recorded in 9 coastal localities and c.70 in 7 localities inland. The largest parties were 57 off Ovingdean on Feb. 15th and 30 at Weir Wood Res. on Mar. 9th. Some of the latter may have been on passage and other records suggesting this were 17 at Shillinglee Park on Mar. 14th, 7 at Barcombe Res. on Mar. 17th and 8 at Petworth Park on Apr. 7th, when 6 also flew E. together off Worthing. Two flew E. off Beachy Head on Apr. 18th.

Little change noted in the numbers breeding and pairs were recorded as follows:

BREEDING PAIRS 1968

Locality	No. of pairs	Locality	No. of pairs
Chichester G.P. (southern pits only)	16	Pond Leigh	1
Burton Park	2	Horsted Keynes	2
Knepp	1	Weir Wood Res.	4 or 5
Warnham Mill Pond	3	Darwell Res.	1
Hammer Pond	1	Petworth Park	0
Balcombe Lake	2	Lurgashall Pond	2
		Shillinglee Park	1
		Rye Harbour G.P.	3
		Pett Level	1
		Erridge Park	1
		Barnhouse Pond	1
		Cuttingly Wood (TQ347393)	1

In addition single birds were noted at Slaughtam Place and Kentwater Pond, Cowden, and pairs were present in both Chichester and Pagham Harbours in June and July. Breeding success was again rather poor and 18 broods were recorded, averaging 1.9 young.

In November and December a total of c.255 recorded in 4 coastal localities, including c.200 in Rye Bay on Dec. 30th (JA). Inland 41 were noted in 4 localities, including 25 at Weir Wood Res. on Nov. 24th, and these decreased to 5 or 6 during December.

6. **RED-NECKED GREBE** (*P. griseogenia*).—One at Brooklands pool, Worthing from Jan. 13th to Feb. 17th (BM, DRP, RJS *et al.*) and 2 in Pagham Harbour on Jan. 18th (BEC).

7. **SLAVONIAN GREBE** (*P. auritus*).—From January to March up to 4 present in Chichester Harbour, including an oiled bird on Jan. 16th, and up to 9 regularly seen off Church Norton. Two at Rye Harbour G.P. until Mar. 31st

and single birds at Chichester G.P. on Jan. 21st and 28th, Piddinghoe from Jan. 29th to Feb. 8th and Beachy Head on Mar. 10th. In April one at Rye on the 12th, 2 off Beachy Head from the 14th to 19th, with 4 on the 20th, and one off Newhaven on the 16th.

In November and December up to 4 present in Chichester Harbour and 3 off Church Norton; 2 at Weir Wood Res. on Nov. 9th; one at Chichester G.P. on the 24th and one, slightly oiled, at Rye on Dec. 22nd.

8. **BLACK-NECKED GREBE** (*P. nigricollis*).—Single birds at Brooklands, Worthing, on Jan. 13th and Rye Harbour G.P. from Jan. 21st to Apr. 6th. Single birds at Chichester G.P. from Oct. 5th to Nov. 2nd and at Newhaven Tidemills on Oct. 6th and Nov. 16th and 17th.

SLAVONIAN/BLACK-NECKED GREBE.—Up to 4 off Church Norton from January to March and up to 11 there in November and December. Two at the mouth of the Rother, Rye, on Dec. 31st.

9. **LITTLE GREBE** (*P. ruficollis*).—Between January and March totals of c.50 recorded in 7 coastal localities and a similar number in 12 inland localities; no party of more than 10 birds seen.

Little change noted in the numbers breeding and pairs were recorded as follows:

BREEDING PAIRS 1968

Locality	No. of pairs	Locality	No. of pairs
Severals, Church Norton	1	Burton Park	3
Chichester G.P.	1	Shillinglee Park	1
(no complete count made)	1	Lurgashall Pond	1
Swanbourne Lake	1	Petworth Park	1
		Sleyning Mill Pond	1

Nine broods totalling 20 young were recorded, an average brood size of 2.2. The pair at Swanbourne Lake reared no young. Single birds were also noted at West Harting Pond, which definitely had no mate, and Bayham.

At the end of the year totals of 52 present in 5 coastal localities and 68 in 12 inland. There were 45 at Newhaven Tidemills on Nov. 16th and up to 28 there in December.

16. **MANX SHEARWATER** (*Puffinus puffinus*).—Rather more records than usual. Birds showing the characters of the race *puffinus* were 6 W. off Selsey Bill on June 22nd and one likewise on the 28th (DSF, HPKR). There are only 5 previous June records for this race for the county. Single birds flew W. off Beachy Head on Aug. 31st and Sept. 2nd (BEC, PC, NAGL, SG) and one E. there on the 15th (WM).

Single birds showing the characters of the race *mauretanicus* flew W. off Beachy Head on Aug. 31st and Sept. 1st (BAEM, MEN *et al*) and likewise off Selsey Bill on Sept. 1st and 2nd (DSF, HPKR).

The following were not sub-specifically identified: one E. off Beachy Head on Apr. 30th (ARK, PC) and 3 W. off Selsey Bill on June 22nd and one on Sept. 2nd (DSF, HPKR).

21. **SOOTY SHEARWATER** (*P. griseus*).—One flew W. off Selsey Bill on July 14th (HPKR), the first July record for the county. One flew W. off Selsey Bill on Sept. 2nd (HPKR).

26. **FULMAR** (*Fulmarus glacialis*).—Seven at Beachy Head on Mar. 10th were the first recorded and up to 25 present there until early July, with odd birds until Aug. 30th. On June 1st 12 flew W. there which were separate from the resident birds. At Selsey Bill 8 E. and 119 W. in 42 days watching from Apr. 19th to June 30th, by far the largest numbers yet recorded there. The largest movements were 8 W. on Apr. 27th, May 3rd and June 15th and 14 W. on June 22nd. Elsewhere along the coast not more than 2 together in April, May and June but prospecting birds were seen at Seaford Head and Porto Bello, Brighton. Autumn records were one E. and one W. off Selsey Bill on July 6th, one W. there on Aug. 31st and one W. off Langney Point on Sept. 1st.

27. **GANNET** (*Sula bassana*).—A sick bird, but not oiled, at West Harting Pond from Jan. 6th to 8th (GRG). At Selsey Bill one E. on Jan. 28th and 2 W. on Feb. 4th. In the spring 141 E. and 84 W. off Beachy Head in 69 days watching between Mar. 24th and June 3rd; 31 E. on Apr. 28th and 27 W. on May 6th were the largest movements. At Selsey Bill 62 E. and 130 W. in 49 days watching from March to May; there were larger movements in June, when 10 E. and 292 W. in 15 days, with 101 W. on the 23rd as the largest number. In the autumn 25 E. and 183 W. off Selsey Bill in 59 days watching from July to December, with 54 W. on Dec. 15th as the largest movement, an unusual date for so many. At Beachy Head a total of 57 between Aug. 2nd and Nov. 17th, of which 19 E. and 20 W.

Oiled birds were: singles dead at Pugham on Feb. 17th, Newhaven on Oct. 5th and Brighton on Dec. 21st, with one alive at Bulverhythe on Dec. 15th.

28. **CORMORANT** (*Phalacrocorax carbo*).—Records came from the whole length of the coast and from 10 inland localities. The table below summarises the records by months but may be incomplete; it is designed only to give some measure of the species' abundance.

Coast	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Inland	23	31	22	11	0	0	0	12	1	26	8	10

Records suggesting passage were 15 from the NW. out SW. at Selsey Bill on Mar. 29th and 15 out SE. there on Sept. 22nd. Numbers off Selsey also showed a genuine drop in June and July.

29. **SHAG** (*P. aristotelis*).—Recorded only from Selsey Bill and Beachy Head. At Selsey Bill single birds E. on Feb. 18th and Apr. 29th and offshore on May 18th, and W. on Aug. 4th and Dec. 22nd. At Beachy Head single birds offshore on May 3rd and Dec. 1st and one W. on Sept. 1st.

30. **HERON** (*Ardea cinerea*).—All known Heronries were visited and the numbers of occupied nests were: Old Park Wood, Fishbourne, 20 plus 2 probably occupied; Pugham, 6; Parham, 29; Henfield, 8 plus one probably occupied; Glynde, 3 plus one probably occupied; Firle, 34; Priesthaves, 3; Glyndale, 2; Eridge, 7 plus one probably occupied; Westham, 2, one of which was lost in a gale; Leasam, 23. The total of 137-142 occupied nests is the highest since 1961, when there were 146. But this increase is entirely due to the figure from Firle, where information from the Water Bailiff leaves no doubt that our previous counts have been much too low. In the past 20 years up to 32 pairs have bred there compared to the maximum figure published in the *Sussex Bird Reports* of 9 pairs in 1962. Elsewhere the 1968 figures show a small decline compared to 1967.

Records indicating migration were one out SE, at Selsey Bill on Apr. 15th, and in the autumn there 2 from SSW, off E, on July 6th, one in SW-NE, and 7 out SW, on Sept. 15th, and one in SE-N, on Oct. 6th. One flew out SE, at Beachy Head on Oct. 17th.

A melanistic juvenile at Chichester G.P. throughout the autumn was eventually picked up dead there.

38. **BITTERN** (*Botaurus stellaris*).—Single birds at Weir Wood Res. on Jan. 21st (TJL); at Hartfield from Jan. 27th to Feb. 16th (MRH, PCB *et al*); at Rye Harbour G.P. on Jan. 27th (JA); at Chichester G.P. on Feb. 4th (DSF) and at Darwell Res. on Mar. 30th (BB). In December one at Chichester G.P. on the 26th (JVS) and one picked up at Blackham on the 30th (per EPT).

42. **SPOONBILL** (*Platalea leucorodia*).—One from W. departed SW, at Beachy Head on May 9th (ARK) and one E, there on the 12th (KY). One came in from the S, at Selsey Bill on Aug. 6th (HDM) and what was presumably the same bird was present in Pagham Harbour until the 25th (many obs.). One at Newhaven Tidemills from Sept. 18th to 30th (many obs.) and one in Pagham Harbour from Oct. 5th to Nov. 2nd, when it was seen to depart high S, over Selsey (DSF *et al*). All were immatures, except that of May 12th, and it is possible that all the autumn records refer to the same bird.

45. **MALLARD** (*Anas platyrhynchos*).—See table for winter populations. Additional counts were of 170 off the Seven Sisters on Jan. 29th and a maximum of 175 at Swanbourne Lake in November, with smaller parties totalling c.105 birds in 3 other localities in the early months and 365 in 7 at the end of the year.

Breeding records totalled 79 pairs in 26 localities spread over the whole county. Breeding success was very much as in 1967, with 37 broods totalling 230 young reported, an average brood size of 6.2. On Mar. 4th SWR found 4 nests in Rewell Wood.

In late August numbers in the Pett/Ryc area reached a maximum of c.1,800.

46. **TEAL** (*A. crecca*).—See table for winter populations; this species has decreased very considerably in recent years. Additional counts were: 100 at Selsey Bill on Jan. 14th, a maximum of 200 at Sidlesham Ferry on Nov. 5th, 80 at Horseye Level on the 16th and 60 in the Ouse valley on Dec. 28th. Smaller parties totalling c.260 birds were also recorded from 14 other localities in the early months and totalling c.255 birds in 9 localities at the end of the year.

In the spring at Beachy Head a total of 37 E. between Apr. 10th and 27th. A total of 11-12 breeding pairs recorded as follows: Sidlesham Ferry, one or 2; Burton Pond, 4; Lurgashall Pond, 3; Shillinglee Park, 2; Weir Wood Res., one. Five of these pairs had broods totalling 31 young. In addition birds were recorded at West Haring Pond, Thorney Island, Chichester G.P., Pallingham Quay, Barcombe Res., Bayham, Bells Yow Green, Pevensey Levels and Ryc Harbour between April and July. Although some of these may well have been late wintering birds or migrants, all these areas are suitable for breeding.

47. **GARGANEY** (*A. querquedula*).—The first recorded were 3 at the Cuckmere on Mar. 16th and between then and the end of April c.40 recorded along the coast and inland, including a total of 13 E. off Selsey Bill between Apr. 11th and 16th.

Three pairs present in 2 localities in the breeding season but only one definitely bred, and one definitely did not. In the autumn a total of 18 recorded between July 18th and Aug. 4th and the last recorded was one at Weir Wood Res. on Sept. 4th.

Ducks.—The table below sets out the peak numbers of the regular and common species in each winter period (January to March and October to December) at all the principal wintering areas in the county. It is thus designed to show the relative importance of these areas to wildfowl and give some indication of maximum wintering population. All these localities, except Wet Level, are covered by the National Wildfowl Counts organised by the Wildfowl Trust. These figures together with others held by the Society have been used in compiling this table. The systematic list is largely confined to records outside the scope of the table.

PEAK WINTER POPULATIONS OF DUCK

Locality	Mallard			Teal			Wigeon			Pintail			Shoveler			Tufted Duck			Pochard		
	Jan./Mar.	Oct./Dec.		Jan./Mar.	Oct./Dec.		Jan./Mar.	Oct./Dec.		Jan./Mar.	Oct./Dec.		Jan./Mar.	Oct./Dec.		Jan./Mar.	Oct./Dec.		Jan./Mar.	Oct./Dec.	
Chichester Harbour	250	150		250	405		380	280		60	60		5	7		0	50		0	25	
Chichester G.P.	270	400		70	340		0	6		0	2		50	55		130	425		200	340	
Pagham Harbour	350	190		300	140		3000	500		0	14		35	4		120	30		35	7	
Burton Pond	60	95		65	0		20	25		4	0		0	0		45	65		60	25	
Amberley/Pulborough	?	45		170	150		2000	350		1	8		20	30		0	0		0	0	
Knepp	?	175		0	30		100	25		0	3		0	8		0	0		0	1	
Weir Wood Res.	800	310		50	30		150	100		0	0		0	15		60	60		20	100	
Barcombe Res.	400	220		35	25		500	130		2	0		10	8		20	80		20	145	
Glynde Levels	200	120		250	400		1000	500		3	0		1	3		9	0		9	0	
Darwell Res.	?	255		12	50		0	50		3	2		2	0		45	175		30	50	
Powdermill Res.	?	50		?	40		?	120		0	0		0	0		?	50		?	25	
Pett Level	50			30			800			5			60	12		7	4		40	40	
Wet Level				100			350			35			15								
Rye Harbour	200	150		10	120		200	20		3	5		0	15		25	40		200	535	

NOTE: A blank indicates that no information was available.
? — birds present but not counted.

BREEDING OR RESIDENT PAIRS 1968

Locality	Pairs present	Pairs bred	Maximum young recorded
West Harting Pond	6 males	0	
Shoftermill	1	1	5
Shillingee Park	2	?	
Lurgashall Pond	1	1	6
Chichester G.P.	?	7	40
Swanbourne Lake	2	?	
Burton Pond	4	2	13
Roman Woods	1	1	7
Birchen Bridge	1	?	
Warnham Mill Pond	3 & 7 males	?	
Gravetye Manor	4	?	
Fullingmill	1	1	5
Barcombe Res.	c.7 birds	0	
Horsted Keynes	3 & 3 males	?	4
Southsea	1	?	
Glynde Reach	2	2	13
Weir Wood Res.	c.10 birds	1	6
Darwell Res.	7	7	successful
Rye Harbour G.P.	7 & 19 males	7	24-26
TOTALS		31	123-125 + 7 other broods

The number of young which actually reached flying stage is not clear, but of the 40 hatched at Chichester G.P. very few reached this stage, and the species may suffer high losses after hatching.

57. **POCHARD** (*A. ferina*).—See table for winter populations; the count of 535 at Rye Harbour G.P., in December, was the highest in the county in recent years. Additional counts involved totals of c.115 in 8 other localities in the early months and 62 in 5 localities at the end of the year.

Summer records were a male at Rye Harbour G.P. during June, another at Chichester G.P. on the 10th and 13th and up to 4 males and a female at Weir Wood Res. in June and early July. There were also up to 60 at Rye Harbour G.P. from July to September.

60. **GOLDENEYE** (*Bucephala clangula*).—More numerous than usual in the first 3 months. C.105 were wintering in Chichester Harbour, mainly in Emsworth, Thorney and Chichester Channels; about 30% of these birds were adult males. Elsewhere along the coast a total of c.45 recorded in 5 localities; the largest party was 19 at Rye in February. Inland a total of 33 reported from 9 localities: Chichester G.P., Amberley, Burton Pond, Knepp, Piddinghoe, Barcombe Res., Weir Wood Res., Darwell Res. and Bayham. The largest party was of 10 at Barcombe Res. during February and March but on Apr. 6th there were 13 at Weir Wood Res. One flew W. off Bexhill on Apr. 27th (SJRR), a late date.

Rather few at the end of the year with 10 at Barcombe Res. during December as the largest party. Nine flew E. off Selsey Bill on Dec. 14th.

61. **LONG-TAILED DUCK** (*Clangula hyemalis*).—Many more records than usual in the early months involving 42-46 birds. At Selsey Bill 2 flew E. and 20 W. in 30 days watching between Jan. 1st and Mar. 17th, and 9 flew E. between

49. **GADWALL** (*A. strepera*).—A further increase in records. At Chichester G.P. up to 15 in the early months, with one still present on Apr. 8th; at the end of the year one there on Oct. 19th increasing to 26 by Dec. 31st, the largest party yet recorded for the county. Elsewhere one at Church Norton on Jan. 2nd and another on July 18th; one or two present at Weir Wood Res. from Mar. 15th to the end of the year; single birds at Burton Pond on Feb. 17th and Sidlesham on Apr. 12th. Two flew E. off Beachy Head on Apr. 9th.

In the early autumn there were 4 at Darwell Res. on July 14th and a similar number at Thorney on Aug. 4th. One at Knepp on Nov. 30th; in December 3 E. off Selsey Bill on the 1st and 5 at Rye Harbour G.P. on the 29th.

50. **WIGEON** (*A. penelope*).—See table for winter populations; no other significant numbers noted. There were still 2 at Weir Wood Res. on Apr. 21st and one at Chichester G.P. on May 11th. One in the latter area on July 28th and Aug. 3rd and 3 on the 24th.

Autumn movements at Selsey Bill totalled 92 E. and 200 W. in 45 days watching from Sept. 1st to Dec. 31st.

52. **PINTAIL** (*A. acuta*).—See table for winter populations. Like Teal this species has decreased markedly in recent years. Additional records were 11 W. off Selsey Bill on Jan. 13th and totals of 16 in 5 other localities in the early months and 8 in 4 localities at the end of the year.

In the spring 6 flew E. off Selsey Bill over Apr. 15th/16th and 11 likewise off Beachy Head between Mar. 24th and Apr. 13th. There were 2 August records, at Chichester G.P. on the 25th and Weir Wood Res. on the 26th.

53. **SHOVELER** (*A. clypeata*).—See table for winter populations; like Teal and Pintail a marked decrease in recent years. The only other significant records were 30 at Barcombe Res. on Aug. 27th and 20 at Selsey Bill on Sept. 1st.

A larger spring passage than usual, with 82 E. off Selsey Bill between Apr. 11th and 27th and 100 E. off Beachy Head between the 14th and 27th, peak 75 on the 14th.

No definite breeding pairs found but birds were noted in 7 suitable localities in the breeding season.

55. **SCAUP** (*Aythya marila*).—Rather more records than of late. In the first months of the year a total of c.40 recorded, including a party of c.30 in Scaford Bay until Mar. 1st. Inland records of single birds came from Chichester G.P., Piddinghoe and Barcombe Res. One at Rye Harbour G.P. on Sept. 29th (SJRR), a very early date, and a total of 7 other birds at the end of the year, 2 at the coast and 5 inland, at Barcombe and Weir Wood Res.

56. **TUFTED DUCK** (*A. fuligula*).—See table for winter populations. Additional counts were of small parties totalling c.160 birds in 14 other localities in the early months and 40 in 4 localities at the end of the year. On Mar. 27th 47 flew E. off Beachy Head.

A further small increase in breeding birds, mainly in established breeding sites. Only one new breeding locality was recorded in 1968 at Roman Woods (TQ112336).

Apr. 27th and 29th. Five in Chichester Harbour until Mar. 10th, including a party of 4. Two at Brooklands, Worthing until Mar. 28th. Two at Barcombe Res. from Jan. 3rd to 10th, 2 at Newhaven Tidemills from Mar. 17th to 29th and 2 off Seaford between Feb. 18th and Mar. 7th, all these records could refer to the same birds. One at Pagham Lagoon from Jan. 28th to Mar. 23rd and 3 in the Rye area on Jan. 21st, 2 remaining at the G.P. until Apr. 30th (many obs.), a late date. One off Beachy Head from Apr. 11th to 19th.
At the end of the year the only records were 2 E. at the Midrips on Nov. 23rd, one at Rye Harbour G.P. from Nov. 23rd to Dec. 29th and one E. off Selsey Bill on Dec. 1st.

62. **VELVET SCOTER** (*Melanitta fusca*).—The only records for January and February were single birds W. off Selsey Bill on Jan. 14th and Feb. 11th. A larger spring passage than usual with 21 E. off Selsey Bill between Mar. 24th and Apr. 29th; 37 E. off Beachy Head between Mar. 30th and Apr. 30th, and 5 more there between May 15th and 24th.

In the autumn, one E. and 19 W. off Selsey Bill in 26 days watching from Oct. 27th to the end of the year and 4 E. off Beachy Head on Nov. 10th. Elsewhere there were up to 3 in Rye Bay from Nov. 5th; 3 (all oiled) at Newhaven Tidemills in late December and 2 at Pagham on Dec. 22nd.

64. **COMMON SCOTER** (*M. nigra*).—In January and February a maximum of c.450 in Rye Bay on Jan. 21st, and there were up to 240 in the Seaford/Cuckmere area and 60 in Norman's Bay.

A spectacular spring passage, involving some 25,000 birds, was the largest ever recorded in the county; records from Selsey Bill and Beachy Head are tabulated below:

	Mar.		Apr.		May		June		W
	E	W	E	W	E	W	E	W	
Selsey Bill	515	12	4395	5	209	14	340	15	218
Days obs.			23	on 16th					
Peak			2140						
Beachy Head	4795	6	17495	24	575	29			NIL
Days obs.			7100	on 15th	155	E. on 24th			6
Peak	4500	E. on 24th							

At Beachy Head 13,360 flew E. between Apr. 13th and 20th but no large movement was seen on the 16th, the date of the peak Selsey movement. C.50 summered in Rye Bay.

The largest autumn movement was 250 W. off Beachy Head on Sept. 15th. Elsewhere at the end of the year c.100 in Rye Bay and 200 in Seaford Bay were the only large parties.

67. **EIDER** (*Somateria mollissima*).—In the first three months of the year c.45, 6 adult males, along the coast with 22 W. off Bexhill on Feb. 19th as the largest party. In April and May 112 E. and one W. off Selsey Bill in 37 days watching, most being seen in April; 85 E. off Beachy Head in April, peak 54 on the 17th.

