

The
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Bird Report

1966



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Ornithological Society

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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 July are entitled to reduced subscriptions. Further details of the Society and subscriptions may be obtained from: B. A. E. Marr, 59 The Green, Southwick, Brighton BN4 4FX.

THE SUSSEX BIRD REPORT

Copies of Reports Nos. 15 (1962), 5/- post free and Nos. 17 and 18 (1964-5), 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 14th February.**

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

THE SUSSEX BIRD REPORT

NUMBER NINETEEN, 1966

CONTENTS

	PAGE
Hon. Secretary's Report	1
Review of the Year	3
List of Contributors	10
Classified Records	11
Additions and Corrections to the 1965 Report	51
Society Investigations, 1966	52
A Summary of the Breeding Survey of Water Rails 1962-1966,	53
Summary of Bird Ringing in Sussex, 1966	55
Report on Wader Counts, 1966	59
The Spread of the Collared Dove in Sussex.. .. .	63
Beachy Head Ringing Station, 1966	69

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THE SUSSEX ORNITHOLOGICAL SOCIETY

Cover Drawing of Little Bittern by Ian Willis

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THE SUSSEX BIRD REPORT, 1966

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SECRETARY'S REPORT

The Society's fifth year has been one which has seen a number of radical changes, a considerable increase in membership, and a thorough and rewarding consolidation in the work being carried out by members on the distribution of birds in the county.

The audited accounts for the year ended 31st December, 1966, give details of the excess of Income over Expenditure for the year amounting to £93 18s. 1d. The balance brought forward from 1965 of £248 11s. 10d. was added to this making a figure of £342 9s. 11d. which was carried forward to 1967. Although no film show was held in 1966, it was particularly gratifying that the increase in subscription income almost equalled the profit on the 1965 film show. The expenses for the year were kept down to the 1965 figure much through economies in the cost of the lecture programme, made possible by our own members giving their services to the Society, and the surplus was helped by a generous donation of £15 10s. from the now defunct Selsey Bill Observatory Fund.

The Society's membership increased considerably, and at the end of the year stood at 471; 87 new members joined. In addition, the Junior Section, run separately and catering for those aged 10 to 14 inclusive, doubled its membership in the course of the year. Mr. Michael Helps, who acted as its first Secretary and who was thus responsible for getting it "off the ground," handed over the reins in April, when he left on a seven-month trip to Turkey, to Miss Mary Greenhalf, who has since coped admirably with the organisation. In the year, the Junior Section sent out three Newsletters to its own members, and monthly outings were arranged to different parts of the county. An experiment to install nest boxes in Stanmer Park, Brighton, resulted in a disheartening failure when almost all of them were torn down or damaged by vandals.

Details were given in the last Sussex Bird Report of the formation of the Editorial and Records Committee in the early part of 1966. Besides preparing the 1965 Report the committee also issued a circular to all members in May, under the heading "Recording for the Sussex Bird Report," which gave a comprehensive list of species meriting further attention in the county, and details of the surveys to be carried out during the remainder of the year. The Committee met on seven occasions during