One present in the Pagham/Selsey area from June onwards was the only summer record. Fifty-six flew W. off Selsey Bill on Nov. 9th and 17 offshore there in November and December. Elsewhere at the end of the year 27 recorded; 13 of these were in Chichester Harbour and 11 were off Bexhill.

69. **RED-BREASTED MERGANSER** (*Mergus serrator*).—Between January and March up to c.55 were wintering in Chichester Harbour and c.25 in the Pagham/Selsey area. As with other species, a much larger spring passage than usual; this may have started in February, when 140 flew E. off Selsey Bill, compared with 43 W. Between Mar. 1st and May 26th 640 flew E. and 117 W. there in 49 days watching, peak 111 E. on Apr. 15th. At Beachy Head 525 E. in April, 488 of these were between the 12th and 21st, and the largest daily total was 234 on the 15th.

In the autumn 6 flew E. very close in Rye Bay on Sept. 8th, an early date, and 223 E. and 254 W. off Selsey Bill in 29 days watching from Oct. 19th to the end of the year and up to 40 offshore there in November. Elsewhere at the end of the year very few recorded except in Chichester Harbour, where there were up to 36 in November and December.

70. **GOOSANDER** (*M. merganser*).—Rather more numerous than usual, particularly at the end of the year. In the early months single birds at Chichester G.P. on Jan. 9th (JVS), at Weir Wood Res. from Jan. 28th to Mar. 6th (many obs.) and Selsey Bill on Feb. 4th (HPKR); 2 at Burton Pond on Feb. 18th (ETW).

At the end of the year 2 flew E. off Selsey Bill on Nov. 16th (DSF); single birds at Darwell Res. on Nov. 23rd (RVW), Weir Wood Res. from Dec. 8th to 12th (CEH, RJB) and at Barcombe Res. from 9th to 13th with 2 there to the 15th (many obs.). Four at Chichester G.P. on Dec. 10th increased to 7 by the 30th (JVS *et al.*). One at Knepp on Dec. 26th (MH).

71. **SMEW** (*M. albellus*).—In January single birds at Pett on the 8th (JA), Church Norton on the 10th and 11th (MS), the Cuckmere on the 11th (AIC), Darwell Res. on the 14th, which remained to Feb. 26th (JR, RVW) and at Chichester G.P. on the 20th, which remained to Feb. 27th (many obs.). One at Moneyenny G.P., Rye from Mar. 9th to 11th (RES). In December one at Rye (RRG, WM) and 2 at Newhaven Tidemills (PFB, MRG) on the 14th and one at Chichester G.P. from the 28th (JVS *et al.*).

73. **SHELDUCK** (*Tadorna tadorna*).—The monthly maxima in Chichester and Pagham Harbours were as follows:

	Jan.	Feb.	Mar.	Apr.	May	Oct.	Nov.	Dec.
Chichester Harbour	2800	1980	4900	730	295	64	800	1450
Pagham Harbour	750	800	500	180	70	265	750	

These counts were probably incomplete, but the March count in Chichester Harbour was the highest ever for that locality even though the whole harbour was not covered. There seems little doubt that the species is increasing rapidly at present, and this is confirmed by the figures from Pagham, where the peak counts in the past 4 winters of 300 in 1965, 500 in '66, 500 in '67 and 800 in '68 compare very favourably with the average maximum of c.100 shown by the Wildfowl counts up to 1963. Elsewhere along the coast smaller wintering parties in several localities totalled c.150 in the early months and 21 at the end of the year. As usual a few also wintered inland, mainly in the early months at Chichester G.P., Amberley/Pulborough, Burton Pond, Glynde, Weir Wood Res., Barcombe Res. and Wet Level. The largest party was of 90 at Wet Level in February. A small easterly passage off Beachy Head in April and May totalled 45 birds.

Inland in the breeding season pairs were recorded as follows: Chichester G.P., 2 or 3 rearing 18 young; West Hartling Pond, one reared 5 young; Parham Park one and Brede Levels one. In addition 2 birds were seen at Barcombe Res. in May, when 30 were still present at Wet Level. A pair probably bred at Beachy Head; a pair reared 6 young at the Cuckmere and 6 pairs reared 58 young at Rye. No counts of breeding pairs were made at either Chichester or Pagham Harbours, but in June and July there were c.145 young in the Thorney area and c.120 young in Pagham Harbour.

75. **GREY LAG GOOSE** (*Anser anser*).—In March 6 at Weir Wood Res. on the 13th (MPL) and 2 on the 25th (CFT), and 3 at Warnham Mill Pond, which departed N., on the 26th (SWMH). One at Beachy Head on Apr. 9th and one E. there on the 14th (ARK, KV *et al*), the latest spring record for the county. In December one at Beachy Head on the 1st (KV) and 3 flying S. down the Cuckmere on the 29th (PJW).

76. **WHITE-FRONTED GOOSE** (*A. albifrons*).—The only records for January and February were 50 at Sidlesham on Jan. 5th and 6th and 4 at Selsey from the 6th to 14th. In March 7 at Selsey Bill on the 3rd, 15 at Chichester G.P. from the 3rd to the 8th, 35 SE, at Beachy Head on the 3rd, 40 NE, over Hartfield and Groombridge on the 5th, one in Pagham Harbour on the 9th, one at Selsey Bill on the 16th and 2 E. off Beachy Head on the 28th. One flew E. there on Apr. 14th and another did so on June 4th (PC, AQ). This bird may have been an escape as may have been one flying E. there on Sept. 5th.

At the end of the year 4 at Sidlesham from Nov. 29th to Dec. 14th, with 10 there on the 15th; one flying SW. at Rye on Dec. 21st and 46 likewise on the 31st; one at Glynde on Dec. 22nd; 9 N. over Bexhill and 37 arriving from the sea at Eastbourne on Dec. 28th, 206 at Crowhurst on the 29th; 23 at Normans Bay on the 30th and 31st and 3 on Lewes Brooks and 27 E. at Chichester G.P. on the 31st.

78. **BEAN GOOSE** (*A. arvensis*).—Four at Iford on Dec. 14th (MCR).

GREY GOOSE SPECIES (*Anser sp.*).—On Nov. 28th 200 + flew SW. over Eridge and in December 43 at Rye on the 12th, 50 at Iden on the 13th, 10 W. over Chichester G.P. and 26 W. over Burgess Hill on the 29th and 12 at Pebsham and 10 SW. over Rye on the 30th. Most of these birds were considered to be *albifrons* and there was evidently a considerable arrival in the latter half of December.

80. **BRENT GOOSE** (*Branta bernicla*).—The monthly maxima in Chichester and Pagham Harbours were as follows:

	Jan.	Feb.	Mar.	Nov.	Dec.
Chichester Harbour	1500	2000	900	710	2500-3000
Pagham Harbour	120	20	12	39	26

Numbers in Chichester Harbour remain at a very high level and the December count was thought to be nearer 3,000 than 2,500. But the species was scarcer than usual everywhere else along the coast and, apart from passage records, only single birds were seen except for 8 in Rye Bay on Nov. 24th.

Offshore passage in the spring was most marked at Beachy Head, where 395 flew E. between Mar. 10th and Apr. 17th, peak 220 on Apr. 16th. At Selsey Bill a total of 154 flew E. in 35 days watching in March and April. Not recorded

in the autumn before Nov. 10th, when 3 flew E. at Beachy Head. Between then and the end of the year small westerly movements were noted at several localities along the coast, involving a total of less than 100 birds. It is of interest that no birds of the race *hrota* were recorded.

81. **BARNACLE GOOSE** (*B. leucopsis*).—One flying E. along the beach at Selsey Bill on Jan. 12th, during the cold spell (MS).

82. **CANADA GOOSE** (*B. canadensis*).—Winter counts from the principal localities of this species are tabulated below:

Locality	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.
West Hartling Pond	—	—	—	—	—	—	40
Amberley/Pulborough	240	40	—	200	—	—	250
Petworth Park	—	40	—	—	—	—	—
Knepp	—	40	—	—	—	—	—
Warnham Mill Pond	—	25	25	15	30	15	—
Weir Wood Res.	26	26	2	6	—	40	—

In addition small parties totalling c.40 birds were noted in 4 other localities in the early months and parties totalling 16 birds were noted in 2 localities at the end of the year.

In the breeding season 13 young were reared by 3 pairs—one at West Hartling Pond and 2 at Rye.

85. **WHOOPER SWAN** (*Cygnus cygnus*).—One at Horsted Keynes Lakes on Feb. 2nd (RB). On Mar. 7th 34, of which 30 were adults, flew E. about 150 yards offshore in Pevensey Bay (MJH).

86. **BEWICK'S SWAN** (*C. bewickii*).—An influx in January was possibly associated with the cold spell and parties totalling 48 birds were recorded in 6 localities: Pagham, Amberley Wildbrooks, Glynde, Darwell Res., Wet Level and Pett Level. The largest party was 27 in Amberley Wildbrooks on the 7th. On the 22nd 17 flew SW. over Chichester G.P. Otherwise the only other records for the early months were 2 at Wet Level on Feb. 11th and 17th and 8 at Amberley Wildbrooks on the 25th.

At the end of the year one at Amberley Wildbrooks on Nov. 3rd increasing to 5 in December, 2 at Thorney on Nov. 17th increasing to 13 in December and 2 at the Cuckmere on Nov. 17th.

91. **BUZZARD** (*Buteo buteo*).—At least 5 pairs were present during the breeding season, although there were no reports of young birds being seen. One bird of another pair was accidentally shot in March. In addition there were 3 records of single birds in other localities during the summer. Three circling high over Cissbury Ring on Mar. 11th and 3 over a West Sussex locality on Mar. 25th were the largest number seen together. Spring migrants were one at Crowlink on May 12th which flew off E. and one at Beachy Head on May 25th which flew N. The autumn was notable for the number of migrants: 12 at Beachy Head between Sept. 4th and Oct. 27th, with 6 there on Sept. 16th, 4 of which were seen flying N. One flew S. at Sidlesham on Sept. 3rd; one at Seaford Head on Oct. 5th and one flew E. over Worthing on Oct. 24th.

92. **ROUGH-LEGGED BUZZARD** (*B. lagopus*).—One at the Midrips/Wicks from Jan. 1st to Feb. 3rd and one there from Nov. 7th to Dec. 14th (RES *et al*).

93. **SPARROWHAWK** (*Accipiter nisus*).—Three pairs raised a total of 8 young and in addition there were 13 other definite and 7 probable pairs. Although the total of proven breeding pairs was slightly less than in 1967 there was a marked increase in the number of sightings across the county, with 37 records of single birds in the breeding season, few of which appear to overlap with the proven or probable pairs. In the winter there were records from 7 other inland localities. The continued increase in records suggests a better breeding season in 1967 than the reports indicated at that time. There were 4 spring coastal records between Apr. 7th and 23rd from Beachy Head and several birds were seen there between Aug. 28th and Nov. 3rd with a maximum of 3 on Sept. 18th. Further information on the status of this species would be of great importance.

94. **GOSHAWK** (*A. gentilis*).—Single birds flying W. at Beachy Head on Sept. 12th and E. there on the 17th (RHC).

98. **HONEY BUZZARD** (*Pernis apiflorus*).—One near Birling Gap on June 4th was evidently hunting (BJ, CMJ). On Sept. 16th there were 5 sightings involving 2, possibly 4 birds, at Beachy Head between 1445-1730 hrs. and at least 3 of the sightings were of birds to the S. or SE. of the Head (NAGL, MEN, MCR). Single birds at Beachy Head on Sept. 17th and Oct. 6th (RHC). One flew N-S. low over Sidlesham on Sept. 18th (MS).

99. **MARSH HARRIER** (*Circus aeruginosus*).—There were 5 spring and 2 autumn records. One at Beachy Head on Apr. 19th (MEN, PC) and a male there on the 26th (RHC). A male seen at Alfriston on Apr. 25th was also heard calling in flight (VAW). One at Sidlesham on May 18th (JVS) and another at Beachy Head on the 19th (PC, PKK *et al.*). On Aug. 23rd a male flew E. at Bexhill (SJR) and on Oct. 6th one flew S. out to sea high over Selsey Bill (DSF, MS).

100. **HEN HARRIER** (*C. cyaneus*).—The number of birds wintering or on passage was approximately 21, which was not far short of the record total of 25 in 1967. There were 14 records between Jan. 1st and May 1st and 7 between Oct. 1st and Dec. 29th. The total of 8 males was very unusual and 4 of these were seen between Mar. 11th and May 1st.

On the downs behind Worthing 2 were resident from Jan. 1st to Apr. 4th with 4 (one a male) together there on Mar. 11th. Other wintering birds in the early months were seen at North Stoke, Lullington Heath and the Midrips and males at Nutley, Glynde and West Dean. Probable spring migrants were ring-tails at the Seven Sisters on Mar. 29th and on Pevensy Levels on Apr. 8th and males at Beachy Head on Mar. 13th and at Selsey on May 1st (HPKR); both males were seen flying in from the sea and the Selsey record is a very late date.

At the end of the year, 2 in the Worthing area from Oct. 1st to Dec. 26th with a male on Nov. 24th when a male was also seen over Amberley Wildbrooks. The remaining winter records occurred between Oct. 22nd and Dec. 29th at Beachy Head, Lullington Heath, Church Norton and Selsey.

102. **MONTAGU'S HARRIER** (*C. pygargus*).—Spring records were: one soaring over Darwell Woods on May 5th and single males at Sidlesham on May 9th and Church Norton on the 11th. In the autumn single immatures at Beachy Head on Sept. 10th and 11th.

HARRIER SP.—The following records of ring-tail harriers, either *C. cyaneus* or *pygargus* were not specifically identified. One at Pevensy Levels on Apr. 18th and one in Ashdown Forest on Apr. 24th. In the autumn single birds in the Adur Valley on Sept. 14th, at Seaford Head on Oct. 6th and on Pevensy Levels on the 20th.

103. **OSPREY** (*Pandion haliaetus*).—The only spring record was of one flying N. over Alfriston on June 9th (LAC). In the autumn at least one was present at Weir Wood Res. from Aug. 21st to Oct. 1st (many obs.). One at Churcher G.P. on Aug. 28th (CRG). Two in the Church Norton and Pagham Harbour area on Sept. 14th; one of which flew out SW. over Selsey Bill (DSF). At Beachy Head single birds flew S. on Sept. 8th (RHC) and Sew. on the 13th (NAGL, MCR *et al.*). One fishing in Thorney Channel on Sept. 22nd (DSF) and one at Pilsey Island on the 24th (JHME).

104. **HOBBY** (*Falco subbuteo*).—Nine pairs probably bred but only one pair was known to have raised young compared with 6 successful pairs in 1967. This may be explained by the less intensive coverage of sites during the year. There were only 6 records of single birds in other known breeding areas.

One at Boxgrove on Apr. 16th was an early arrival and there were single birds at Beachy Head on May 4th, 5th, 18th and 20th; the last bird was seen coming in from the sea. Autumn migration was noted only at Beachy Head, where 5 were recorded between Aug. 25th and Oct. 20th with one flying S. on Sept. 22nd.

105. **PEREGRINE** (*F. peregrinus*).—A welcome increase in records involving at least 8 birds. On Jan. 14th an immature female flying across Pagham Harbour was seen later over Bracklesham Bay (BAEM, HPKR, MS). One in the Glynde-Firle area was seen on 6 dates between Jan. 1st and Mar. 13th (DCL, JR, JAW). One at Midhurst Common on Apr. 12th (KSC, TPW).

In the autumn one flew in from the SW. over Camber on Aug. 24th (EDB). One at the Cuckmere on Oct. 13th (MJH, BAEM, IRW). A female at Amberley on Sept. 29th (CMJ). One at Beachy Head on Oct. 2nd (EIM). One at Selsey Bill on Dec. 29th (HPKR).

107. **MERLIN** (*F. columbarius*).—Numbers were again about average with most records from the coast and in the autumn. In the early months one at Selsey Bill on Jan. 28th and one at Newhaven Tidemills between Feb. 5th and Mar. 16th. A female in the Chantombury area on Mar. 13th. One at Wych Cross on Apr. 13th and one at the Cuckmere on May 1st.

In the autumn, a female at Church Norton on Oct. 8th and one over E. Brighton Golf Course on the 14th. There were 8 records of single birds at Beachy Head between Sept. 17th, when one was trapped, and Dec. 18th; and one was seen to take a hirundine there on Oct. 26th. Late winter records were of single birds at the Cuckmere on Dec. 6th, at Broadbridge on Dec. 24th and at Bexhill on the 30th.

108. **RED-FOOTED FALCON** (*F. vespertinus*).—An immature at Sidlesham on Sept. 8th (MS). This record has been accepted by *Brit. B.*

110. **KESTREL** (*F. tinnunculus*).—There were 6 spring and 2 autumn passage records at the coast as follows: in March, one in from the SE. at Langney Point on the 17th and one in S-N. at Selsey Bill on the 30th; in April, one flew out

ESE, at Worthing on the 9th and 2 flew SW, at Selsey Bill on the 21st and one SW there on the 25th; one came in S-N, at Selsey Bill on June 3rd. In the autumn one S-N, at Selsey Bill on Sept. 22nd and 4 flew out S, at Beachy Head on Oct. 4th.

With the completion in 1967 of the breeding survey it was perhaps natural that there should be a decline in observations of breeding birds and there were fewer breeding season records than in the 3 previous years. The results are summarised as follows:

Pairs proved to breed	54	Pairs probably breeding	73	Possible breeding pairs	43
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BREEDING SUCCESS

Pairs known to have raised young	27	Young raised (left nest)	54	Average brood size	2.0	Pairs known to have failed	Nil
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NOTE: One clutch of 4 eggs was blown from a nest in a gale.

A detailed paper describing the results of the breeding survey appears on page 58.

115. RED-LEGGED PARTRIDGE (*Alectoris rufa*).—P.J.W. and VAW estimated that c.35% of the partridges in the Alfriston area were this species. Two breeding season counts received of 3 pairs on c.400 acres of farmland at Sidlesham and one pair on c.2,500 acres at Wepham Down.

116. PARTRIDGE (*Pendix perdix*).—Two breeding season counts received, of 14 pairs on c.400 acres of farmland at Sidlesham and 5 pairs on c.2,500 acres at Wepham Down. The Sidlesham figures show a 25% decline compared with the period 1962-65. Breeding season counts of both partridge species would be welcome.

117. QUAIL (*Coturnix coturnix*).—One at Sidlesham on Jan. 31st (JVS). One at Beachy Head on Apr. 24th. Very few summer records, which were: 2 at Heyshott Down on June 23rd, one near Midhurst on July 25th and one at Plumpton on Aug. 11th. No autumn records.

120. WATER RAIL (*Rallus aquaticus*).—In the first 4 months of the year a total of c.28 was found wintering in 14 inland and 6 coastal localities. Departure dates of wintering birds were noted at West Chilmington on Mar. 17th and Chichester G.P. on Apr. 14th.

In the breeding season pairs were recorded as follows: Shillinglee Park, one; Lurgashall Pond, 2; Burton Pond, certainly 2, possibly 3. Once again breeding was not proved, but pairs were present throughout the season. There was probably also a pair present at Church Norton. There were also records in April from Fishbourne, Iping, Sompington and Wet Level which may relate to breeding birds rather than migrants or wintering birds, but the evidence is insufficient. Breeding may also take place at Benhall Mill. One calling at Pett Level on Sept. 8th.

At the end of the year a total of c.40 was recorded from 7 inland and 6 coastal sites, including an estimate of 15 wintering in the Church Norton area (HPKR).

124. LITTLE CRAKE (*Porzana parva*).—On Apr. 15th RHC trapped an adult female at Beachy Head. This record has been accepted by Brit. B. There are 12 previous records for the county and the last was obtained at Pevensey on June 1st, 1931.

125. CORNCRAKE (*Crex crex*).—Single birds at Beachy Head on Apr. 26th (NAGL) and May 26th (KV) and at Chichester G.P. on May 5th (PJB). In the autumn single birds at Beachy Head on Aug. 31st (KV) and Sept. 4th (AQ) and 8th (RHC, KV). One at Sidlesham on Sept. 18th (MS) and another on Oct. 15th (JVS).

127. COOT (*Fulica atra*).—The monthly maxima at stated localities are tabulated as in previous years, a dash indicating that no count was received.

Locality	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.
Manhood End	850	350	—	—	—	280	—
Chichester G.P.	730	—	250	—	800	—	1055
Pagham Lagoon	100	—	—	—	—	—	—
Swainbourne Lake	—	65	—	90	—	150	—
Piddinghoe	—	—	—	—	—	—	80
Barcombe Res.	250	—	—	—	—	—	130
Weir Wood Res.	180	95	45	120	165	240	100
Darwell Res.	160	200	—	—	—	285	95
Pett Level	200	1200	—	—	—	—	450
Rye Harbour G.P.	—	—	—	—	—	70	600

Waders

As in past years a series of monthly wader counts were organised in Chichester and Pagham Harbours with a count along the whole coastline on Dec. 22nd. Full results of these counts are tabulated on page 70. The systematic list is largely confined to records outside the scope of these tables which should be consulted in conjunction with the list for all 1969 information.

131. OYSTERCATCHER (*Haematopus ostralegus*).*—The monthly maxima recorded at Rye Harbour were: Jan. 85, Feb. 30, Apr. 125, July 105, Aug. 300, Sept. 250, Oct. 150, Nov. 90, Dec. 90. C.40 summered there. Elsewhere there were 40 at the Midrips on Jan. 21st, 110 at Climping on Mar. 5th and up to 25 at Rottingdean at both ends of the year. Some E. passage in the spring at Beachy Head, which totalled c.100 birds in 57 days watching from Mar. 10th to May 25th. One came in from the SW, at Selsey Bill on Mar. 9th and one out SW, there on Apr. 30th.

Breeding pairs were: Chichester Harbour, 2 with nests on June 12th; Pagham Harbour, 2 with nests in June; Rye Harbour, 6 of which 4 reared 13 young. On June 9th there were 227 in Chichester Harbour and 82 in Pagham Harbour.

133. LAPWING (*Vanellus vanellus*).*—The January cold spell produced the usual large S. and W. cold weather movements, most were noted at Worthing with c.1,500 moving on the 10th and 11th. At Selsey Bill 56 flew in S-N, in 27 days watching from Jan. 14th to Mar. 31st and 67 departed S. in 10 days in February; 11 S-N, over Worthing on Feb. 21st.

Flock counts received for the early months were: a maximum of c.500 at Selsey Bill on Feb. 18th, c.1,100 in the Amberley/Pulborough marshes in February and 200 near Worthing on Mar. 13th.

* See also wader count tables page 70.

Counts of breeding pairs received were: 8 and 4 males on one area of c.400 acres of arable and marsh at Sidlesham, a 70% decline compared with the period 1960-65; 15 on another area of c.100 acres of marsh at Sidlesham; 14 on c.2,500 acres at Wepham Down; 3 on c.500 downland acres at Well Bottom; 4 at Sumping Brooks; 4 at Weir Wood Res. and 75 at Rye Marsh and Harbour. There was an early nest, c/4, at Harting on Mar. 11th and in June and July large post breeding flocks were noted at Amberley Wildbrooks, 450; Cuckmere valley, 250; and Glynde, 750.

In the autumn at Selsey Bill 4 flew in S-N., 590 departed S. and 110 W. in 58 days watching from July 6th to the end of the year. Most movement was in December with a peak of 420 S. on the 14th, when 150 also departed S. at Newhaven and many flew SW. over Rye. Flock counts at the end of the year were: 300 at Park Brow on Oct. 13th, 160 at Wiston on Nov. 23rd, 280 at Harrow Hill on the 30th, 300 at Groombridge on Dec. 18th, c.1,000 at Elsted on the 26th and 700 at Selsey Bill in November and December.

134. **RINGED PLOVER** (*Charadrius hiaticula*)*.—The monthly maxima recorded at Rye Harbour were: Feb. 70, Mar. 30, July 30, Sept. 90, Dec. 3. Other counts were 50 at Shoreham on Feb. 3rd and c.20 there from August to December and a maximum of c.50 in the Newhaven area in November. Inland records were 3 at Barcombe Res. on Mar. 24th and one at Weir Wood Res. on Aug. 31st.

A total of 41-43 breeding pairs found as follows: Pilsey Island, 2; Selsey Bill, 2 or 3; Church Norton, 6; Chichester G.P., one; Newhaven Tidemills, 2; Cuckmere Haven, 2 or 3; Normans Bay, one; Rye Harbour, 25. Six flew in S-N. at Selsey Bill on Sept. 8th.

135. **LITTLE RINGED PLOVER** (*C. dubius*).—Two at Barcombe Res. on Mar. 21st and 24th, with one until Apr. 15th and 2 there on June 30th, but definitely not breeding. Single birds at Chichester G.P. on Apr. 6th, a dew pond near Brighton on the 13th (CFH), Bishopstone on the 13th and Sidlesham Ferry on May 26th. One in the latter area from July 21st to 29th with 2 from the 27th. One at St. Leonard's on Sept. 15th. No breeding records.

136. **KENTISH PLOVER** (*C. alexandrinus*).—One at Cuckmere Haven on Aug. 20th (HJH).

139. **GREY PLOVER** (*Pluvialis squatarola*)*.—At Rye Harbour there were up to 25 in January and February, 6 on July 24th and up to 13 in December. C.300 in Pagham Harbour on Jan. 2nd, 40 at Goring on the 16th and 22 at Fairlight on Dec. 14th. On the August wader count the 1,200 in Chichester Harbour were all adults in s/p.

140. **GOLDEN PLOVER** (*P. apricularius*)*.—Flock counts in the early months were 1,000+ between Itchenor and West Wittering on Feb. 17th; a maximum of 900 at Selsey Bill on Jan. 3rd; which decreased to 230 by Apr. 13th and 5 on the 25th; 35 at the Cuckmere on Jan. 11th and 600 at Winchelsea Beach on the 28th with 500 there on Mar. 4th. One in s/p (showing the characters of the race *apricarius*) at Rye on May 31st (S.J.R.R.) and one in Pagham Harbour on June 9th (HPKR).

* See also wader count tables page 70.

The first autumn birds were 7 at Chidham on July 28th and 6 flying N. over Findon on the 31st. Flock counts at the end of the year were 85 at Selsey Bill on Nov. 1st, increasing to 825 on Dec. 1st, 300 flew out SW. there on the 14th; 60 at Pagham on Nov. 17th; 220 at Pevensey Levels on Nov. 16th; 400 at Winchelsea Beach on Dec. 2nd; 65 at Ford on Dec. 15th and 70 at Glynde, 150 at Crowhurst and 300 at Pett Level on the 28th.

143. **TURNSTONE** (*Arenaria interpres*)*.—The monthly maxima recorded at Rye Harbour were: Apr. 60, May 45, June 4, July 25, Aug. 40, Sept. 32, Dec. 40. There was also a sizeable wintering population along the coast between Pevensey and Hastings, involving c.245 birds in the early months and a maximum of c.150 at the end of the year, when c.50 were wintering at Selsey Bill. C.200 in Pagham Harbour on Jan. 28th.

There were 2 inland records; a single bird at Barcombe Res. on May 8th and 2 at Darwell Res. on Aug. 31st.

145. **SNIPE** (*Callinago gallinago*)*.—Counts are tabulated to give an approximate total of birds recorded in each month; figures in brackets give the number of areas in which counts were made.

Jan.	Feb.	Mar.	Oct.	Nov.	Dec.
300 (9)	710 (15)	435 (10)	285 (3)	600 (9)	560 (11)

Counts were received from 35 localities, a rather wider spread than in previous years. Counts of more than 50 together were made at Thorney Island, Selsey Bill, Amberley/Pulborough marshes, Glynde (marl pit, Levels and Reach), Whelpley Levels, Hooe Level, Herstmonceux Castle, Wet Level and Winchelsea marsh. The largest counts were up to 150 at Thorney and 100 at Hooe Level at each end of the year, c.100 in Amberley/Pulborough marshes on Feb. 10th, c.200 at Glynde marl pit on Nov. 5th and c.140 at Pagham on Dec. 22nd.

The only complete breeding counts received were Glynde Level, 2 pairs, and Coombe Haven, 5 pairs. The latter was not covered during the 1965-67 survey and the 1968 breeding density of c.4.2 pairs per square mile was well above the average of 1.3 found during the survey in the other marshland areas. Other breeding season records came from established breeding areas in the Arun and Adur valleys and Pevensey Levels and counts made along the Rother near Midhurst from January to May indicated that none bred there.

One flew in S-N. at Selsey Bill on Aug. 25th.

147. **JACK SNIPE** (*Lymnocyptes minutus*).—Many more records than usual. In the early months birds were noted, all singly unless otherwise stated, in the following areas: Thorney Island, 4-5; Fishbourne, 2; Selsey Bill; Sidlesham Ferry; Pagham, 3; Chichester G.P., 2; 2 sites near Midhurst; Scaynes Hill S.F.; Shoreham, 2; Plumpton; Newhaven Tidemills, 3; Glynde Reach; Normans Bay; Winchelsea and Wet Level, 3. There was some indication of passage in March and the latest spring record was at Chichester G.P. on Apr. 23rd.

At the end of the year first recorded at Thorney Island on Oct. 20th and birds were noted in the following localities: Thorney Island, 2-3; Fishbourne; Church Norton; Chichester G.P.; Worthing; Lancing; Scaynes Hill S.F.;

* See also wader count tables page 70.

Newhaven Tidemills, 1-2; Glynde, 3; and Crowhurst, 2. On Nov. 28th there were 10-12 scattered round Newhaven Tidemills (Pjw), the largest number recorded in one area for some years.

148. WOODCOCK (*Scolopax rusticola*).—As is usual, the cold weather at both ends of the year produced several records from the coast, suggesting small movements. Once again there were widespread breeding season reports of roding birds, involving c.43 birds in 25 localities. Proven breeding pairs were noted at Northapel and Wych Cross. A detailed analysis of the information received so far will be published later.

In November one at Beachy Head on the 6th, one at Runcton on the 17th and 18th and 2 at Alfriston on the 24th.

150. CURLEW (*Numenius arquata*).—The monthly maxima recorded at Rye Harbour were: Apr. 20, June one, July 120, Aug. 150, Sept. 200, Nov. 130, Dec. 30; and at Pett Level they were: Jan. 30, Feb. 300, Mar. 40, Apr. 11, June 15, July 40, Sept. 10, Dec. 300. There were also c.30 at Newhaven Tidemills at both ends of the year.

In the breeding season records from Ashdown Forest indicated a breeding population of 6 pairs and a pair bred successfully in a new site in the NW. of the county; the original site there was not occupied.

151. WHIMBREL (*N. phaeopus*).—The first recorded were off Beachy Head on Apr. 11th. There were larger spring movements than usual, notably at Beachy Head, where 566 flew E. in 42 days watching between Apr. 11th and May 20th; most, 470, were seen between Apr. 17th and 20th with 206 on the 17th as the largest movement. These movements were reflected along the whole coast. One flew NW. over Harting on Apr. 20th and 5 NE. over Rottingdean on May 11th; on May 12th there were 36 at Bury and on the 19th 13 at Watersfield. About 7 summered at Rye Harbour and there was one in Chichester Harbour on June 9th.

Very little visible passage in the autumn, when the last recorded were 2 at Pilsley Island on Oct. 20th.

154. BLACK-TAILED GODWIT (*Limosa limosa*).—There were up to 700 in Chichester Harbour in January and 120 in Pagham Harbour during March and 40 there during November. Inland records were: one at Arundel on Mar. 3rd, 3 at Glynde on the 18th, 8 at Barcombe Res. on the 24th and one from Apr. 6th to 15th, one at Wet Level on May 12th and one at Chichester G.P. on Aug. 4th.

155. BAR-TAILED GODWIT (*L. lapponica*).—There were 75 at Pagham Harbour on Jan. 15th and 200 at Northpoint beach, Rye, on Sept. 14th. In the spring 705 flew E. off Selsey Bill in 37 days watching in April and May and 335 flew E. off Beachy Head between Apr. 17th and May 4th.

156. GREEN SANDPIPER (*Tringa ochropus*).—At the beginning of the year single birds were wintering in 5 localities and at least 3 in Pulborough marshes. In December single birds were present in 5 localities and 2 at Chichester G.P. and 3 at Langton.

* See also wader count tables page 70.

Spring passage probably started in March and rather more than usual were seen in April; one at Chichester G.P. on June 15th. Autumn passage noted from July 6th with a peak of 26 birds in the first week of August. The presence of wintering birds makes the start of spring and end of autumn passage difficult to detect. Monthly totals were:

Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
3	18	1	1	27	46	16	11	8

157. WOOD SANDPIPER (*T. glareola*).—In the spring one at Barcombe Res. on Apr. 23rd, 2 on May 8th and one on the 12th (DCL, BAEM) and one at Sidlesham Ferry on June 2nd (HPKR). In the autumn 21 recorded between July 7th and Oct. 20th, mainly at the coast but there were inland records from Chichester G.P., Iford, Piddinghoe and Weir Wood Res.

159. COMMON SANDPIPER (*T. hypoleucos*).—Five wintering birds in 4 localities in January and February and 2 December records.

Spring passage was first noted on Mar. 17th and continued until June 1st; once again there was an increase in records, with a clear peak (12 birds) in the third week of May. Two summered at Weir Wood Res. (CIN). Autumn passage first noted on June 21st and continued until about Nov. 24th, with peak periods in the last week of July (63 birds) and the third week of August (93 birds). Records included counts of c.40 along a quarter mile stretch of the Ouse at Iford on Aug 8th and 50 in Pagham Harbour on the 18th. Inland records came from 11 localities in the spring and 9 in the autumn. Monthly totals were:

Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	19	34	5	77	174	45	23	4

161. REDSHANK (*T. totanus*).—At Shoreham there were c.100 in February, an autumn maximum of 45 on Aug. 19th and c.120 in December. Up to 65 in the Newhaven area in the early months, 50 there on Oct. 1st and up to 40 in December. At Rye Harbour recorded monthly maxima were: Apr. 70, July 80, Sept. 25, Oct. 75.

Breeding pairs were recorded as follows: Chichester Harbour, 16-18 in 4 sites; Pagham Harbour, 2 on the N. side; Chichester G.P., one; Harting, 6-10; Arun valley, 11 in 4 sites; Barcombe Res., 2; Glynde Level, 3; Cuckmere valley, 2; Rye marsh and Harbour, 14. Breeding pairs were also noted in the Ouse valley and at Hooe, Brede and Wet Levels, but counts not made. None was found breeding at Coombe Haven (see SBR 1967, 53-60).

162. SPOTTED REDSHANK (*T. erythropus*).—One at Newhaven Tidemills until Mar. 5th, 2 at Thorney on Jan. 6th and 2 at the Cuckmere on the 11th. In December single birds at Thorney and Newhaven Tidemills.

Very few on spring passage. Autumn passage first noted on June 29th and continued until about Nov. 24th; peak 48 birds in the last week of August. However, the wader counts record 40+ at Thorney from July to September. Inland records came from Barcombe Res. in the spring and Chichester G.P., Piddinghoe, Weir Wood Res. and Darwell Res. in the autumn. Monthly totals were:

Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	6	0	11	51	51	54	19	5

* See also wader count tables page 70.

165. **GREENSHANK** (*T. nebularia*)*.—One at Thorney on Feb. 17th, 2 there on Dec. 22nd and one at Pevensey on the 28th were the only winter records.

Spring passage was noted from Mar. 17th and continued to June 6th. Autumn passage was first noted on July 5th and continued to about Nov. 18th, with peak periods in the last week of July, 71 birds, the third week of September, 124 birds, and the third week of October, 72 birds. The largest flocks were 63 at Chidham on July 28th and 80 there on Sept. 22nd. Inland records came from 2 localities in the spring and 5 in the autumn. Monthly totals were:

Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
4	11	10	1	78	64	150	83	10

169. **KNOT** (*Calidris canutus*)*.—On Jan. 27th there were 205 at Pilsley Island. Thirty flew E. off Beachy Head on Apr. 12th. At Rye there were 12 on Apr. 29th, 3 on June 16th, which may have summered, and a maximum of c.30 on Sept. 9th. On the Dec. 22nd wader count there were 700 along the Hayling Island shore of Chichester Harbour; this area is the Hampshire part of Chichester Harbour not normally covered by our wader counts.

170. **PURPLE SANDPIPER** (*C. maritima*).—Again more records than usual, as follows: Pilsley Island, 2 on Nov. 24th; Pagham, 2 wintering at each end of the year; Littlehampton, one on Mar. 31st; Ferring, 2 on Nov. 14th; Saltdean, one in December; Newhaven, c.20 regularly recorded January to March with a maximum of 25 on Mar. 20th (PIW), the largest party recorded in the county since 1907 and up to 16 there at the end of the year; Bulverhythe, 5 in the early months and a maximum of 10 in December and one was seen there on Aug. 14th (TNB), a very early date; Fairlight, 15 on Apr. 27th; Rye, one on Sept. 8th and 2 on Nov. 5th.

171. **LITTLE STINT** (*C. minuta*)*.—In the spring single birds at Newhaven Tidemills on Mar. 9th and May 22nd and at Normans Bay on Apr. 7th and 9th; 2 at the Midrips on May 19th and 21st. In the autumn a total of c.24 recorded between July 21st and Nov. 24th, all at the coast. One wintering at Pagham in December.

173. **TEMMINCK'S STINT** (*C. temminckii*).—An unusual number of records. In May one at Newhaven Tidemills from the 19th to 22nd (RB, BAEM, ABW *et al.*) and one at Sidlesham Ferry on the 23rd (MS). In August 2 at Sidlesham Ferry on the 13th, 3 on the 14th and one remaining to the 17th (MS, RJS *et al.*).

175. **BAIRD'S SANDPIPER** (*C. bairdii*).—One at Rye Harbour G.P. from Sept. 8th to 10th (DJB, ER). This record has been accepted by *Brit. B.* and is the second for the county.

176. **PECTORAL SANDPIPER** (*C. melanotos*).—One at Sidlesham Ferry from Sept. 2nd to 11th (SKR, BCS, MS *et al.*).

178. **DUNLIN** (*C. alpina*)*.—At Shoreham there were up to 770 between January and March and c.1,200 in early December. In the Newhaven area there were up to 250 in the early months and c.100 in December. The monthly maxima recorded at Rye Harbour were: Feb. 25, Apr. 140, June 5, July 140, Sept. 30, Nov. 16.

* See also wader count tables page 70.

Eleven flew in S-N. at Selsey Bill on Apr. 27th and 110 flew E. and 10 W. there in 37 days watching in April and May; 12 E. in 42 days at Beachy Head in the same period.

Inland records were: 30 at Wet Level on Jan. 27th and 14 on Feb. 17th; 2 at Barcombe Res. on Mar. 31st; one at Pond Leigh on Apr. 25th, which departed NW.; one at Chichester G.P. on May 18th and one at Weir Wood Res. from Aug. 25th to 28th.

179. **CURLEW SANDPIPER** (*C. ferruginea*)*.—One at Church Norton on May 14th (MS) was the only spring record. In the autumn a total of 13 recorded along the coast between July 24th and Oct. 5th, the most together were 8 at Sidlesham Ferry on Aug. 1st. One at Darwell Res. on Sept. 5th (RVW).

181. **SANDERLING** (*C. alba*)*.—C.50 wintering at Goring at both ends of the year and a maximum of 120 there on Nov. 9th. The monthly maxima recorded at Rye Harbour were: Feb. 11, Apr. 30, July 18, Sept. 52, Dec. 29, and there were 50 at Camber on Feb. 26th and 30 on Dec. 2nd. The only record received from Climping was 29 on Mar. 5th.

184. **RUFF** (*Philomachus pugnax*)*.—Many more records than usual and recorded in every month except June. The monthly totals indicate an interesting pattern of birds arriving in the county during January and February and departing again in March and April; there was some through passage in April and May. Records included a flock at Bracklesham Bay which reached a peak of 120 from Feb. 18th to March 17th (HPKR, MS), the largest flock yet recorded in the county. Six flew in SE-NW. at Selsey Bill on Jan. 21st, being first seen very far out.

Autumn passage was larger than usual and was noted from July 1st to the end of October, with a peak of 86 birds in the last week of August. The largest flocks were 75 at Chidham on Aug. 25th and 45 there on Sept. 22nd. There was only one November record, but a marked increase occurred in December; a similar pattern has occurred annually since 1965. Monthly totals were:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
87	147	125	52	11	0	12	98	83	7	1	15

185. **AVOCET** (*Recurvirostra avosetta*).—An extraordinary number of records involving 70 birds, mainly in the spring. In January one at Newhaven Tidemills from the 10th to 15th; 3 at Sidlesham Ferry on the 15th which remained to Feb. 18th, and one there until Mar. 18th.

In the spring 10 flew W. at Beachy Head on Mar. 24th (KV). One flew E. off Selsey Bill on Apr. 14th, when there was also one at Sidlesham Ferry which stayed to May 1st; 2 there on Apr. 17th and 18th and another from May 17th to 19th. One at Barcombe Res. on Apr. 19th. On Apr. 27th a party of 17 flew E. off Selsey Bill (DSF, BAEM, RFP). On May 9th, there were parties of 8 in Pagham Harbour (NPH) and at the Wicks (LAC), 7 flew E. off Beachy Head (RHC, ARK), and one at Cuckmere Haven departed N. In June one at Rye Harbour G.P. on the 2nd, 2 at Shoreham on the 6th and 7th and one at Chichester G.P. on the 10th.

One flew W. off Bexhill on July 10th and, in December, one or 2 at Thorney from the 7th to 22nd and 3 at Sidlesham Ferry from the 16th to 22nd.

* See also wader count tables page 70.

187. **GREY PHALAROPE** (*Phalaropus fulicarius*).—One at Selsey Bill on Sept. 29th (DSF) and one at Sidlesham Ferry from Oct. 6th to 13th (DSF, NPH *et al.*).

188. **RED-NECKED PHALAROPE** (*P. lobatus*).—One in s/p on Thorney Deepes on May 25th (ETW), the sixth spring record for the county.

189. **STONE CURLEW** (*Buchinus oedichenus*).—One at the Midrips on Apr. 24th. In the breeding season single pairs or birds located in 4 sites on the downs.

193. **ARCTIC SKUA** (*Stercorarius parasiticus*).—The first recorded was one E. off Beachy Head on Mar. 30th. A larger spring passage than usual. At Selsey Bill 72 E. in 27 days watching from Apr. 17th to the end of May, 12 E. on Apr. 17th being the largest movement, and in June 4 E. and 9 W. there. At Beachy Head 100 flew E. in 55 days watching from Mar. 30th to June 3rd, with a peak of 31 over May 9th/10th. Three off Hove on June 22nd.

In the autumn a total of c.48 recorded along the coast between July 6th and Oct. 13th, but no large movement noted. Most were seen off Beachy Head with 25 birds between Aug. 28th and Sept. 16th.

194. **GREAT SKUA** (*S. skua*).—One off Selsey Bill on Mar. 23rd (MS) and one or 2 on the 24th (DSF, BAEM, HPKR *et al.*). An oiled bird, which had been dead about a week, picked up at West Wittering on the 28th (WWAP). There is only one previous March record for the county. In April and May single birds flew E. off Selsey Bill on Apr. 17th and 21st and W. on May 5th. At Beachy Head a total of 9 E. between Apr. 17th (when 4) and May 10th; one on Apr. 21st was seen to come in high from the SW. before moving E. along the shore. One E. off Boxhill on Apr. 26th.

In June 2 off Selsey Bill on the 29th (DSF, BAEM, MS), the second June record for the county. In the autumn one off Eastbourne on Aug. 31st and Sept. 2nd and 3rd, one W. off St. Leonard's on the 16th and one W. off Selsey Bill on Oct. 24th.

195. **POMARINE SKUA** (*S. pomarinus*).—Two flew E. off Beachy Head on June 3rd (KV). The first June record for the county. One off Beachy Head on Sept. 2nd (PJW, VAW) and one off Langney Point on the 29th (SFK, MHP, GAS).

198. **GREAT BLACK-BACKED GULL** (*Larus marinus*).—The following counts were received: c.300 at Bulverhythe in January and February and similar numbers from Sept. 24th to the end of the year; c.160 in the Pett/Rye/Midrips area on Jan. 21st; 60 at Rottingdean on Jan. 26th; 50 at Chichester G.P. on Feb. 18th and June 10th. At Shoreham there were up to 70 from Sept. 9th to the end of the year, with 500+ on Nov. 23rd, and there were c.70 at Pagham on Oct. 26th and 110 at Littlehampton on Dec. 15th.

Considerable E. passage was noted in March off Pevensey, with a peak of c.40 per hour throughout the 6th.

199. **LESSER BLACK-BACKED GULL** (*L. fuscus*).—In January and February c.115 noted in 5 localities, including c.100 at Christ's Hospital on Jan. 27th. No large spring movements although some E. passage was noted off Selsey Bill between February and May. No breeding records.

Autumn movement began in June when 720 moved SW. off Selsey Bill in 15 days watching; later movements there totalled 1,000 SW. in 59 days watching from July to December and 72 E. in 12 days in December. Counts were

again made at Chichester G.P. during the autumn, as follows: c.200 from June 27th to Aug. 3rd, 74 on Aug. 24th, 280 on Sept. 6th increasing to 350 on the 27th, 180 on the 29th and 125 on Oct. 19th.

In December c.46 recorded from 6 localities.

200. **HERRING GULL** (*L. argentatus*).—Thirty-three breeding pairs counted at Rye Harbour and 3 nests recorded on houses at St. Leonard's. No counts were received from the cliffs.

201. **COMMON GULL** (*L. canus*).—The following flock counts were received: c.50 at Selsey Bill in January and February and c.100 there in November and December; 1,000 off Beachy Head on Mar. 16th; 140 at Shoreham on May 2nd; 100 at Chichester G.P. on Aug. 24th; c.500 at Worthing on Sept. 16th and c.250 at Ovingdean on Dec. 13th.

All passage noted off Selsey Bill was E. with totals of 1,040 in 35 days watching from February to April and 260 in 34 days from October to December. At Beachy Head 1,000 E. over Apr. 19th/20th.

202. **GLAUCOUS GULL** (*L. hyperboreus*).—The immature at Sidlesham Ferry noted in the 1967 Report remained until Jan. 21st (DSF, MH, MS), it was slightly oiled. An immature in the Hove area on Feb. 17th and 24th (CFH, CML) and from Aug. 17th to Oct. 11th (GAS, CMV). An adult flew W. off Worthing on Mar. 20th (DSF), an immature in Pagham Harbour on May 18th (CMJ) and an adult there on Sept. 19th (CFH, TP). An immature at Shoreham on Nov. 27th (CMV); this bird had bright pink legs, an unusual feature.

203. **ICELAND GULL** (*I. glaucoides*).—A sub-adult at Beachy Head on Apr. 23rd (PC, RHC).

205. **MEDITERRANEAN GULL** (*L. melanocephalus*).—Single birds at Sidlesham Ferry during January and February. Hove from Jan. 14th to Mar. 13th and W. off Beachy Head on Mar. 16th. One flew E. off Selsey Bill on Apr. 12th and 2 likewise off Beachy Head. Single birds at Brighton on Apr. 21st and Newhaven Tidemills on May 7th, at Selsey Bill on July 27th and 28th, flying N. over Chichester G.P. on Aug. 3rd and in the Sidlesham/Selsey area during September and until Oct. 8th, with a second bird at Sidlesham during October. One at Hove on Dec. 12th.

All these birds were adults except those of Mar. 16th and Apr. 21st, which were second year, and the October bird at Sidlesham which was sub-adult.

207. **LITTLE GULL** (*L. minutus*).—One off Shoreham beach on Feb. 25th. Spring records were: one W. off Selsey Bill on Apr. 7th and single birds E. there on the 11th and 21st; singles E. off Beachy Head on the 21st and 28th and 2 E. on May 9th. One in Chichester Harbour on Apr. 21st and one at Rye on May 19th. One flew E. off Selsey Bill on June 16th.

Rather few autumn records, with c.19 reported between July 14th and Nov. 13th. Inland records were one at Chichester G.P. from Sept. 6th to 13th, up to 3 at Weir Wood Res. during August and one there on Sept. 10th. One at Newhaven Tidemills on Dec. 16th.

208. **BLACK-HEADED GULL** (*L. ridibundus*).—C.350 pairs bred in 4 colonies at Rye Harbour G.P. but breeding success was poor, with fewer than 200 young reared.

Flock counts were received from the following areas: Selsey Bill, a maximum of 400 in January and 300 in August, increasing to 850 by December; Pagham Harbour, c.5,000 on Aug. 25th, c.1,000 on Sept. 22nd and c.6,500 on Oct. 26th; Chichester G.P., 150 on July 6th increasing to c.1,300 by Sept. 27th, c.550 on Oct. 19th; Shoreham, c.1,700 on Feb. 4th, c.100 on Apr. 14th, c.1,200 on Aug. 19th, c.400 on the 27th and up to c.2,700 in December; Porto Bello, c.1,000 on Mar. 10th; Ovingdean, 2,000+ on Dec. 13th; Newhaven, a maximum of 4,000+ on Nov. 23rd; Beachy Head, 800 on Mar. 16th.

209. **SABINE'S GULL** (*L. sabini*).—One flew W. off Selsey Bill on Sept. 26th (MS).

211. **KITTIWAKE** (*Rissa tridactyla*).—Spring movements at Beachy Head were predominantly E., with 250 E. and 30 W. in 57 days watching between Mar. 24th and June 4th. At Selsey Bill movement was mainly W., with 43 E. and 304 W. in 50 days in the same period and, as with Gannet, much larger numbers in June, when 1,180 flew W. in 15 days, peak 534 on the 23rd.

Larger numbers in the autumn than in the past few years, with 330 W. off Selsey Bill in 59 days watching July to December; most, 200, in July. At Beachy Head a peak of 550 W. on Sept. 2nd and 200 in Newhaven Harbour on Oct. 1st.

212. **BLACK TERN** (*Chlidonias niger*).—First recorded off Selsey Bill on Apr. 16th and a total of 36 E. there up to May 9th. The only other significant spring movements were 11 E. off Bexhill on Apr. 23rd and 10 E. off Beachy Head on May 9th.

The first autumn bird was one flying W. off Selsey Bill on July 6th and between then and Oct. 3rd c.50 recorded. Inland records were received from Chichester G.P., Burton Pond, Southsea, Barcombe Res. and Weir Wood Res. involving about 20 birds.

213. **WHITE-WINGED BLACK TERN** (*C. leucopterus*).—One at Rye Harbour G.P. on Aug. 11th (MAH) and an immature at Chichester G.P. from Sept. 11th to 16th (JVS, MS *et al.*). These records have been accepted by *Brit. B.*

217. **COMMON TERN** (*Sterna hirundo*).—Between 61 and 63 pairs bred at Rye Harbour G.P. and at least 60 young were reared. At the other site a maximum of 36 occupied nests in June. Two at Chichester G.P. on June 9th.

COMMON/ARCTIC TERN (*S. hirundo/paradisica*).—First recorded on Apr. 12th at Selsey Bill and 2,725 E. there in 33 days watching to the end of May, peaks 406 E. on Apr. 16th and 1,140 E. on May 9th. At Beachy Head 3,490 E. in 50 days watching from Apr. 14th to June 4th, peak 2,420 on May 9th. In the autumn virtually no movement noted at Selsey Bill. Elsewhere there were feeding flocks of c.2,000 off Peacehaven on Aug. 25th and c.1,000 in Seaford Bay on the 27th, and c.1,500 slowly moving W. off Beachy Head on Sept. 2nd. Inland records were 2 at Weir Wood Res. on Aug. 8th and 3 on the 22nd. The last recorded was one off Selsey Bill on Nov. 2nd.

219. **ROSEATE TERN** (*S. dougalli*).—In April single birds E. off Beachy Head on the 17th (RFP, IRW) and 19th (PC, ARK) and Worthing on the 21st (DRP). These are the earliest records for the county. Two flew E. off Selsey Bill on May 9th (DSF), one W. there on June 8th and one offshore on the 28th (DSF), 2 E. on July 7th and 2 W. on the 13th (DSF, HPKR). One at Worthing on July 9th (BC).

222. **LITTLE TERN** (*S. albigifrons*).—First recorded on Apr. 14th at Selsey Bill. Spring movements were rather larger than usual, with 265 E. off Selsey Bill in 31 days watching to the end of May and 125 E. off Beachy Head in 48 days in the same period; 76 E. off Worthing on Apr. 21st.

A total of 101-106 breeding pairs recorded in 3 localities, as follows: Pagham Harbour, 30-35 pairs; Rye Harbour G.P., 35 pairs in 3 colonies. At the other site a maximum of 36 occupied nests in June. Breeding success at Rye was fairly good but the records indicate that no young were reared at Pagham. See also *Brit. B.* 62, 4-13.

Very little autumn passage recorded. There were 2 inland records of 2 at Weir Wood Res. on Aug. 21st and 4 there on Sept. 6th (CN). The last record was one in Pagham Harbour on Oct. 13th.

223. **SANDWICH TERN** (*S. sandvicensis*).—First recorded off Newhaven on Mar. 20th. Spring passage was exceptionally large, probably the largest ever recorded in the county. At Selsey Bill 4,230 E. and 6 W. in 40 days watching between Mar. 24th and the end of May, peak 1,400 E. over Apr. 16th/18th. At Beachy Head 4,280 E. in 55 days in the same period, with a peak of 1,082 on Apr. 16th, but 3,140 flew E. there between Apr. 13th and 21st.

In June rather larger numbers than usual were present offshore; the most together were c.100 off Selsey Bill on the 28th.

Very little autumn passage seen, but there were c.1,000 in Seaford Bay on Aug. 27th. The last recorded was one flying E. off Selsey Bill on Nov. 2nd, a late date.

224. **RAZORBILL** (*Alca torda*).—A total of 14 oiled birds noted during the year, mainly in December, when 10 were reported, 7 of them dead. See also table on page 11.

226. **LITTLE AUK** (*Plautus alle*).—One flew W. off Selsey Bill on Jan. 14th (ETW). One on Glynde Reach on Nov. 5th (WM). One flew W. off Selsey Bill on Dec. 15th (HPKR) and one offshore there on the 23rd (DSF). An oiled bird picked up dead at Newhaven Tidemills on Dec. 28th (MCR, PJW, VAW).

227. **GUILLEMOT** (*Uria aalge*).—A total of 43 oiled birds noted during the year, mainly in March, 5 (one dead); April, 7 (6 dead); and December, 19 (11 dead). None was reported between June and September. See also table on page 11.

On June 22nd a very young fledgling, which can only have left its breeding ledges a very short time, was picked up at Pett (RFS).

One showing the characters of the race *aalge* was picked up at Beachy Head on Mar. 24th.

230. **PUFFIN** (*Fratercula arctica*).—Oiled birds picked up alive at Lancing on Mar. 23rd (Mrs. Butler) and dead at Selsey Bill in late March (WWAP).

222. **STOCK DOVE** (*Columba oenas*).—No large flocks recorded, the most seen together were 27 at Chidham on May 12th.

An increase in breeding birds noted at Sidlesham, with 4 pairs on one area of c.400 acres compared with none in the period 1961-1967. Pairs were seen in 5 other sites in the parish where the species had been absent in the same period. Elsewhere counts of breeding pairs were: Easthill Park, Portslade, 3-4; Southersham, 6 in a disused quarry; Friars Bay, 3 on the cliffs; Beachy Head, 4+. Elsewhere in the breeding season noted in 24 localities.

235. **TURTLE DOVE** (*Streptopelia turtur*).—First recorded on Apr. 17th at Shoreham and 23 at Manhood End on the 21st. The spring maximum at Beachy Head was 14, 11 of which came in from the S., on June 1st.

In the autumn a maximum of 12 at Beachy Head on Oct. 6th. The last recorded was one with Collared Doves at Seaford Head from Oct. 13th to Nov. 9th.

COLLARED DOVE (*S. decacolor*).—Reported from 47 localities during the year. Very little information received for the early months; c.200 at East Wittering and c.50 at Burgess Hill being the only records of large flocks. At the end of the year flocks totalling c.735 birds were reported from 9 localities. The largest gatherings were recorded on October 27th when there were c.200 at West Wittering and c.200 at Beachy Head.

Breeding Survey

Breeding was established for the first time in 9 new localities. In addition breeding took place, or was highly probable, in another 22 areas. JAH estimated the breeding population in the Borough of Bexhill (c.8 square miles) at 404 pairs, a 12% increase on the figure for 1967.

A paper detailing the spread of the species between 1958, when it was first recorded in the county, and 1966 was published in the 1966 Sussex Bird Report (pages 63-68). The present survey will be continued in 1969 and any information that will add to our existing knowledge will be very welcome. All localities where the species has been newly recorded since 1966 are listed below:

Albourne	Crowborough	Hurstpierpoint
Angmering	Cuckmere Haven	Itchenor
Arundel	West Dean/Exceat	Mayfield
Brighton	Easebourne	Midhurst
East Preston	Emsworth	Newhaven
Hollingbury	Fanners Green	Nutley
Ovingdean	Findon Valley	Pagham
Withdean	Five Oaks	Rusper
Woodingdean	Frant	Southwick
Chichester	Heathfield	Scaynes Hill
Copthorne	Horsted Keynes	Storrington
Crawley	Hove (West)	Winchelsea

Owl Species.—Please note that all records are very urgently required.

241. **BARN OWL** (*Tyto alba*).—The gradual increase of the last 3 years appears to have been maintained and there were 23 definite pairs recorded. At least 7 young were raised by 5 pairs and another pair were known to have laid successfully; 4 of the broods were raised in East Sussex. There were 19 other records of single birds seen in the breeding season and a further 4 winter sightings. On Oct. 5th a nest in the east of the county still contained 2 large young.

244. **SNOWY OWL** (*Nyctea scandiaca*).—One was seen by VAW on Nov. 8th at Seaford Head and was watched flying up the Cuckmere Valley towards Lullington. This record has been accepted by *Brit. B.* and is the first for the county.

246. **LITTLE OWL** (*Athene noctua*).—Only 26 definite pairs were reported compared with a further 36 records of single birds. Numbers appeared to be slightly down compared with 1967 and continued information on this species is essential. Four pairs and 12 singles were found in East Sussex, but most were reported around Haywards Heath (3 pairs, 9 singles); Worthing (5 pairs, 7 singles); Chichester and Midhurst.

247. **TAWNY OWL** (*Strix aluco*).—There were 82 known and 12 probable pairs reported and the records suggest a slight decrease compared with 1967. Thirteen pairs raised at least 27 young, an average brood size of 2.1. The main distribution of pairs was as follows: Petworth and NW. Sussex 31; Worthing 13; Horsham 7; Haywards Heath 9 and there were 20 pairs reported in East Sussex. There are still gaps in the coverage around Rogatc, Iping, Brighton and NE. Sussex.

248. **LONG-EARED OWL** (*Asio otus*).—The scarcity of records is probably not a true reflection of the status of this species in the county; all records of this species are urgently required. A pair bred in the N. of the county and another pair possibly bred in the N.E. Pellets typical of those cast by this owl were picked up in a well-matured conifer plantation in the W. of the county. There have been no definite breeding records in the county for at least 20 years.

249. **SHORT-EARED OWL** (*A. flammeus*).—This species continues to be scarce and nearly all of the records relate to the period January to February or November to December. Maximum numbers were 5 at the Rother Saltings, Camber, on Dec. 30th and 6 at Selsey Bill on the same date. Elsewhere single birds along the coast in the Rye Harbour to Camber area and in the Pagham Harbour and Chichester Harbour areas. Single birds at Beachy Head on Oct. 10th and 16th. The only inland records were of up to 3 near Chancetonbury in the period Sept. 18th to Dec. 7th. A fairly late bird at Camber on Apr. 9th.

252. **NIGHTJAR** (*Caprimulgus europaeus*).—First recorded on Apr. 20th at Harting; one at Beachy Head on Sept. 12th was the last.

Breeding Survey

An estimated total of 82 pairs or singing males was found in 43 localities. Thirty-seven pairs were accounted for at 19 sites which had held 33 pairs in 1967. ETW found 3 nests in a small (28 acres) fir plantation at Petworth. Very little information received on breeding success but 5 pairs are definitely known to have raised a total of 8 young. Two observers commented on disturbance and probable desertion of nests due to weeding and bracken clearance operations in young plantations in July.

Although records were received from 24 localities not visited in the 1967 survey, coverage in the west of the county could still be improved and there are large areas of East Sussex which have not been visited. This survey will continue in 1969.

Woodpeckers. All Woodpecker records are urgently required. A considerable volume of information is now building up, but more is needed before a proper appreciation of these species' status can be made.

262. **GREEN WOODPECKER** (*Picus viridis*).—For the third successive year an increase in the number of records received and a further genuine increase in population seems very probable. For example the species was present at Marley during the breeding season for the first time since 1962.

Counts of breeding pairs were: Blackdown, 2; Ambersham Common, 3; Petworth Park, 4; Coates Common, 2; Arundel Forest, Patching, 5; Parham Park, 2; Wych Cross, 2 in 35 acres of woodland; St Leonard's Forest, Lily Beds, 2 or 3. Elsewhere single pairs or birds noted in 69 localities, well distributed over the whole county.

263. **GREAT SPOTTED WOODPECKER** (*Dendrocoptes major*).—Counts of breeding pairs were: Blackdown, 3; Shillinglee Park, 3; Lurgashall, 2; Bexley-hill Common, 2; Petworth Park, 4; Ambersham Common, 3; Coates Common, 2; West Chilton, 2, at Cattlestone farm; St. Leonard's Forest, Lily Beds, 4 or 5; Wych Cross, 3 in 35 acres of woodland; Birch Grove, 2 at TQ412308. Elsewhere single pairs or birds noted in 39 localities, mainly in the west and centre of the county.

On Mar. 9th one was seen drumming on an iron bracket on an electricity grid pole at Harting.

264. **LESSER SPOTTED WOODPECKER** (*D. minor*).—Rather fewer records than in 1967. In the breeding season recorded in 17 localities, all single pairs or birds. Definite pairs were found at Blackdown, Petworth Park, Coates Common, West Chilton and Wych Cross. Outside the breeding season noted in a further 4 localities.

265. **WRYNECK** (*Jynx torquilla*).—In the spring single birds at Michelgrove on Apr. 17th and Beachy Head on the 21st.

An unusual number of autumn records involving c.25 birds, mainly at Beachy Head where at least 15 different birds were seen between Aug. 21st and Oct. 12th. The maximum there was 3 on Sept. 5th, and 8 were trapped. Other records were of single birds at Hastings on Aug. 28th and 29th, Littlehampton on the 29th, Runciton on Sept. 2nd, Sidlesham on the 4th and Seaford Head from the 6th to 9th. There were one or 2 at Church Norton from Sept. 14th to 29th and single birds at Cissbury on the 16th, Rye on the 21st and Chichester G.P. on the 29th.

271. **WOODLARK** (*Lullula arborea*).—No records for the beginning of the year or of spring movement. In the autumn a single bird at Marley Common on Oct. 23rd. At Beachy Head single birds present on Oct. 10th, 26th and 27th, 2 on Nov. 2nd and 10 on the 3rd. Three flew SW-NE. over Church Norton on Nov. 11th and one at Pagham on Dec. 27th.

Breeding Survey

Only one pair definitely located but breeding not proved. In addition 2 singing males seen in West Sussex and 4 in East Sussex. Exact sites are suppressed for security reasons. This survey is continuing in 1969 and all records would be most welcome.

255. **SWIFT** (*Apus apus*).—First recorded at Chichester G.P. on Apr. 19th. There were records for Selsey, Hollingbury, Birling Gap and Beachy Head on Apr. 20th and a general arrival was noted in the next 9 days. The largest number noted at Beachy Head was 200 on May 9th.

Forty birds flew out to sea from Selsey Bill in June. Autumn movements included a big build-up of birds along the coast between Portslade and Rottingdean on Aug. 7th and c.3,000 flew out to sea from Beachy Head on Aug. 10th. Late records were one at Beachy Head on Sept. 15th and one at Hove on the 19th. One at Newick on Oct. 31st (per CLBC) was the latest date for the county.

Breeding Survey

Reported to be present and almost certainly breeding in 72 localities. Counts of birds in low "screaming parties" were: Harting 12, Midhurst 18, Fernhurst 28, North Chapel 8, Petworth 44, Wisborough Green 12, Slinfold 8, Horsham (W. of railway) 48, West Hove/Portslade 18, Lewes 12, Old Heathfield 6, Albourne 18, Rottingdean 7, Falmer/Ovingdean 10. There were only 2 pairs in Plumpton and none could be found in Sidlesham parish.

This survey is to be continued in 1969. Information on the presence or apparent absence of breeding birds in defined localities is required. Counts of low-flying "screaming parties" during the last 2 weeks of May and the first 2 weeks of June would be very welcome.

256. **ALPINE SWIFT** (*A. melba*).—One flew out S. at Beachy Head on Aug. 3rd (RHC). This record has been accepted by *Brit. B.*

258. **KINGFISHER** (*Alcedo atthis*).—In the early months single birds recorded in 8 inland and 6 coastal localities.

Breeding season records came from 34 localities, including several new sites, and some further increase in population seems probable; in 3 areas 2 pairs were found where only one had been found in previous years. A total of 21 definite pairs were reported in 18 localities and breeding was proved for 12 pairs, all apparently successful. All other breeding season records were of single birds but breeding may well have taken place; most of these are casual sightings.

Between September and December 32 noted in 24 inland localities, of which 10 were breeding sites. At the coast birds were wintering in 7 localities. Between July 26th and Sept. 7th CRG ringed 14 at Chichester G.P.

261. **HOOPOE** (*Upupa epops*).—A total of 29 recorded in the spring between Mar. 31st and June 1st, more than in any previous year. Records were as follows, all of single birds unless otherwise stated: Mar. 31st, Cuckfield; Apr. 5th, Ardingly; Apr. 6th, Pevensey Levels; Apr. 15th, Chichester G.P. 2, Beachy Head, Lions Green; Apr. 16th, Plumpton 2, Crumbles to 23rd; Apr. 17th, Beachy Head 2 to 19th; Apr. 18th, Crowhurst to 21st; Apr. 21st, Eastergate, Bignor Hill, Beachy Head; Apr. 22nd, Hainaker, Rippe; Apr. 23rd, Beachy Head, Wartling; Apr. 24th, Southsea; May 4th, Pulborough; May 5th, Runciton to 9th; May 12th, Bury, Aleiston, Rotherfield; May 14th, Sidlesham; June 1st, Harting. There was also one at Robertsbridge throughout May and June.

Thus there was a very marked peak between Apr. 15th and 24th, with 18 birds, and a smaller peak in mid-May.

In the autumn one at Henfield from Sept. 8th to 28th, one at Sidlesham on Oct. 4th and one at Wilmington from Nov. 11th to 13th (PS). There is only one later county record, from Hartfield on Dec. 14th, 1897.

272. **SKYLARK** (*Alauda arvensis*).—Between January and May 82 departed S. and 18 came in S-N. at Selsey Bill in 72 days watching; most movement was in March, with 48 departures and 6 arrivals. Four flew out S. there in June.

The only breeding season counts received were of 22 pairs on c.2,500 acres at Wepham Down and 4 pairs on 155 acres of farmland at Plumpton.

Autumn movements at Selsey Bill were 3 E., 38 W., 170 S., and 6 N. in 22 days watching in October and November and there was a peak count of c.500 in the area there on Nov. 1st. At Beachy Head the peak count was c.1,000 on the 3rd. A large cold weather movement at Rye on Dec. 30th, with birds arriving from the S. all day and moving N.

274. **SWALLOW** (*Hirundo rustica*).—First recorded on Mar. 25th at Shoreham. Spring movements at Selsey Bill totalled 420 in S-N. and 6 out S. in 37 days watching in April and May, with 26 departing S. in June. At Beachy Head a maximum of 300 S-N. on May 19th.

The only breeding counts received were 3 pairs at Northwood Farm, Sharpthorne; 11 pairs reared 31 young at Wales Farm, Plumpton, and 11 pairs at Woodlands Farm, Wartling, where breeding success was very poor. Breeding counts of this species would be very useful.

Autumn movements at Selsey Bill were rather small, with 9,720 out S. in 38 days watching from August to November, peaks 4,605 on Sept. 7th and 2,200 on Oct. 5th. Large movements, reaching 3,000 per hour, occurred at Beachy Head in September, but, as in 1967, their confused nature made accurate counts impossible. Two records for the second half of November, and one at Sidlesham on Dec. 5th (NPH).

276. **HOUSE MARTIN** (*Delichon urbica*).—First recorded on Mar. 25th at Woodingdean; one at Church Norton on the 31st and 2 at Midhurst on Apr. 1st. Thereafter not recorded until Apr. 13th and there were few records from Selsey Bill or Beachy Head.

In the autumn at Selsey Bill 500 SW. in August, 570 S. in September and 403 S. in October in 28 days observation. At Beachy Head very little movement in August, c.1,000 flew out to sea on 4 days in September and c.700 likewise Oct. 6th. Elsewhere, 250 at Swanbourne Lake on Sept. 5th, 200 at Barcombe Mills on the 22nd and 300 there on the 23rd. There were 7 records for November, the last being one at Pulborough on the 18th.

Breeding Survey

Breeding was reported from 93 localities. Nests were being rebuilt in Horsham car park on Apr. 19th and Warminglid on the 26th. The following counts of occupied nests in specified areas were received: South Harting village 17, Sidlesham parish c.30, Slinfold village 12, Horsham (W. of railway) c.49, Rottingdean village 13, Ditchling (High Street and West Street) c.60, and Pevensy village 26. Largest individual colonies reported were c.30 at Brede Water Works, c.25 at Haywards Heath Grammar School, 20 on a school at Billingshurst and there were 100 nests in Plumpton.

This survey is to be continued in 1969 when all records of breeding, even single nests, are required. Counts of occupied nests in defined areas would be particularly welcome.

277. **SAND MARTIN** (*Riparia riparia*).—First recorded at Church Norton on Mar. 23rd. No large spring movement; a maximum of 60 N. at Beachy Head on Apr. 20th, but there were c.400 at Weir Wood Res. on May 12th.

Counts at breeding colonies were: Chichester G.P., 50-100 pairs; Midhurst Common, c.150 birds; near Midhurst station, 20 pairs; Storrington, Marley Tileworks, c.100 pairs; Isfield Mill, 20 pairs. In addition a small colony was found in drainpipes in a brick bank-facing at the Chichester canal.

In the autumn a total of 3,050 out S. at Selsey Bill in 25 days watching from July to September and a maximum of 5,000-7,000 at Chichester G.P. on Aug. 19th and 20th. One at Beachy Head on Oct. 17th was the last record.

278. **GOLDEN ORIOLE** (*Oriolus oriolus*).—One at Beachy Head on May 21st (PC, ARK).

281. **HOODED CROW** (*Corvus corone cornix*).—Rather more records than of late. One near Bexhill during January and February (MJH, SR). One flew SW. at Beachy Head on Apr. 26th (ARK), one at Sompington on Nov. 25th (BC) and 2 in the Cuckmere valley from Dec. 14th to the end of the year (AJC, JBT *et al.*).

282. **ROOK** (*C. frugilegus*).—A count covering the parishes of Sidlesham, Earnley, Wittering, Itchenor, Pagham, Mundham, Hunston, Donnington and Birdham showed 1,300 occupied nests in 36 colonies, compared with 1,217 in 32 colonies in 1965. Other counts were: 213 nests in 11 colonies at Harting parish; Midhurst, 59 nests in 3 colonies; Clayton, 80 nests in 3 colonies; Hassocks, 38 nests in 2 colonies, Burgess Hill, 65 nests in 2 colonies; Rottingdean/Ovingdean/Woodingdean, 181 nests in 6 colonies. In addition 12 other colonies totalling 328 nests were reported from Elsted, Trotton, Singleton, Lavant, Haywards Heath, Balcombe, Ringmer, Tillingham, Playden, Iden and Rye.

285. **NUTCRACKER** (*Nucifraga caryocatactes*).—During the autumn invasion of this species into Britain the following were reported in Sussex: one near Hailsham from Aug. 25th to 31st was trapped (many obs.). One flew W. over Beachy Head on Oct. 2nd (RHC). One was shot in mistake for a Jay near Coldwaltham on Oct. 16th (*per* WWAP). It was of the race *macrorhynchos* and the specimen is now in the Bognor museum. These records have been accepted by *Brit. B.* and are the first for Sussex since 1946.

289. **BLUE TIT** (*Parus caeruleus*).—A pair reared young in a House Martin's nest at Rusper. In the autumn a maximum of c.150 at Beachy Head on Oct. 6th; otherwise up to 30 there.

293. **WILLOW TIT** (*P. montanus*).—Recorded in the breeding season in 16 localities but breeding was only proved at West Chiltington, Olsehurst and Broadwater Forest. There were 2 pairs present in North Wood, Adversane, 3 at Hollingbury and 2 in Abbot's Wood, Arlington.

294. **LONG-TAILED TIT** (*Aegithalos caudatus*).—Breeding season reports were received from 24 localities, fewer than in 1967, but the species appears to have had a very successful breeding season. Two observers, from West Chiltington and Horsham, comment that most post breeding season parties varied between 10-15 birds; a party of 20 was seen at Slinfold on July 20th. Counts of pairs received were: North Wood, Adversane, 6-8; Wych Cross, 4 in 35 acres of woodland.

295. **BEARDED TIT** (*Parus bicinctus*).—A marked decrease in reports compared with the previous 4 years. In the early months there were 2 at Sidlesham Ferry in January and February, one at Seaynes Hill S.F. (first seen Dec. 1967) until Feb. 18th, one at Pett Level on the 19th and one or 2 at Church Norton on Mar. 30th and 31st.

At the end of the year the only records were: 3 out S. at Beachy Head on Sept. 3rd (LHC) and 6 there on Nov. 4th, 2 at Church Norton from Oct. 26th to Nov. 17th and 2 at Pagham from Nov. 28th to Dec. 31st.

296. **NUTHATCH** (*Sitta europaea*).—Single birds at Beachy Head on Apr. 9th and 15th were the first recorded there since regular watching began. Some breeding season counts were: North Wood, Adversane, 8 pairs; Ambersham Common, 2 pairs; Coates Common, 3 pairs; Rackham Wood, 3 pairs; Clapham Wood, 2 pairs; Wych Cross, 5 pairs in 35 acres of woodland; Bayham, 10 pairs.

299. **WREN** (*Troglodytes troglodytes*).—Autumn numbers at Beachy Head were again very high, with peaks of 50-100 over Oct. 19th/20th and 200-300 over the 26th/27th.

302. **FIELDFARE** (*Turdus pilaris*).—The usual W. cold weather movements occurred during the January cold spell, the largest being 350 W. at Weir Wood Res. and 500 SW. at Burgess Hill on the 13th, when 50 also came in S-N. at Selsey Bill. Very large numbers were also present at Glynde and Pevensy Levels during January, with counts of 2,000+ in both areas. Elsewhere in January and February numbers were small and only 3 flocks of more than 100 noted. Spring passage was possibly larger than usual and records include a flock of 1,000 at Alfriston on Apr. 15th.

In the autumn first recorded on Oct. 6th at Beachy Head and there were some large movements later in the month starting on the 19th, when the autumn maximum of c.400 was noted at Beachy Head. Other large flocks in this period were 300 at Sidlesham Ferry on Oct. 25th, 300 at Pevensy Levels on the 22nd and 750+ at Amberley Wildbrooks on Nov. 3rd.

303. **SONG THRUSH** (*T. philomelos*).—On Oct. 19th numbers at Beachy Head rose from c.25 to c.250. At Selsey Bill c.150 on Nov. 23rd had mostly gone next day.

304. **REDWING** (*T. iliacus*).—As with Fieldfares W. movements were noted during the cold spell in January, the largest being c.1,000 per hour at Worthing over the 10th and 11th. There was a roost of 2,000-3,000 at Combe Haven during January and February, but elsewhere numbers were much lower and only 3 parties of more than 100 were seen. There were 2 May records, at Ferring on the 5th (DSF) and Beachy Head on the 11th (PC).

In the autumn first recorded on Sept. 18th at Marley and Newhaven. There was a spectacular arrival on Oct. 19th, which was reflected over the whole county. The largest numbers were c.5,000 at Beachy Head and c.1,000 at Sidlesham, of which c.450 departed N. and c.350 SW.

307. **RING OUZEL** (*T. torquatus*).—First recorded on Mar. 31st at Beachy Head and between then and the end of April c.15 recorded, all at the coast.

In the autumn at Beachy Head recorded regularly between Aug. 24th and Nov. 17th, with peaks of 55 on Sept. 22nd and 60 on Oct. 6th. Elsewhere c.100 recorded in the same period, including 20 at Seaford Head on Sept. 28th and up to 40 roosting near Cissbury between Oct. 27th and Nov. 8th. On Dec. 8th there was one at Beachy Head (RHC); the only other December record for the county is of one at Horsham on Dec. 24th, 1926.

308. **BLACKBIRD** (*T. merula*).—On Oct. 19th numbers at Beachy Head rose from c.20 to c.150. C.300 at Ferring on Nov. 4th and c.200 at Selsey Bill on the 23rd, which had mostly gone the next day.

311. **WHEATEAR** (*Oenanthe oenanthe*).—First recorded on Mar. 20th at Newhaven, Cuckmere and Langton. The spring maximum at Beachy Head was 35 on Mar. 24th and at Selsey Bill 13 on Apr. 26th.

The few breeding records were: Newhaven Tidemills, one pair; grid square TQ40, one pair; Rye area, 5 pairs.

Autumn passage noted from July 27th to Nov. 13th with maxima of 50 at Selsey Bill on Sept. 7th, 60 at Rye on the 8th and 70 at Beachy Head on the 15th. There was one at Selsey Bill on Dec. 7th (DSF), a very late date.

One of the race *leucorhoa* was trapped at Marley on June 1st (PGD).

317. **STONECHAT** (*Saxicola torquata*).—In January and February c.43 wintering along the coast in 18 localities and 2 inland.

Breeding pairs were recorded as follows: Blackdown 2, Iping Common 3, Ashdown Forest (approximately 60% coverage) 12, Lullington Heath 2, Crowlink to Holywell c.15, Hastings 2 and single pairs at Pound Common, Amber-sham Common, Grafham, Hat Hill, Tillington, St. Leonard's Forest, Chailey North Common, Peacehaven, Newhaven Head, Newhaven Tidemills, Seaford and Seven Sisters. One pair on Iping Common had broods of 6, 5 and 3 young.

An adult moving W. at Sidlesham on July 12th was probably an early migrant. At Selsey Bill an autumn maximum of 18 on Oct. 30th; no movements evident at Beachy Head. At the end of the year c.54 wintering along the coast at 23 localities and 5 in 2 inland areas.

This species will be the subject of a breeding survey in 1969 and all records will be very welcome.

318. **WHINCHAT** (*S. rubetra*).—One at Weir Wood Res. on Mar. 17th (AMC), the earliest county record. Very few on spring passage, a maximum of 6 at Beachy Head on May 2nd. One pair may have bred in the N. of the county.

Autumn passage from Aug. 10th to Nov. 9th, when there was one in the Cuckmere Valley (MRG, RRG, WM). Maximum counts were 60+ at Beachy Head on Aug. 30th, 30 at Selsey Bill on Sept. 15th and 30 at Cissbury on the 19th.

320. **REDSTART** (*Phoenicurus phoenicurus*).—First recorded on Mar. 31st at Beachy Head, where the spring maximum was 7 on Apr. 15th. Virtually no movement noted at Selsey Bill, 2 being seen on Apr. 14th and only 10 other birds during April and May.

Autumn passage at Beachy Head from Aug. 2nd to Oct. 27th with a maximum of 25 on Aug. 31st. Late records were single birds at Lullington on Oct. 20th, Southwick Hill on 22nd and Selsey on the 30th. One roosted in an out-building at Pevensy Bay during the period Nov. 14th to 18th (MJH) and there was one at St. Leonard's on the 23rd (SR). These are the third and fourth county records for November and also the latest dates for the county.

Breeding Survey

An increase in records. PGD describes this species as "almost common" in the extreme NW of the county between Blackdown and the Hampshire/Surrey border. Although detailed counts have not been made in this varied and difficult area he suggests the population may be as high as 100 pairs.

Breeding was also confirmed or highly probable at Iping, Henley, Lodsworth, Ambersham, Petworth, Flexham Park, Coates Wood, St. Leonard's and Tilgate Forests, Ashdown Forest, Sheffield Park, Hornshurst Wood, Hoath Wood, Nap Wood, Bayham, Broadwater Forest, Beckley and Bexhill. Forty pairs or singing males and 2 females were found in these areas. These figures are particularly encouraging since the central forest areas were not covered as thoroughly as in 1967.

This survey will continue in 1969 when all records will again be welcome. Information is urgently required for the extreme east of the county.

321. **BLACK REDSTART** (*P. ochruros*).—Very few on spring passage, only 7 being seen between Mar. 22nd and Apr. 20th. A pair probably bred on the East Sussex cliffs.

Definite autumn passage first noted on Sept. 18th and c.65 were recorded up to the end of November with most of these in the second half of October; on the 19th there were c.20 at Beachy Head. In December up to 4 at Shoreham, one at Southwick on the 10th, 2 at Newhaven on the 7th and one or 2 at Bexhill.

322. **NIGHTINGALE** (*Luscinia megarhynchos*).—A very welcome increase in breeding season reports. Counts were: Harting parish, 9-10 singing males; Blackdown/Lurgashall/Petworth/Northchapel, c.17 pairs; Bexleyhill, 7-8 pairs; Coates Woods, 2 pairs; Flexham Park, 7 pairs in 300 acres of woods; Cattlestone Farm, West Chiltington, 5 singing males; Southwater Forest/Madgelands/Marlpit Wood, 20-25 singing males; Middleton Wood, 4 pairs; Beachy Head, 2 pairs; Abbots Wood, Arlington, 5-6 singing males; Dallington Forest to Brightling Down, 7 singing males in 2½ miles; woods SE. of Beckley, Rye, 12 singing males in 3 miles. In addition there were 6 singing at Wisborough Green and 2 at Loxwood on Apr. 20th and single males or pairs were noted in another 19 localities.

324. **BLUETHROAT** (*Cyanosylvia svecica*).—Two showing the characters of the race *cyaneocula* at Sidlesham Ferry on Sept. 7th and 8th (BJ, CMJ *et al.*). Two at Beachy Head on Sept. 10th (BEC, NAGL), one on the 14th (NAGL, MEN) and one on the 17th (NAGL). One at Seaford Head on Oct. 5th (RB, PJW, VAW) and one at Selsey Bill on Nov. 2nd and 3rd (BSD, HPKR, MS), the latest record for the county.

326. **CETTI'S WARBLER** (*Cettia cetti*).—One trapped at Beachy Head on Sept. 25th (BEC, NAGL). This record, the third for the county, has been accepted by *Brit. B.*

327. **GRASSHOPPER WARBLER** (*Locustella naevia*).—First recorded on Apr. 12th at Midhurst. C.72 breeding pairs, based on counts of singing males, recorded from 33 localities. More than one pair recorded from: Blackdown, 2; Henley Common, 3; Singleton Forest—c.120 acres centred on SU92155, 14; Graffham, 4; Burton Down, 3; Duncton, 3; Rewell Wood NE., 3; Arundel

Forest, 3; Cissbury Ring, 6; St. Leonard's Forest, 3; Newells Rough, 8; Brant-ridge Forest, 3; Ditchling Common, 2; Moulscombe Wild Park, 2; Five Lords Burgh, Seaford, 5; Lullington Heath, 2; Beachy Head, 5.

In the autumn one at Seaford Head on Oct. 5th and one at Beachy Head on the 6th were the last recorded.

329. **SAVI'S WARBLER** (*L. tuscinioides*).—One at the Devil's Dyke, Brighton, on Apr. 26th (CFH). This record has been accepted by *Brit. B.* and is the second for the county.

333. **REED WARBLER** (*Acrocephalus scirpaceus*).—The first recorded were 6 at Church Norton on Apr. 20th. Counts of breeding pairs were: West Harting Pond, 6; Shoreham Sanctuary, 8. In the autumn recorded at Beachy Head between Aug. 3rd and Sept. 21st with a peak of c.20 on Sept. 3rd. Single birds at Selsey Bill and Seaford Head on Oct. 19th.

337. **SEDGE WARBLER** (*A. schoenobaenus*).—The first recorded was one at Chichester G.P. on Mar. 29th. C.4 pairs at Burton Pond; 8 pairs at Shoreham Sanctuary and 7 pairs between Lancing and Coombes. In the autumn recorded at Beachy Head between July 21st and Sept. 27th with a peak of 50 on Aug. 31st. Four October records, the last being one at Beachy Head on the 19th.

338. **AQUATIC WARBLER** (*A. paludicola*).—One trapped at Beachy Head on Aug. 11th (BEC, PC, SG *et al.*). This record has been accepted by *Brit. B.*

339. **MELODIOUS WARBLER** (*Hippolais polyottra*).—One at Beachy Head on May 27th and 28th (PC, JBW). The first spring record for the county.

340. **ICTERINE WARBLER** (*H. icterina*).—One at Church Norton on May 7th (MS). The third record for the county and the second in spring.

343. **BLACKCAP** (*Sylvia atricapilla*).—A male at Arundel on Feb. 9th and a female at Southwick between the 11th and 20th. In the spring first recorded on Mar. 24th at Beachy Head; few recorded at the coast.

Autumn passage at Beachy Head from Aug. 2nd to Nov. 4th with a peak of c.200 on Sept. 13th. In October, 3 at Church Norton on the 20th and 2 on the 28th.

344. **BARRED WARBLER** (*S. nisoria*).—One was trapped at Beachy Head on Sept. 4th (AQ, VAW *et al.*). The sixth record for the county.

346. **GARDEN WARBLER** (*S. borin*).—First recorded on Apr. 20th at Midhurst; only small numbers on spring passage. Autumn passage at Beachy Head from Aug. 2nd with a peak of c.30 on the 12th. An unusual number of October records with single birds at Selsey Bill on the 16th, the Crumbles on the 19th, Litlington on the 24th, Worthing on the 25th and Church Norton on the 28th. In November, one at Beachy Head until the 7th, the latest record for the county.

347. **WHITETHROAT** (*S. communis*).—First recorded on Apr. 15th at Selsey Bill and Beachy Head. Spring passage peaks of c.30 at Selsey Bill on Apr. 18th and c.160 at Beachy Head on Apr. 21st with c.100 there on May 2nd.

Autumn passage at Beachy Head from Aug. 2nd to Oct. 6th, with peaks of 400 on Aug. 11th, 250 on the 19th, 31st and Sept. 12th and 400 on the 13th. The last were 3 at Seaford Head on Oct. 13th.

348. LESSER WHITETHROAT (*S. curruca*).—First recorded on Apr. 14th at Thorney. Few recorded on spring passage. In the breeding season 18 pairs recorded from 15 localities, status much as in 1967. Counts included 7 pairs in 12 localities visited in the Petworth, Midhurst, Blackdown area and 3 pairs at Beachy Head.

Autumn passage from Aug. 3rd to Sept. 29th at Beachy Head with a maximum of c.40 on Aug. 31st and Sept. 1st.

353. DARTFORD WARBLER (*S. undata*).—One pair probably bred in the usual area and up to 3 birds there during the year. Up to 3 pairs probably bred in the area first colonised in 1966 and one pair bred in a new area. The area where birds were first seen in 1967 was burnt out and no birds were seen.

Two in the east of the county from the end of 1967 were present until February, when the area was burnt out. One at Pagham on April 15th and 16th and a female at another site on June 29th.

354. WILLOW WARBLER (*Phylloscopus trochilus*).—The first recorded were 4 on Mar. 27th at Chichester G.P. Spring passage peak at Beachy Head was 40 on Apr. 21st and May 2nd, smaller than usual.

356. CHIFFCHAFF (*P. collybita*).—First recorded on Mar. 20th at Chichester G.P., Sompington and Newhaven Tidemills. Spring passage peak at Beachy Head was 60 on Apr. 20th.

Single birds at Seaford Head on Nov. 9th, Church Norton on the 24th, Chichester G.P. from Dec. 1st to the 29th and Saltdean on the 21st.

Two showing the characters of one of the northern races, *abietinus* or *tristis*, on the Crumbles on Oct. 19th.

WILLOW WARBLER/CHIFFCHAFF.—Spring passage peak was 63 at Selsey Bill on Apr. 18th. In the autumn peaks of 50 at Selsey Bill on Aug. 11th and 40 on Sept. 15th; 60 at Hope Gap on Aug. 23rd. At Beachy Head, passage from Aug. 2nd to Nov. 2nd with peaks of 300 on Sept. 12th and 600 on Aug. 8th. Single birds on Nov. 2nd at Rottingdean and on Dec. 29th at Hastings.

357. WOOD WARBLER (*P. sibilatrix*).—First recorded on Apr. 18th at Chichester G.P.; single birds at Rottingdean and Warren Hill on the 20th. In the breeding season pairs recorded from: Blackdown 6, Lodsworth 2, Rogate 1, Bexley Hill 2, Upperton Common 1, Flexham 4 and Bayham 10. In addition 18 territorial males recorded in 10 localities: Rackham, Coates Wood, St. Leonard's Forest, Paddockhurst Park, Ashdown, Pippingford, Nap Wood, Broadwater Forest, Lower Great Common and Broadfields Forest.

More recorded in autumn at Beachy Head than in any year since regular observations began with a total of c.10 between Aug. 2nd and 18th, and a peak of 5 on the 11th.

360. YELLOW-BROWED WARBLER (*P. inornatus*).—Four recorded at Beachy Head as follows: one on Oct. 19th (HPM *et al.*) was still present on the 20th when another was found (MJH *et al.*). A different bird from Oct. 26th to the 28th (many obs.), and one there on Nov. 30th (RRG, WM). There are now 8 records for the county of which 6 are from Beachy Head.

361. PALLAS'S WARBLER (*P. proregulus*).—Three records, the first for the county, at Beachy Head as follows: one trapped on Oct. 18th stayed until the 20th (BEC *et al.*); an unringed bird on the 27th and 28th (RHC, AQ *et al.*); and a third bird on the 30th arrived with a party of Goldcrests (RHC). These records have been accepted by Brit. B. and were part of the widespread arrival of this species in the British Isles which totalled approximately 20 birds.

364. GOLDCREST (*Regulus regulus*).—Only small numbers at the coast in the spring with a peak of 7 at Church Norton on Mar. 31st. Recorded at Beachy Head between Mar. 10th and Apr. 29th with a peak of 6 on Apr. 7th. C.40 pairs recorded in the breeding season including 6 singing males at Bayham and 10 in Broadwater Forest; pairs were also present in 19 sites in the Horsham area.

Autumn passage at Selsey Bill from Aug. 25th to Dec. 1st with a peak of 20 on Oct. 26th and at Beachy Head from Aug. 31st to Nov. 24th with a peak of 50 on Nov. 2nd.

365. FIRECREST (*R. ignicapillus*).—Over twice as many as in 1967, previously the best year, and the final total was well over 100, mostly at Beachy Head. Records were: one trapped at Alfriston on Jan. 14th, in February one at Rackham on the 11th, 3 at Beachy Head and one at the Cuckmere on the 20th and one at Shoreham on the 24th. C.50 recorded along the coast between Mar. 16th and Apr. 28th with peaks at Beachy Head of 15 on Mar. 24th, 4 on Apr. 19th and 11 on the 20th. One at Beachy Head on May 11th, the latest spring record for the county.

In the autumn c.55 recorded between Sept. 18th and the end of the year with peaks at Beachy Head of 7 on Oct. 20th and 12 on Oct. 27th. December records, all of single birds were: Chichester G.P. from Nov. 27th to the end of the year, Amberley on the 1st, Sidlesham Ferry on the 9th, Camber on the 12th, Shoreham Sanctuary from the 24th to the end of the year and Church Norton on the 29th. One at Beachy Head on 2 dates in December was possibly wintering.

366. SPOTTED FLYCATCHER (*Muscipapa striata*).—First recorded on Apr. 28th at Beachy Head with a peak there of 25 on May 20th. In the breeding season c.60 pairs recorded from 37 localities; in several cases a small decrease noted over 1967. Counts were received from several villages and there were 4 pairs in 100 acres of Petworth Park. All breeding season records of this species are welcome.

In the autumn recorded at Selsey Bill between Aug. 11th and Oct. 4th with a maximum of 18 on Sept. 15th and at Beachy Head between Aug. 10th and Oct. 6th with a maximum of 20 on Sept. 3rd.

368. PIED FLYCATCHER (*Ficedula hypoleuca*).—In the spring 10 recorded between Apr. 17th and May 21st, mostly at Beachy Head. In the autumn exceptional numbers recorded between July 29th and Sept. 25th with peaks at Beachy Head of 50 on Aug. 10th and 41 on the 11th and at least 60 were trapped there in the first two weeks of August. C.40 elsewhere along the coast in August and September. One at Beachy Head on Nov. 1st (RHC), the latest record for the county.

370. RED-BREASTED FLYCATCHER (*F. parva*).—A first-year bird trapped at Hope Gap, Seaford, on Sept. 4th (RB, RJJ). Two at Beachy Head on Oct. 20th (MEN, AQ *et al.*). There are now 5 records for the county.

373. **MEADOW PIPIT** (*Anthus pratensis*).—Spring arrival was very small with a total of c.260 S-N. in 35 days watching at Selsey Bill in March and April and a peak of 40 S-N. at Beachy Head on Apr. 7th.

In the autumn 730 out S. at Selsey Bill in 23 days watching in September and October. At Beachy Head c.1,200 W. in 2 hours after dawn on Sept. 25th and 40 SSW. on Oct. 27th.

374. **RICHARD'S PIPIT** (*A. novaeseelandiae*).—One at Selsey Bill on Sept. 29th (DSF, MS). Two at Beachy Head on Oct. 19th (PRC, REE *et al.*), one on the 20th (many obs.) and one from Oct. 26th to Nov. 3rd was trapped on the 27th (ARK, WM *et al.*). One at Sidlesham on Oct. 21st (MS). These records have been accepted by *Brit. B.*

375. **TAWNY PIPIT** (*A. campestris*).—Single birds at Saltdean on Aug. 10th (AJC); Beachy Head on Aug. 24th and 25th (PC, RHC, MEN *et al.*); the Midlands on Sept. 4th (LS); Selsey Bill on Sept. 8th (DSF, HPKR, MS) and Beachy Head on Sept. 8th (MJH, BAEM, IRW *et al.*) and 11th (BEC). These records have been accepted by *Brit. B.*

376. **TREE PIPIT** (*A. trivialis*).—Spring arrival was late and the first records were of single birds at Selsey Bill and Paddockhurst Park on Apr. 13th followed by 3 at Hawkhurst Common Wood on the 14th. At Beachy Head 57 E. between Apr. 15th and May 2nd with a maximum of 20 on the 21st.

Large movements were recorded at Beachy Head in the autumn; 930 E. between Aug. 18th and 27th with a maximum of 250 on the 18th. The last recorded was one at Selsey Bill on Oct. 6th.

Breeding Survey

An estimated total of 174 pairs or singing males in 48 localities, 61 pairs being found at 21 sites not previously visited. In addition PGD has suggested that the population on the commons and young plantations in the extreme NW of the county may be as high as 100 pairs.

It should be noted that the total figure for 1968, although lower than in 1967, is nevertheless encouraging since very little information was received from Ash-down Forest and the coverage of the forest areas in the centre of the county was also less thorough than in 1967.

This survey will be continued in 1969. Further information is required from all of the areas mentioned above and also from the extreme east of the county.

379. **ROCK PIPIT** (*A. spinoletta*).—Up to 10 wintered at Selsey Bill at both ends of the year and 30 between Bracklesham and Church Norton on Nov. 30th. Up to 6 along Shoreham Beach between Oct. 31st and the end of the year. Seven at the Cuckmere at both ends of the year. Up to 5 along Eastbourne sea-front in January and February and 9 in December; 10 at Beachy Head on Jan. 21st. In the Rye area, 25 at Northpoint on Feb. 11th, 40 at Camber on Oct. 29th and 10 at Rye on Dec. 4th. Small numbers were wintering along the coast in 7 other localities and there were breeding season records from Saltdean, Ovingdean and Beachy Head.

Single birds showing the characters of the race *litoralis* at Pevensey Bay on Feb. 29th, Mar. 6th and 22nd and at Newhaven Tidemills on Mar. 22nd. One showing the characters of the race *spinoletta* at Newhaven Tidemills on Mar. 20th, 2 at Beachy Head on Apr. 20th and one at Bracklesham Bay on Nov. 9th.

380. **PIED WAGTAIL** (*Motacilla alba*).—A roost of 396 at Seaynes Hill S.F. on Jan. 7th. Several birds showing the characters of the race *alba* reported between Feb. 25th and May 29th.

Three S-N. at Beachy Head on Mar. 10th and 2 S-N. on Mar. 17th. Autumn movements at Selsey Bill were 10 E., 51 W., 142 S. and 2 S-N. in 33 days watching September to November.

381. **GREY WAGTAIL** (*M. cinerea*).—The breeding survey by MG, MRG, RRG and WM in 1967 was repeated and extended to cover most of East Sussex. Coverage of West Sussex was less complete with 13 of the 1967 sites not visited; 1968 breeding results were as follows:

River System	Occupied Territories	Pairs	Single Birds	Breeding Pairs Proved	Total young known to have fledged
West Rother	13	12	1	9	7
Arun	11	6	5	3	5
Adur	7	7	—	6	9
Mole	7	4	3	1	2
Medway	16	10	6	—	—
Ouse	34	26	8	13	30
East Rother	7	5	2	3	3
Hastings	5	3	—	1	—
TOTALS	100	75	25	47	56

The total of 100 occupied territories containing 75 breeding pairs and 25 single birds, at least some of which probably bred, is the largest population recorded for Sussex; it is probably due to a combination of increased observer activity and a genuine increase in the numbers of the species. The 56 young were reared by 18 pairs, an average brood size of 3.1. A detailed account of the present status of the species is in preparation.

Autumn passage recorded at Selsey Bill in June and July totalling 3 E. and 3 W.; in September 2 E. and 7 S.; in October one E. and one W.; 2 out SE, on Dec. 24th. At Beachy Head recorded regularly from Aug. 10th to Sept. 30th with a maximum of 15W. on Aug. 31st.

Records were received of 18 wintering birds in 13 localities. WM and RRG have started a survey which indicates that the species is far commoner in winter than the records suggest and that an important winter habitat is sewage farms. Records from such areas would be most welcome.

382. **YELLOW WAGTAIL** (*M. flava*).—First recorded on Mar. 24th at Sidlesham. Spring maximum at Selsey Bill was 15 on Apr. 20th, 25 S-N. there in 37 days watching in April and May.

Counts of breeding pairs were: Thorney Island, 6; Arun Valley—2 miles below Greatham Bridge, 5; River Ouse—W. side Newhaven/Piddinghoe, 3 and Rodmell, 1; Lower Cuckmere, 3; Glynde Level, 12; Brede Levels, 2 but probably many more; Hoove, 4; Coombe Haven, 11 (see SBR 1967 pp. 53-60); Rye Marsh and Harbour, 10; Winchelsea Marsh, 1.

Autumn movements at Selsey Bill totalled 108 E., 100 W., 205 S. in 17 days watching between Aug. 4th and Oct. 6th. At Beachy Head recorded regularly between Aug. 3rd and Sept. 29th; peak of movement Aug. 18th to 30th when c.1,700 E. The last were 2 at Brooklands, Worthing, on Oct. 9th and one at Beachy Head on the 20th.

One showing the characters of the nominate race *flava* at Beachy Head on Apr. 15th, a pair at Sidlesham Ferry on May 25th; one at Pett Level on July 31st.

One showing the characters of the race *eimerocapilla* at Beachy Head on Apr. 28th (BEC, MEN, AQ), the first record for the county.

383. **WAXWING** (*Bombycilla garrulus*).—One at Rye on Dec. 28th (MJR).

384. **GREAT GREY SHRIKE** (*Lanius excubitor*).—Single birds at Beachy Head on Jan. 14th and Mar. 25th (many obs.); Ambersham Common on Feb. 4th which remained until Apr. 6th (many obs.) and at Ashdown Forest on Mar. 23rd (GP).

At the end of the year recorded at Beachy Head between Oct. 16th and Dec. 1st, with 2 birds involved (many obs.); one flew from N. out SSW. at Selsey Bill on Oct. 30th (DSF); an adult at Worthing S.F. from Oct. 28th to Dec. 21st was joined by an immature from Nov. 23rd (CEM *et al.*); Sidlesham Ferry one on Nov. 2nd and different birds on the 14th and Dec. 16th (MS); Midhurst one on Nov. 3rd and 21st (KSC, DACMCN).

388. **RED-BACKED SHRIKE** (*L. collurio*).—One at Chichester G.P. on Sept. 8th (REG, LGH); one at Beachy Head from Sept. 15th to 22nd (many obs.); an immature trapped at Alfriston on Oct. 14th remained until the 17th (PJW, VAW); a female at Pebsham Wood from Oct. 26th to Nov. 5th (TNB, SR, JBW), the latest record for the county.

389. **STARLING** (*Sturnus vulgaris*).—In the first half of the year a total of 466 out S. at Selsey Bill in 72 days watching to May 31st. In the autumn there 18 E., 21 W., 1,102 S. and 33 S-N. in 74 days watching June to December, but no clear peak. Winter roosts recorded at: Ovingdean Vale with up to 30,000 in February declining to less than 1,000 by Mar. 28th; Lancing shooting range at least 75,000 on Mar. 14th and there were also 2 roosts in the lower Cuckmere.

391. **HAWFINCH** (*Coccothraustes coccothraustes*).—All records were: 2 at Paddockhurst Park on Feb. 3rd; 2 at Bignor Hill on Mar. 10th; a flock of c.20 at Horsted Keynes on Apr. 15th (RRG *et al.*); a pair at Burgess Hill on Apr. 25th; 2 near Brightling on May 5th and one in Ashdown Forest in June.

392. **GREENFINCH** (*Carduelis chloris*).—In February and March c.90 S. at Selsey Bill in 22 days watching and 47 S-N. there in 23 days watching in April. Autumn movements there were 3 E., 218 W., 181 S. and 15 S-N. in 34 days watching between October and December. On Oct. 27th 38 SSW. at Beachy Head. Up to c.650 at Rye Harbour in late November and December, an unusual number for the area.

393. **GOLDFINCH** (*C. carduelis*).—In April and May 31 E., 22 W., 15 S-N. and 258 S. at Selsey Bill in 37 days watching and 8 S. there in 15 days in June. At Beachy Head 100 W. on May 2nd and 60 E. on the 18th. In the autumn at Selsey Bill 162 E., 672 W., 3,847 S. and 15 S-N. in 45 days watching September to December, peak 500 S. on Oct. 5th and 870 S. on the 20th. At Beachy Head 800 W. between Sept. 23rd and 29th and 600 SW. on Oct. 27th.

394. **SISKIN** (*C. spinus*).—Only 6 flocks totalling c.155 birds in the early part of the year including 65 at Blackdown on Feb. 3rd and 48 at Burton Park Lake on Feb. 28th. The last reported were single birds at Beachy Head on Apr. 7th and 12th.

In the autumn first recorded on Sept. 12th at Marley. At Beachy Head recorded regularly between Sept. 15th and Oct. 27th with a maximum of c.20 on Sept. 24th; c.10 there on Oct. 20th. Winter flocks totalling c.155 birds in 10 localities including flocks of 70 and 50 in Tilgate Forest on Dec. 18th.

395. **LINNET** (*Acanthis cannabina*).—Movements at Selsey Bill between January and May totalled 3 E., 30 W., 512 S-N. and 341 S. in 72 days watching; 5 S. there in June.

In the autumn there 200 E., 482 W., 3,417 S. and 17 S-N. in 45 days watching September to December, peak 1,000 S. and 500 in the area on Oct. 5th. At Beachy Head a maximum of c.2,000 in the area on Oct. 6th; 220 SSW. on Oct. 27th.

396. **TWITE** (*A. flavirostris*).—Monthly totals were:

Jan.	92	Feb.	44	Mar.	3	Oct.	56	Nov.	119	Dec.	36
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The largest flocks were 22 at Sidlesham Ferry in January and 20 at Pagham on Feb. 10th. In the autumn 50 at Camber on Oct. 29th increasing to 70 on Nov. 1st with smaller numbers to the end of the year and up to 27 at Selsey in November and December.

397. **REDPOLL** (*A. flammea*).—In the early months parties totalling 265 in 7 localities including 200 in Broadwater Forest on Apr. 10th. At Selsey Bill 8 S-N. on Apr. 12th, 1 S-N. on the 13th and 1 S-N. on the 14th. Recorded at Beachy Head between Apr. 12th and May 26th with a peak of 55 E. on May 2nd. In the breeding season recorded from 4 widely separated localities, 2 in the E. and 2 in the W. of the county, but no proof of breeding was obtained.

In the autumn 8 E., 24 W., 36 S. and 20 S-N. in 33 days watching at Selsey Bill between September and November; the last were 2 S-N. on Nov. 9th. Recorded regularly at Beachy Head between Sept. 22nd and Nov. 24th, maximum c.100 on Nov. 11th. Parties totalling 85 birds in a further 8 localities; no party was of more than 20 birds.

One trapped at Marley on Feb. 27th showed the characters of the race *flammea* (PGD).

400. **SERIN** (*Serinus serinus*).—One at Selsey S.F. on Nov. 24th (HPKR). This record has been accepted by *Brit. B.*

404. **CROSSBILL** (*Loxia curvirostra*).—The only records were: 2 flying N. at Southwick on Aug. 5th and one at Chichester G.P. on the 24th. One at Rewell Wood on Dec. 9th.

407. **CHAFFINCH** (*Fringilla coelebs*).—Autumn movements at Selsey Bill totalled 526 S., 7 SE. and 18 S-N. in 22 days watching October to November. Maximum 500 S. on Oct. 18th. C.100 at Selsey on Nov. 1st and a maximum of c.200 at Beachy Head on Oct. 18th.

408. **BRAMBLING** (*F. montifringilla*).—In the early part of the year c.130 recorded in 15 localities, the most being flocks of 30 at Sidlesham Ferry and Brooklands S.F. The last were 2 at Beachy Head on Apr. 15th.

In the autumn 4 W. at Selsey Bill between Oct. 28th and Nov. 9th and 15 E. at Beachy Head on Oct. 19th when there were 30 in the area. Elsewhere only 24 recorded in 10 localities to the end of the year.

WHITE-THROATED SPARROW (*Zonotrichia albicollis*).—One at Beachy Head from Oct. 19th to 30th (P.R.C., BAEM, RFP *et al.*). This record, the first for the county, has been accepted by *Brit. B.*

410. CORN BUNTING (*Emberiza calandra*).—In the early part of the year 60 at Worthing on Apr. 9th. In the breeding season 75 pairs or singing males recorded in 21 localities. Most were recorded along the downs but records also came from Pilsey Island, Chichester G.P., Pevensey Levels and Rye. Counts were: c.15 singing along the bridleway between Steyning Round Hill and Chancetisbury; 6 pairs Cissbury to Chancetisbury; c.15 singing between Devil's Dyke and Truleigh Hill; 5 singing males along $\frac{1}{2}$ mile of the B2123 S. of Falmer; 6 singing in $1\frac{1}{2}$ miles Sullington Hill to Lee Farm and 6 in the Newmarket Hill area. In the autumn 80 at Selsey on Nov. 1st.

415. CIRL BUNTING (*E. cirius*).—Most records came from the Cuckmere Valley where birds were present throughout the year including 8 pairs around Alfriston, 2 pairs at West Dean and also present at Exceat, Litlington and Milton Street. Elsewhere, present throughout the year at Steyning, and at Beachy Head where 2 pairs bred. In the breeding season single pairs at Petworth, Ferring and Eastbourne. On Oct. 20th 5 at Prinsted had increased to 8 by the 29th.

416. ORTOLAN BUNTING (*E. hortulana*).—One on Nov. 3rd and 4th at Beachy Head (MEN, AQ, PJW *et al.*). There is no previous county record later than Oct. 5th.

421. REED BUNTING (*E. schoeniclus*).—A peak of 105 at Selsey on Feb. 23rd. Counts of breeding pairs were 20 in the Rye area and 9 singing males or pairs on 2 miles of the Arun below Greatham Bridge. Single pairs at several of the ponds in the Horsham area. In the autumn 93 E., 4 W. and 49 S. at Selsey Bill in 31 days watching Oct. 5th to Dec. 29th; most, 36 S., on Oct. 6th. A roost of c.40 at Chichester G.P. on Oct. 19th.

422. LAPLAND BUNTING (*Calcarius lapponicus*).—All records came from Beachy Head where there were single birds on Apr. 15th (BEC, KV), Sept. 10th (RHC) and Oct. 19th (many obs.). Eight there on Nov. 3rd, 6 of which were seen arriving from the sea (many obs.). There is only one previous April record for the county.

423. SNOW BUNTING (*Plectrophenax nivalis*).—The only records in the early part of the year were of up to 3 in Pagham Harbour from the beginning of the year until Mar. 3rd. At the end of the year, one on Oct. 12th, 2 on Nov. 6th and 3 on Dec. 28th at Pett Level. One or 2 at Beachy Head on 6 dates between Oct. 26th and Dec. 8th; 2 at Selsey on Oct. 28th; 24 at Camber Sands on Dec. 21st and 10 there on the 29th.

425. TREE SPARROW (*Passer montanus*).—Between 80-100 at Sidlesham on Feb. 14th, 80 at Cissbury Ring on Mar. 13th and 120 at Exceat on the 23rd. On Apr. 26th 14 E. at Selsey Bill. Recorded at Beachy Head between Mar. 3rd and May 26th with 20 W. on Mar. 31st and 20 W. on May 2nd.

In the breeding season recorded from 16 localities as follows: Selsey, Sidlesham, Amberley Wildbrooks, West Chiltington 2 pairs, Slimfold, Lindfield, Lewes 6 pairs, Iford a pair, Weir Wood Res., Alfriston, Charlestone, Litlington, Milton Street, Pevensey Levels, Sidley 3 pairs and Beckley.

Recorded at Beachy Head between Aug. 10th and Nov. 3rd, maximum 80 on Oct. 6th; 300 at Hope Gap, Seaford, on Oct. 20th. In October a total of 28 W. at Selsey Bill and 29 W. there in November.

CORRECTION TO THE 1966 REPORT

223. SANDWICH TERN.—Further information about the breeding record in 1966 has been received, which suggests the possibility that these nests were, in fact, those of Black-headed Gulls. Therefore, the record must now be rejected as not proven.

ADDITIONS AND CORRECTIONS TO THE 1967 REPORT

2. GREAT NORTHERN DIVER.—The bird in Chichester Harbour was first recorded on Nov. 5th, not Oct. 5th as stated.

55. SCAUP.—Six at Rye Harbour G.P. on Jan. 2nd.

76. WHITE-FRONTED GOOSE.—Eighteen at Rye Harbour on Dec. 29th.

178. DUNLIN.—On Oct. 19th 250 flew W. off Selsey Bill.

187. GREY PHALAROPE.—One flew W. off Selsey Bill on Oct. 19th (RJB).

193. ARCTIC SKUA.—Eight flew W. and 5 E. off Selsey Bill on Oct. 19th.

COMMON/ARCTIC TERN.—On Oct. 19th 94 flew W. off Selsey Bill.

375. TAWNY PIPIT.—One at the Crumbles on Sept. 17th (RHC). This record has been accepted by *Brit. B.*

396. TWITE.—Sixteen at Shoreham on Jan. 21st.

THE PRESENT STATUS OF THE KESTREL IN SUSSEX

By

M. SHRUBB

Introduction

This paper describes the results of a survey, started by the Sussex Ornithological Society in 1964, of the present status and trends of the breeding population of the Kestrel *Falco tinnunculus* in Sussex. No detailed information was available at that time on numbers or regular breeding sites but the species was known to be generally distributed in the county and was thought to have declined since 1938 (des Forges & Harber 1963).

A detailed survey of this type in an area the size of Sussex presents problems in coverage and, as experience with more local species suggested that it would be impossible to obtain sufficient data in one year, the survey was continued for four years. It thus coincided with two national enquiries into the species' status, to which all the Sussex records were contributed. Preliminary findings were published in the *Sussex Bird Reports* 1964 to 1967.

Much information on the Kestrel's status as a migrant in the county has also been obtained in recent years, and some on the species' status in the winter months was gathered during the survey. These records are summarised at the end of the paper.

Methods and Coverage

Following Walpole-Bond (1938) the breeding season was taken as the period April-August and information was gathered in two ways. Society members were asked for all records of Kestrels seen in the breeding season, with other relevant facts, for example display seen or birds seen carrying food. Many widely scattered records of pairs and single birds were received and in some areas fuller coverage was given by active local observers. Secondly the species was studied in some defined areas to obtain data on breeding density.

Sussex is approximately 950,000 acres (3,800 sq. km.) in extent and areas totalling c.198,400 acres (795 sq. km.) were completely searched, including six study areas totalling c.129,920 acres (520 sq. km.). Other records came from very approximately 384,000 acres (1,534 sq. km.) of the remaining area of the county. Here the coverage varied widely between localities but many areas were well studied and more Kestrel pairs were reported than single birds. At least some information, therefore, was gathered from more than half the county.

The detailed observations have demonstrated that a pair of Kestrels defend a breeding season territory, over which they hunt and which contains the nest. Indeed observations made over several years in Sussex clearly show that these breeding territories are occupied, presumably by the breeding pair, throughout the year. An occupied territory, equivalent to one pair, is therefore taken as the basic unit of population, to impose a uniform value on records varying from a proven breeding pair to sight records of one bird. The minimum evidence of an occupied territory was taken as three records of at least one bird in one breeding season or a total of six such records in the four breeding seasons.

Most territories were better substantiated but, in the study areas, it was found unusual to see both birds of a known pair together in the breeding season, except during display, at the nest or with fledged young. This, coupled with evidence of territorial behaviour, suggested that records of single birds must be used in assessing the population. They will frequently indicate breeding pairs and to ignore them must underestimate numbers.

All the records received were plotted on the lin. O.S. maps. This proved the most satisfactory way of deciding whether any particular report referred to a known territory or a new one. Many records of single birds formed discrete groups when plotted and these were assumed to indicate occupied territories.

Breeding was considered proven if a nest was found, or a fledged brood seen in an established territory and probable if a definite pair was found, birds carrying food noted or persistent records of single birds obtained. Breeding was otherwise treated as only possible.

Number of territories

Figure 1 shows the distribution and total number of breeding season territories found occupied by Kestrels in the survey period. Each is shown in the relevant 10 km. square of the national grid but not more exactly; a convenient form of presentation for future comparison.

A total of 238 territories was found and continuity was good, but 48 were reported only once; 14 of these were recorded for the first time in 1967. With annual variations in observer coverage some lack of continuity was inevitable but the figures from the study areas suggested that year to year fluctuations occurred. Thus in these areas, three territories were occupied only in 1965, two only in 1966 and one only in 1967.

Breeding was proved at least once in 132 territories, considered probable at least once in 102 but only possible in the remaining four. No distinction is made between these categories in Figure 1.

Records which fall outside the definition used for an occupied territory were received from a further 71 localities. These need more investigation and experience suggests that many would prove to be occupied territories. They are shown as open black circles on Figure 1 to give a more complete picture of distribution.

The species emerges as generally distributed and reasonably numerous. It was present in every 10 km. square of the county except four, which were not visited, and even in those only superficially covered, several territories were located without difficulty. The variations in abundance indicated by Figure 1 may, however, only reflect the varying distribution of observers and in some squares the species was probably under recorded. In particular, records in 1968, when 10 new territories were found by one observer east of a line from Eastbourne to Tunbridge Wells, suggest that the species was under-recorded there during the survey, through lack of observers.

Breeding Density

To compare numbers in different parts of the county a study of breeding density was made in six defined areas, identified in Figure 2 by reference letters A to F.

A and C, on the coastal plain, are arable farmland with some grass marsh and, in C particularly, urban areas. The downland area B is an even mixture of farmland and forestry plantations, area D is also downland farmland, with

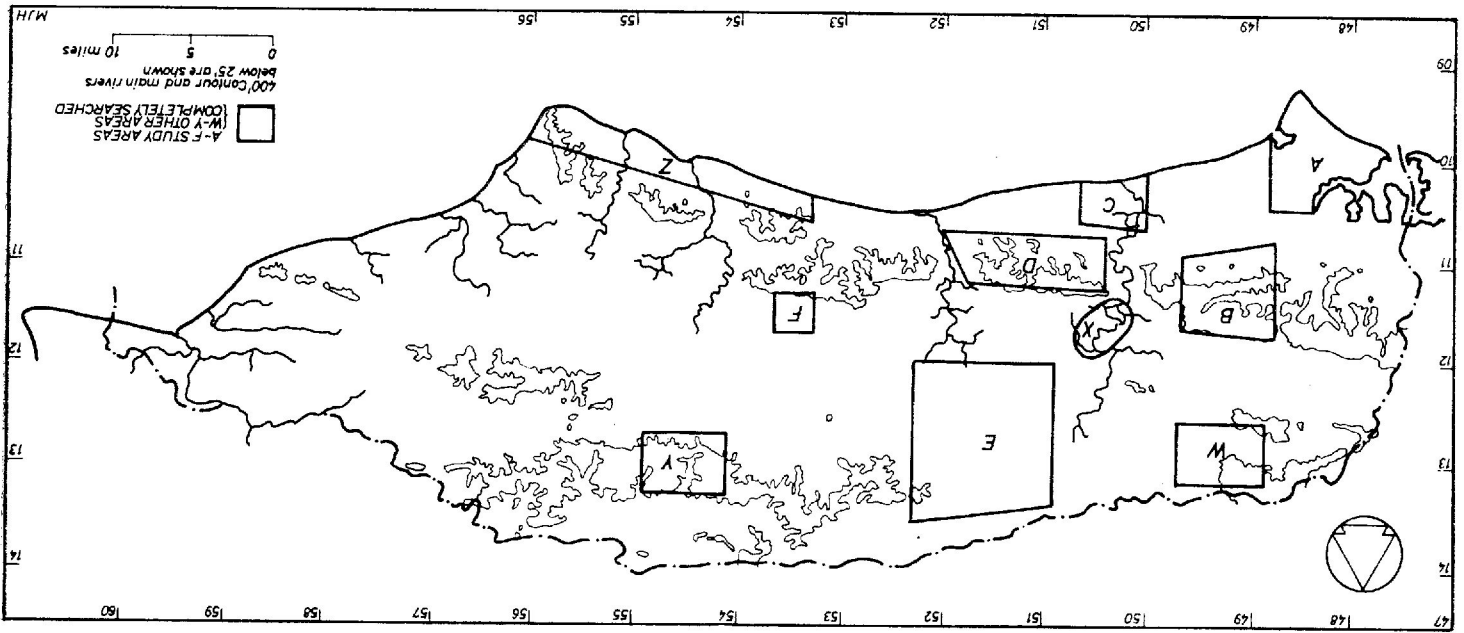


FIGURE 2. KESTREL SURVEY AREAS 1964-1967

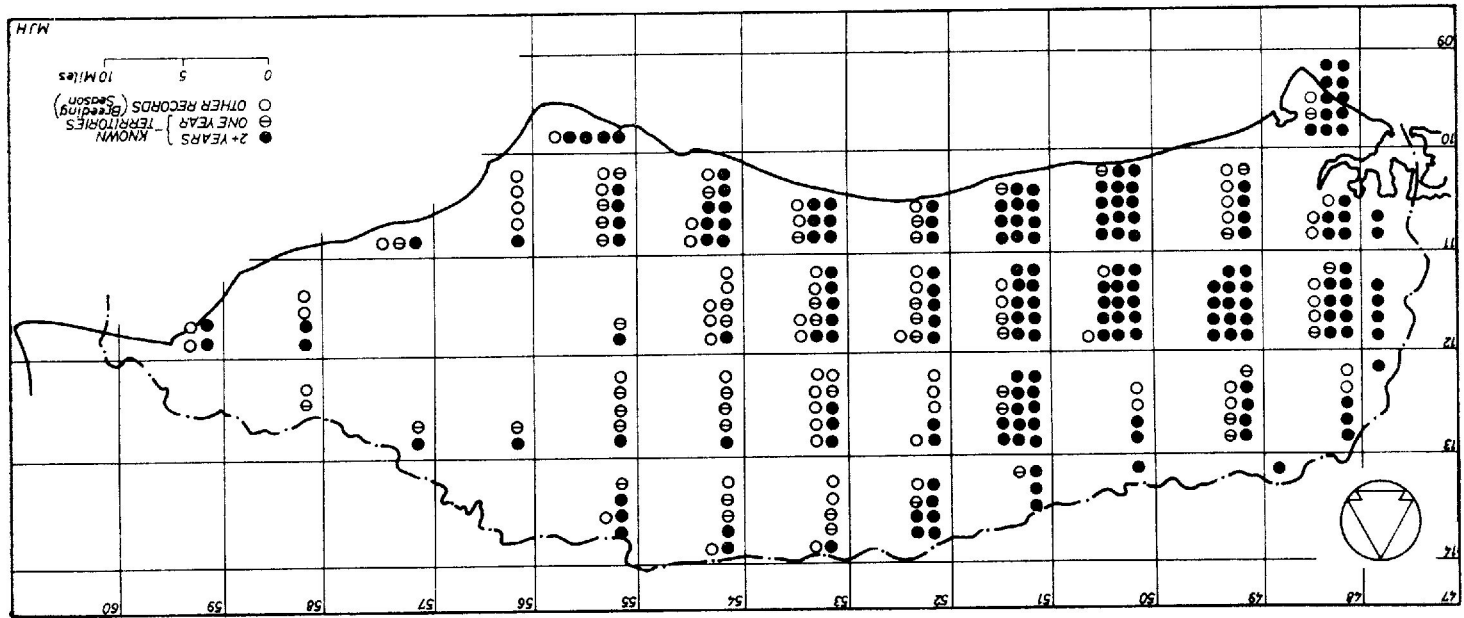


FIGURE 1. KESTREL DISTRIBUTION AND TOTAL NUMBER OF BREEDING SEASON TERRITORIES 1964-1967

Total Breeding Population

Table 1C gives average breeding densities for each main habitat classification used and a calculation based on these gives a county population of c.600 pairs. This may be an over estimate since the eastern end of the county was comparatively poorly studied. Here densities could be lower than in West Sussex, since the species appears to be generally scarcer in Kent than in Sussex (Kent Bird Report 1966, 1967).

Breeding Success

Information on breeding success was recorded annually during the survey. A total of 19 nests was found and the records of these are given in Table 2. Hatching and fledging success is expressed as a percentage of the total number of eggs laid in those nests in which the final result is certainly known.

Breeding was most often proved by finding a fledged brood in an established territory in July/August, when family parties are fairly conspicuous. A total of 120 broods was thus recorded, see Table 3; in addition 24 other broods were noted, but without exact details. Where pairs are noted as failed in Table 3 the nest site was known and under observation, but no brood was ever seen.

The average brood sizes given in Tables 2 and 3 agree well with those found in the London area in 1967, 2.4 (Montier 1968) and Leicestershire in 1963 and 1964, just over 2 (Griffiths 1967). A high proportion of nests in the London area and in Leicestershire were robbed by man. Although fewer nests were predated in Sussex, it is of interest that man was responsible in every case.

BREEDING SUCCESS OF KESTRELS IN SUSSEX 1964-1967

TABLE 2. NESTS

Average clutch size	Hatching success		Egg losses		Fledging success					
	Nests	Eggs in Nests	Hatched	%	Predated	Stolen	Infertile	Young fledged	%	Average brood size
19	4	61	15	41	4 nests	5 (8%)	3 (4.9%)	37	60.5	2.4

NOTES: Four nests were not investigated beyond clutch size
Stolen—some eggs removed from an otherwise successful nest

TABLE 3. FLEDGED BROODS OUT OF NEST (NESTS EXCLUDED)

	Broods by Pairs		Average brood size		Failed
	Young	268	2.1	6	
1964	14	34	2.4	nil	
1965	30	61	1.8	3	
1966	41	98	2.4	nil	
1967	35	75	1.9	3	
TOTAL	120	268	2.1	6	

TABLE 4. REGIONAL VARIATIONS IN BREEDING SUCCESS

	Total young by Pairs	Average brood size	% Failed, all breeding attempts
Coastal Plain	32	1.9	25
Grass Marsh	21	1.9	6.6
Downland	137	2.4	6.3
Weald	82	2.2	5.7

Some regional variation in breeding success was also found, see Table 4. No specific investigation of this point was made and this seems desirable before any conclusions are formed. But the tendency for pairs in areas with a high breeding density to breed least successfully seems worth noting for future reference.

Discussion

Unfortunately few figures are available for comparison with the present survey. Walpole-Bond (1938) described the Kestrel as moderately common in most parts of the county but definitely scarce in some, for example the forest regions (the North part of the county including St. Leonard's and Ashdown Forests). The only figures cited were for the chalk cliffs between Brighton and Eastbourne roughly equivalent to area Z of the present survey, with a population varying from 30 to 60 pairs annually (in 1919 c.100 pairs were estimated but this was quite exceptional); the species was more numerous there than elsewhere in the county.

Although Walpole-Bond's figure cannot be converted to give a comparative density, reference to Table 1B and Figure II shows a big decline in this area, which may be only local. Indeed it may have largely occurred by the thirties and forties. C. M. James (pers. comm.) noted six cliff breeding sites between Brighton and the Cuckmere between 1939 and 1951, excluding 1942-45, and a further four sites between 1952 and 1956; in addition three Brighton churches were also used. On average he found three occupied nest sites annually in the first period and 1.25 in the second. Coverage in both periods was about the same but some bias in favour of the first is possible.

James's figures do not pretend to be complete counts, but he states that it was not difficult to find nests and he never recorded large numbers of birds present. A real decline in the cliff population by the late forties therefore seems probable. The suggestion of a further decline since 1951 is supported by the present survey, when only six of his cliff breeding sites were found occupied and only 10 pairs were noted along the cliffs between Brighton and Eastbourne; it is of interest that three Brighton churches are still in use.

No definite reason for this decline is known but a reduction in suitable nest sites is possible since a similar local decline in the Herring Gull *Larus argentatus* population has also occurred, although the species has generally increased in Britain (Parslow, 1967). Walpole-Bond (1938) records 2,000 breeding pairs of Herring Gulls on the cliffs between Seaford Head and Eastbourne. While this may have been an over-estimate Porter (1966) found only c.360 in 1965 and considered that nest sites were not available for many more. This suggests a marked change in topography of the cliffs which is likely to have also affected Kestrels.

Elsewhere the picture is more obscure. Prestt (1965) records the species as sparse in the county, with a moderate decline occurring between 1953 and 1963. Unfortunately few figures or breeding records for the period are now available so it is impossible to make a comparison with the present survey. While a previous decline seems implicit in the increase noted between 1964 and 1967 only further counts can show if normal fluctuations are involved. (See Walpole-Bond 1938, Parslow 1967).

There have been marked changes in the farming structure of the county since 1939, which may also have affected Kestrels on a fairly wide scale; particularly the decrease in grassland and increase in cereal acreages. Table 5 gives

comparative acreages of permanent grassland (excluding rough grazings), tillage and cereals in Sussex in 1939 and 1967.

TABLE 5. GRASSLAND, TILLAGE AND CEREAL ACREAGES SUSSEX 1939 AND 1967

	Permanent grass acres	Tillage acres	Cereals acres
1939	396119	82098	61930
1967	231825	225552	188453

Some 22,000 acres of farmland have also been lost in the period to building development.

A considerable change has thus taken place involving c.164,000 acres (655 sq. km., 17.5% of the total area of the county). The change was greatest between 1939 and 1945 but a further marked change also occurred between 1960 and 1967, with an increase of 42,500 acres of cereals. Similar changes also occurred between 1914 and 1918, but, unlike the present, proved only temporary (Jesse 1960).

Accepting the differences in breeding density found in predominantly grassland and predominantly arable farming habitats in the present survey the changes in habitat outlined above could have caused a decline of c.20% in the 1939 Kestrel population in farming areas. This hypothesis is untested, but an attempt to isolate the effects of a particular habitat change seems worth making. The increase recorded between 1964 and 1967 was most marked in the predominantly agricultural parts of the county, but was common to grassland and arable habitats.

Other local surveys of breeding Kestrel populations have been made in the period 1963 to 1967, i.e. in Leicestershire in 1963 and 1964, in the Bristol area from 1964 to 1966 and in the London area in 1967. Breeding density in Leicestershire was c.3,500 acres (14 sq. km.) per pair (Griffiths 1967) and in the London area varied between 11.3 and 58.1 sq. km. per pair, averaging 22.9 (Montier 1968). In the Bristol area breeding density was 23 sq. km. per pair (Taylor 1967). Thus with a density ranging between 1.1 and 3.9 pairs and averaging 1.6 pairs per 2,500 acres (10 sq. km.) the species is clearly most numerous in Sussex, but the differences, ranging on average between 8.9 and 11.8 pairs per 25,000 acres (100 sq. km.) may be less marked than these figures suggest. There were differences in the methods used and the Sussex figures may be biased by the comparative lack of data from the eastern end of the county.

Too little information is available to make a useful comparison of the breeding success between 1964 and 1967 set out in Tables 2 and 3 with that of previous years in the county. But, by using the British Trust for Ornithology's Nest Record Cards, comparison with neighbouring parts of England is possible. Table 6 sets out breeding success figures for Sussex, the rest of south-east England, eastern and southern England for the period 1964 to 1967.

In analysing the cards certain difficulties arise as many are incomplete. For clutch size, therefore, single entries for eggs after mid May have been accepted as representing full clutches and, for brood size, all healthy young reaching 3 weeks old have been treated as fledged. The overall impression gained from the cards is that these are reasonable suppositions and errors resulting from them should not invalidate comparisons. Eggs have been treated as infertile if no other reason for their apparent, or actual, failure to hatch was suggested. The figures need interpreting with caution. Some bias is possible in Sussex for

example, as the majority of the nests were found in 1965, which Table 3 indicates as the poorest breeding season of the four. The samples in many places are also rather small.

Variations between Sussex, SE. and E. England were not great, however, although breeding success in S. England was markedly higher, which was almost certainly due to a much lower rate of predation. This accounted for over 36% of all eggs or young in those nests followed right through the breeding period in SE. and E. England, and man is recorded as the principle predator, responsible for 97% of those losses. The point has already been made by Griffiths (1967) and Montier (1968) that Kestrels are liable to suffer heavy losses through nest robbing near built-up areas, and this has certainly affected the figures in parts of SE. England. But it does not apply to the more rural areas of Sussex where the predation rate was also high, over 27%. In E. England there was less predation but more infertile eggs were laid, 20% compared to under 10%.

It is instructive to compare these figures with those for the rest of Great Britain where the predation rate, calculated on the same basis, was 22%, and 14% of eggs laid were infertile.

Analysis of the cards for the preceding decade revealed a rather different pattern, with a more uniform predation rate of about 20% in all areas, for which man was entirely responsible. There was also a marked difference in the number of infertile eggs in SE. and E. England, 27%, and the rest of Great Britain, 10%. But the average clutch and brood sizes vary little from those for the years 1964 to 1967, see Table 7. Table 7 also gives clutch and brood sizes before 1954 and indicates some decline since in SE. and E. England but not in the rest of Great Britain.

TABLE 7. AVERAGE CLUTCH AND BROOD SIZES OF KESTRELS IN SOUTH-EAST AND EASTERN ENGLAND AND THE REST OF GREAT BRITAIN, 1937 TO 1967

	South-east and Eastern England		Rest of Great Britain	
	Average Clutch size	Average Brood size	Average Clutch size	Average Brood size
1937-1953	4.8	11	4.5	2.9
1954-1963	4.2	7.4	4.7	3.2
1964-1967	4.4	6.9	4.6	2.9

It is unfortunate that rather few cards for SE. and E. England are available before 1964, but, if the results they show are valid, they suggest a reduction in the breeding capability of the species since 1954, which is not apparent in the rest of Great Britain. But this does not seem sufficiently significant to have caused the recent declines in Kestrel populations in these regions described by Cramp (1963) and Prest (1965). There has been little variation in breeding success since 1954 and the present level has been sufficient to support some increase, at least in SE. England. It is also evident that predation by man could have a significant effect on breeding success, and the total loss of eggs and young through this in Great Britain between 1954 and 1967 was 21.3%, 85% of the total predation rate.

Movements and Winter numbers

The Kestrel was described by Walpole-Bond (1938) as most common in the county at the migrations and scarcest in winter. He noted that some Sussex breeding birds wintered elsewhere and that many migrants occurred in the autumn between September and mid November. No figures are given, but the overall impression of his account is that these movements were very obvious despite a large breeding population.

Since considerable attention has been paid in the past 15 years to migration generally in Sussex, Walpole-Bond's statements seem worth comparing with more recent records. Since 1959 Selsey Bill and since 1960 Beachy Head have been systematically watched to record migration, and before 1959 Langney Point was regularly watched and many other coastal localities were visited with some frequency.

Table 8 summarises the movements of Kestrels recorded between 1953 and 1967. Only records of immigration or emigration are included. Some coasting movement undoubtedly takes place, but is difficult to disentangle from the presence of local residents; definite coasting passage, usually noted as out at sea, has only involved about 20 birds in the 15 years.

TABLE 8. MOVEMENTS OF KESTRELS IN SUSSEX 1953 TO 1967

	Total birds	Spring Period 22/1-20/5	Peak April	% 78	Total Autumn birds	Autumn Period 25/7-19/11	Peak 1/10-15/10	% 34
Immigration ..	23	13/2-26/5	—	—	47	28/8-28/11	1/10-15/10	34
Emigration ..	5	—	—	—	61	—	—	49

There seems no reason to doubt that Kestrel passage through the county is now quite small. Although complete daily coverage was not achieved for any spring or autumn at either Beachy Head or Selsey Bill it is unrealistic to suppose that regular movements of any size would have entirely escaped detection. The largest number of passage birds recorded in one year was a total of 21 in the spring and autumn of 1960 and the average for 1960 to 1967 was 14, 3 in spring and 11 in autumn. The largest daily movement recorded was of three birds. Movements on this scale would not be easily detected among our breeding birds without systematic watching. Nor has this produced any records at Beachy Head or Selsey Bill of sizeable autumn influxes. Only one record suggesting this can be found in the county files for the period 1953 to 1967; unusual numbers were noted in the Rye/Midrips area on Sept. 21st, 1958. The lack of any marked movement at Beachy Head may be of particular significance since some recent records suggest that this is an excellent area for observing passage raptors (Sussex Bird Report 1965, 1968).

No clear peak of spring passage is discernible, although most occurs in April, but in the autumn there is a marked peak in the first 15 days of October, which accounts for 43% of all the autumn records. Some of the study areas were watched through the year and this peak correlates fairly well with the dispersal of young birds noted, which was most marked in October. This has not been very adequately documented. As with breeding summer visitors one tends to note the birds' absence rather than a precise movement. The winter records from these areas also suggest that our breeding stock is entirely resident. Thus in areas A, B and C adults were present in all breeding territories throughout the winter. More casual records from other areas support this pattern. But without ringing recoveries this has not been proved.

Thus there has apparently been a marked change in the status of the Kestrel in Sussex as a migrant and some change is possible in the winter. The decrease of migrants is of particular interest and possibly reflects, at least in part, population declines noted in other parts of Britain. Snow (1968) shows that long distance movements by British Kestrels are predominantly SSE, and that many which leave England must do so across the Hampshire and Sussex coasts.

Summary

A breeding survey of the Kestrel *Falco tinnunculus* was made by the Sussex Ornithological Society from 1964 to 1967. The species was found to be generally distributed and reasonably numerous, with a total of 238 occupied territories in just over half the county and birds present in a further 71 localities. Breeding density in 10 areas ranged between 1.1 and 3.9 pairs per 2,500 acres (10 sq. km.). An increase was evident in some parts of the county. The total population is estimated at 600 pairs.

Details of breeding success are given, with an average of 2.4 young reared from 15 nests, and 120 other fledged broods noted with an average of 2.1 young per brood. Comparison with previous records shows a big decline along the chalk cliffs since 1938. Decreases elsewhere are thought to have occurred but cannot be shown by the survey. Possible causes of these changes are discussed. Comparison with three other recent surveys in Leicestershire, London and the Bristol area, shows the species to be most numerous in Sussex.

Breeding success in Sussex is compared with neighbouring parts of England. Little variation is apparent between Sussex, SE. or E. England, but breeding success was higher in S. England, due to a much lower rate of predation. This was very high in SE. and E. England compared to the rest of Great Britain. Some reduction in breeding capability seems possible since 1954 in SE. and E. England, but not in the rest of Great Britain, but this does not seem sufficient to have caused a decline in the species.

The present status of the species as a migrant and in winter in Sussex is also given. The breeding birds appear to be resident. Only small passage movements now occur, mainly in the autumn, and a considerable decline in the number of migrant Kestrels is indicated.

Acknowledgements

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REPORT ON WADER COUNTS IN 1968

By
M. SHRUBB

The monthly wader counts in Chichester and Pagham Harbours were continued in 1968, using the same methods and covering the same roosts as in previous years (*Sussex Bird Report* 1965, 53), except that counts were discontinued at Manhood End after May; very few waders now visit the area. Observations along the Chichester Channel suggest that birds feeding in this area now roost further down the estuary, either at the existing roosts at Chidham and Pilsey Island or at a site as yet undiscovered. Beginning in October counts were also started in the fields on the north side of Pagham Harbour, which an experimental count in February had indicated is now a favourite roost for the Black-tailed Godwit and Redshank populations using the harbour; further counts confirmed this.

No count was made in January, always a difficult month for which to plan, for administrative reasons. Coverage at each roost was complete during the remainder of the year except at the localities previously mentioned. Tides were generally satisfactory except in June, when a low tide may have affected the figures.

Some co-operation with the Hampshire Field Club was also achieved and it is hoped this can be maintained. Thus on March 17th and December 22nd the Hampshire part of Chichester Harbour was covered and in December, Langstone and Portsmouth Harbours were also included. This gave a complete figure for the whole of this estuarine complex for the first time.

The December count also included wader areas along the whole Sussex coastline, as in 1965 and 1966. Areas covered were Climping, Goring/Ferring, Shoreham, Rottingdean, Newhaven Tidemills, the Cuckmere, Norman's Bay, Bulverhythe, Pett Level, Rye Harbour and the Midrips. The results of this count were rather disappointing and other records from these areas suggest that many waders had departed during the rather cold weather in the middle of the month.

The results of the counts are set out in Table 1—monthly figures from Chichester and Pagham Harbours; Table 2—figures for the Sussex coastline on Dec. 22nd; and Table 3—figures for the whole Chichester/Langstone/Portsmouth complex on Dec. 22nd.

Since a more detailed analysis of the counts is now planned the policy of commenting on the figures each year has been discontinued.

TABLE 2
SUSSEX COASTLINE COUNT ON 22ND DECEMBER, 1968

Species	Chichester Harbour	Pagham Harbour	Climping	Goring/Ferring	Shoreham	Newhaven/Cuckmere	Norman's Bay	Bulverhythe	Pett Level	Rye Harbour/Midrips	Approx. Totals
Oystercatcher	380	95	140	27	1	2	0	0	0	0	750
Lapwing	560	260	0	0	400	850	100	0	250	5000	7420
Ringed Plover	295	145	0	45	0	27	0	0	0	4	515
Grey Plover	455	45	0	30	0	0	0	0	0	4	535
Golden Plover	420	0	0	0	8	0	0	0	0	0	430
Turnstone	45	150	6	4	0	0	12	60	0	40	320
Snipe	125	140	0	0	0	10	6	0	10	0	290
Curlew	185	55	0	0	0	20	0	0	60	15	340
Black-tailed Godwit	65	(250)	0	0	0	0	0	0	0	0	315 or 65
Bar-tailed Godwit	655	0	0	0	0	0	0	0	0	0	655
Redshank	1320	80	0	5	40	0	9	0	0	6	1460
Spotted Redshank	1	0	0	0	0	0	0	0	0	0	1
Greenshank	2	0	0	0	0	0	0	0	0	0	2
Knot	60	(200)	0	0	0	0	0	0	0	0	260 or 60
Purple Sandpiper	0	0	0	2	0	12	0	0	0	0	14
Dunlin	7450	3600	0	38	350	45	1	0	0	0	11500
Sanderling	70	20	270	185	0	0	0	0	0	0	575
Avocet	1	3	0	0	0	0	0	0	0	0	4

NOTE: There were 250 Black-tailed Godwits in Pagham Harbour on Dec. 27th and 200 Knot there on the 21st.

TABLE 3
TOTAL WADER NUMBERS IN CHICHESTER, LANGSTONE AND PORTSMOUTH HARBOURS, DECEMBER 22ND, 1968

Species	Chichester (Sussex)	Chichester (Hampshire)	Langstone	Portsmouth	Total
Oystercatcher	380	45	300	60	785
Lapwing	560	550	500	0	1610
Ringed Plover	295	150	170	2	615
Grey Plover	455	80	150	2	685
Golden Plover	420	17	1	0	440
Turnstone	45	0	50	85	180
Snipe	125	0	300	0	425
Jack Snipe	0	0	1	0	1
Curlew	185	535	300	250	1270
Black-tailed Godwit	65	185	300	35	585
Bar-tailed Godwit	655	690	205	1	1550
Green Sandpiper	0	0	1	0	1
Redshank	1320	2000	1000	240	4560
Spotted Redshank	1	0	0	0	1
Greenshank	2	0	0	0	2
Knot	60	700	200	20	980
Little Stint	0	0	1	0	1
Dunlin	7450	3500	17500	2000	30450
Sanderling	70	0	0	0	70
Avocet	1	0	0	0	1
TOTALS	20,540	17 species	20,980	2,090	44,200
			16 species	10 species	20 species

TABLE 1. MONTHLY WADER COUNT TOTALS IN WEST SUSSEX IN 1968

Species	17 Feb.		17 Mar.		14 Apr.		12 May		9 June		28 July		25 Aug.		22 Sept.		20 Oct.		24 Nov.		22 Dec.		
	Chi.	Pag.	Chi.	Pag.	Chi.	Pag.	Chi.	Pag.	Chi.	Pag.	Chi.	Pag.	Chi.	Pag.	Chi.	Pag.	Chi.	Pag.	Chi.	Pag.	Chi.	Pag.	
Oystercatcher	510	270	530	95	155	100	205	60	225	80	50	145	500	170	770	170	815	140	425	145	380	95	
Lapwing	435	280	85	0	40	0	12	0	65	40	170	40	225	55	435	185	1080	500	775	480	560	260	
Ringed Plover	120	55	20	0	60	12	140	40	15	25	55	20	135	110	225	220	430	195	995	240	295	145	
Grey Plover	320	235	420	215	115	45	5	35	50	60	65	60	1200	15	360	120	760	135	825	105	455	45	
Golden Plover	2	4	140	17	0	0	0	0	0	1	7	0	0	0	60	0	120	0	0	0	15	420	0
Turnstone	20	75	35	0	75	65	95	65	8	25	85	45	20	100	145	150	220	70	12	85	45	150	
Snipe	160	0	120	0	45	15	0	0	0	0	4	1	12	0	60	0	165	2	190	25	125	140	
Jack Snipe	4	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	
Curlew	1050	260	515	815	110	400	85	55	80	75	540	380	2350	0	1500	300	1850	380	1145	280	185	55	
Whimbrel	0	0	0	0	1	0	50	45	1	0	160	30	190	30	5	2	2	0	0	0	0	0	
Black-tailed Godwit	20	490	210	625	15	250	140	0	7	0	135	0	70	0	175	0	480	0	270	0	65	(250)	
Bar-tailed Godwit	250	35	35	145	15	1	40	8	0	15	15	35	220	0	5	1	335	3	490	45	655	45	
Green Sandpiper	0	0	1	0	0	0	0	0	0	0	7	0	5	0	3	0	1	0	0	0	0	0	
Wood Sandpiper	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	
Common Sandpiper	0	0	1	0	1	0	1	5	0	0	15	35	8	15	2	6	2	1	1	0	0	0	
Redshank	1310	300	1400	170	180	380	50	15	95	25	2280	25	520	10	1980	245	2130	445	1500	220	1320	80	
Spotted Redshank	0	0	0	0	0	11	0	1	0	0	45	0	45	0	40	0	15	0	2	0	1	0	
Greenshank	0	0	4	0	0	3	0	1	0	0	65	3	30	2	115	1	65	5	2	0	2	0	
Knot	75	5	25	100	25	2	30	1	3	35	15	0	1	1	15	15	3	2	9	1	60	(200)	
Purple Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Little Stint	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	1	0	0	0	
Dunlin	14250	5040	4350	1500	3540	1650	1500	870	55	45	1500	410	1350	335	5860	475	12200	1070	9900	3940	7450	3600	
Curlew Sandpiper	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	
Sanderling	305	5	265	0	55	215	0	90	35	0	13	0	125	0	280	0	240	10	160	1	70	20	
Ruff	0	0	1	0	0	3	1	0	0	0	3	5	75	2	60	0	7	0	1	0	0	0	
Avocet	0	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	

NOTE: Chi.—Chichester Harbour, Chi. (Hants.)—that part of Chichester Harbour which lies in Hampshire; not normally covered by these counts. Pag.—Pagham Harbour.

SUMMARY OF BIRD RINGING IN SUSSEX, 1968

Compiled by

P. J. WILSON

The trend towards a smaller number of ringers operating within the county seems to have continued this year with only 11 separate totals received from ringers or groups. A total of 13,445 birds of 105 species were ringed against 10,795 birds of 89 species in 1967. Over 11,000 of this year's total were accounted for by 4 ringers or groups.

The following are some of the more interesting nestlings ringed by P. G. Davis in the north of the county: 6 Cuckoos, 67 Stonechats, 26 Redstarts, 90 Wood Warblers and 107 Willow Warblers. Other interesting birds ringed included 109 Mute Swans by Dr. A. B. Watson; a Pectoral Sandpiper by M. J. Goddard and J. A. Newman; a Red-breasted Flycatcher by R. Batchelor and 7 Little Grebes, 6 Cirl Buntings, a Bluethroat and a Natteracker by P. J. Wilson. Details of ringing in the Beachy Head area are set out below.

BEACHY HEAD RINGING STATION

The year under review was the first that the now independent station was self-supporting; funds being raised by subscription from active ringers. The committee responsible for running the station remains basically the same as the previous year, with the exception of a further local member, B. Whitby, who was co-opted to the committee in January, 1968.

For the first time since regular watching began at the Head, concentrated ringing has been carried out in two widely separated areas, by ourselves in Whitbread Hollow and independently by Mr. and Mrs. R. H. Charlwood at Hodcombe. In both localities the advantage of concentrating on small areas in this way was well demonstrated, and some interesting contrasts between the numbers and species ringed came to light. For instance, 10 Pied Flycatchers were ringed in the Hollow throughout the whole autumn, whereas in Hodcombe, 60 were ringed in one week, although there were apparently seldom more than 10 to 15 in the garden on any one day. Thus, a steady passage was brought to light which would otherwise have been interpreted as the same birds off passage.

Together with the extra coverage at Hodcombe, the area was watched on a greater number of days and by more observers than ever before. This resulted in a higher ringing total (over 7,000 being the combined total of the 3 groups in 18th October and 3rd November was by far the most remarkable since regular watching began at the Head and coincided with similar movements at several other observatories. No less than 3 Pallas's Warblers were recorded (one trapped), and these included the first and last to be seen in the country during the autumn. There were also 3 Yellow-browed Warblers, a White-throated Sparrow, 2 Red-breasted Flycatchers, several Richard's Pipits and an Ortolan Bunting.

Mr. and Mrs. R. H. Charlwood ringed a total of 3,071 birds in the area and included in this total were 12 Firecrests, 71 Pied Flycatchers, 164 Wheatears, one Merlin, one Sparrowhawk and the first Little Crake in Britain.

The following is a list of species ringed by the Beachy Head Ringing Station in 1968:

Kestrel	2	Black Redstart	1	Spotted Flycatcher	20
Wryneck	5	Nightingale	3	Pied Flycatcher	10
Swallow	49	Bluethroat	2	Duncock	71
House Martin	13	Robin	71	Meadow Pipit	5
Great Tit	17	Cetti's Warbler	1	Richard's Pipit	1
Blue Tit	66	Grasshopper Warbler	26	Tree Pipit	4
Coal Tit	2	Reed Warbler	45	Starling	25
Willow Tit	2	Sedge Warbler	87	Greenfinch	36
Treecreeper	2	Aquatic Warbler	1	Goldfinch	173
Wren	90	Blackcap	550	Linnet	31
Mistle Thrush	10	Garden Warbler	149	Redpoll	3
Song Thrush	117	Whitethroat	1058	Bullfinch	53
Redwing	113	Lesser Whitethroat	18	Chaffinch	18
Ring Ouzel	28	Willow Warbler	470	Yellowhammer	2
Blackbird	64	Chiffchaff	431	Girl Bunting	1
Wheatear	14	Wood Warbler	1	Reed Bunting	1
Stonechat	18	Pallas's Warbler	1	House Sparrow	6
Whinchat	23	Goldcrest	15		
Redstart	43	Firecrest	2	TOTAL	4053

A. QUINN
B. E. COOPER
M. E. NOLAN

SELECTED LIST OF RECOVERIES REPORTED IN 1968

Key to symbols and terms
(Ring numbers are omitted)

Age	Manner of Recovery
pull.—nestling or chick, <i>not yet flying</i>	v.—caught or trapped and released with ring;
juv.—young, <i>able to fly freely</i>	!—shot or killed by man;
1st W.—bird in its first winter;	x.—found dead or dying;
fig.—full grown (age uncertain)	()—caught or trapped alive and not released or released but with ring removed.
ad.—adult, at least one year old	
1Y.—first year bird in the plumage assumed at its first (post juvenile) moult.	
PJ.—post juvenile; free flying bird definitely not juvenile but not certainly in an older age group.	
	/?—Method of recovery unknown.

Sex
♂—male
♀—female

Distance
The distance is given in miles and directions are approximate.

Birds ringed in Sussex

Eleven recoveries were reported. The maximum movements were 60 miles W. and 67 miles N. from birds ringed at the coast.

pull. 7.6.67 Rye Harbour (RHC)
/? 7.8.68 Laraele, Morocco
Not only is Morocco a long way S. for a British Lapwing, but the date of recovery is remarkably early.

pull. 14.7.63 Midrips (the late D. D. Harber)
v 27.7.68 Wicks

pull. 23.6.65 Midrips (RHC)
27.7.68 Wicks

The recoveries in the table below have been selected from those reported to the Chichester Ringing Group. The first bird was ringed at Pagham, the remainder at Chichester. All were ringed as juveniles.

Date Ringed	Date Recovered	Key	Locality Recovered
30.8.64	19.5.68	v	Evesham, Wores. 100m. NW.
11.9.64	12.5.68	v	Long Handborough, Oxon. 110m. NW.
12.8.66	3.6.68	v	Evesham, Wores. 93m. NW.
29.8.65	28.4.68	v	Ecton, Northants. 100m. N.
3.7.66	9.6.68	v	Petworth. 12m. NE.
3.8.66	29.6.68	v	Brewood, Wolverhampton. 140m. NNW.
5.7.66	17.7.68	v	St. Pryne-St. Mesmin, Loriet, France

Bluc Tit	pull. /?/	16.6.67 16.10.68	Possingworth Park (GM) Burnley, Lancs. 215m. NW.
Marsh Tit	juv. v	29.7.61 16.4.69	Possingworth Park (GM) Possingworth Park
			Seven years and 9 months is a remarkable age for any small bird.
Fieldfare	1st W. +	22.1.66 6.6.68	Burgess Hill (JAW) Keitele (Kuopto), Finland
Redwing	Ad. /?/	19.1.66 13.12.67	Burgess Hill (JAW) Listrac, Medoc, France
Ring Ouzel	x	19.10.68 11.12.68	Hodcombe, Beachy Head (RHC) Seas (Orme), France
Redstart	1Y. ♂ v	24.8.67 22.4.68	Beachy Head (BHRS) Parkhill, Lyndhurst, Hants. 80m. W.
Reed Warbler	PJ. v	13.9.67 30.7.68	Chichester G.P. (CRG) Barton-on-Humber, Lincs. 195m. N.
Sedge Warbler	1st W. x	8.8.65 16.4.68	Beachy Head (BHRS) Reus, Tarragona, Spain
	1st Y. v	5.9.65 19.5.68	Eastbourne (RHC) Hardingstone, Northants. 110m. NW.

All birds listed in the table below were ringed as juveniles at Chichester.

Date Ringed	Date Recovered	Key	Locality Recovered
15.8.66	24.4.68	v	Sidlesham. 3m. S.
25.7.67	(17.4.68)	v	Eu, Seine Maritime, France
11.8.67	3.8.68	x	Attleborough, Norfolk. 135m. NE.
8.9.67	(3.8.68)	x	Rigsby, Douglas, Lanarks. 350m. NW.
15.9.67	4.5.68	v	Kilconquhar Loch, Fife. 380m. NNW.
18.9.67	19.5.68	v	Far Cotton, Northants. 95m. N.
16.9.68	19.9.68	x	Anglet, Bayonne, France

Blackcap	ad. v	24.4.68	Beachy Head (BHRS)
	x	30.6.68	Orpington, Kent. 45m. N.
	juv. x	22.7.67 16.4.68	Burgess Hill (JAW) Jurcorps, Praheq (Deux Sevres), France

Whitethroat	1st W. x	26.8.67 1.7.68	Beachy Head (BHRS) Market Rasen, Lincs. 185m. N.
	1st Y. x	2.9.68 10.9.68	Beachy Head (BHRS) Lasse, St. Etienne de Baigorry, Basses Pyrennes, France
	fig. v	24.8.67 4.5.68	Burgess Hill (JAW) Ecton, Northants. 95m. NNW.
	1st Y. x	7.9.68 9.9.68	Hodcombe, Beachy Head (RHC) West Hythe, Kent. 40m. NE.
Lesser Whitethroat	fig. v	15.8.68 3.4.68	Chichester G.P. (CRG) Paralimni, Cyprus
	fig. x	15.9.67 (6.5.68)	Chichester G.P. (CRG) Fair Oak, Eastleigh, Hants. 25m. WNW.
			The recovery from Cyprus shows once again that the main autumn migration of this species, like that of the Wood Warbler, is in a mainly SE. direction.
Willow Warbler	1Y. v	28.7.68 2.8.68	Hodcombe, Beachy Head (RHC) Dungeness, Kent. 70m. E.
	juv. /?/	21.8.67 21.4.68	Possingworth Park (GM) Mortrico, Guipuzcoa, Spain
Chiffchaff	fig. v	7.9.67 31.3.68	Beachy Head (BHRS) Elmers End, Beckenham, Kent. 47m. NNW.
Goldcrest	ad. ♀ /?/	2.3.67 28.6.67	Possingworth Park (GM) Bishopstone, Nr. Glasgow. 395m. NW.
Yellow Wagtail	fig. v	20.8.68 4.9.68	Chichester G.P. (CRG) Cappreton, Landes, France
Goldfinch	ad. v	17.5.68 19.9.68	Hodcombe, Beachy Head (RHC) Shoreham-by-Sea. 22m. W.
	ad. /?/	18.5.68 27.7.68	Hodcombe, Beachy Head (RHC) Marquion (Pas de Calais), France
Linnet	ad. ♂ 0	24.9.68 27.10.68	Beachy Head (BHRS) R. Uizama, Pamplona, Navarra, Spain
	fig. ♀ v	19.8.67 26.10.67	Chichester G.P. (CRG) Arcangues, Usteritz, Basses Pyrennes, France
Chaffinch	ad. ♀ x	17.1.65 31.3.68	Beachy Head (BHRS) Blankenese, Hamburg, Germany
Reed Bunting	PJ. ♂ v	26.11.67 12.10.68	Chichester G.P. (CRG) Winchester, Hants. 28m. NW.

Birds ringed elsewhere and recovered in Sussex

fig. 28.8.60 (Moulting). Knechtsand-Nord, Weser Estuary, NW, Germany
x 3.2.68 Pagham Harbour
The Weser Estuary is used by large numbers of Shelduck annually for moulting. During this period they are flightless and it has been possible to catch large numbers.

Shelduck	ad. v	2.4.68 4.9.68	Emsworth, Hants. Chichester G.P. (CRG)
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Black-headed Gull	pull.	15.6.66	Jap. Narpes, (Vaasa), Finland
	x	9.3.68	Heatfield
Ringing has shown that a large proportion of the Black-headed Gulls wintering in Britain originate from the Baltic countries.			
Sand Martin	juv.	24.8.68	Keyhaven, Lymington, Hants.
	v	1.9.68	Chichester G.P. 34m. E. (CRG)

OBITUARY—G. R. GERVIS

Geoffrey Gervis, our Assistant Recorder, died on 15th March, 1969, after a long period of poor health.

Born in Hampstead in 1907, he spent the greater part of his life living and working in London. From boyhood he was interested in all aspects of Natural History, but it was not until he was in his late forties that he became seriously interested in birds. For a while he lived in the country near Watford, and was then able to visit frequently the Tring Reservoirs, rich in ornithological associations. Indeed it was on the bank of the Wilstone Reservoir at Tring that I first met him. He was looking for a Sociable Plover which had been seen the day before, but in its absence was quite happy to watch some Dunlin which were there.

Seven years ago, at the age of 54, he found himself in the happy position of being able to retire early rather than move back into London when his work with the Express Dairy was reorganised. His wife had been born and brought up in Sussex, and it was to her old home in Harting, at the extreme west end of the county, that they retired.

Retirement meant more time for birdwatching. He preferred to go out alone or with a couple of friends at the most, and would spend a whole day wandering round Pagham Harbour, with a call at Chichester Gravel Pits en route. He made regular counts of birds around his home for the Inland Observation Point, later the Daily Bird Count Scheme run by the British Trust for Ornithology, with characteristic thoroughness, and was engaged in collecting records for a paper on the birds of Harting Parish. Holidays often meant a week at Portland Bird Observatory, where his unobtrusive helpfulness and friendliness will be sadly missed by the warden and the other regular visitors.

Geoff was at the meeting in Brighton in 1962 at which this Society was inaugurated, and thus was a founder-member, and in 1966 he agreed to become our Assistant Recorder. A place was found in his study for the Society's files, and he took on the ever-growing task of sorting, collating and filing our notes and extracting the essential details for the Editor of the Sussex Bird Report. In this he was painstaking and thorough, and it must have taken up a great deal of his time. He continued with it when illness limited the amount of walking which he could manage in the field, and even when he did not feel well enough to travel to the Society's ordinary meetings at Brighton he continued to attend the Council and the Records Committee meetings.

To his wife, who did not lament when her husband went a-birding but who encouraged him in his hobby with understanding and patience, we offer our sympathy and best wishes. He was a good friend, and we shall miss him.

A.B.W.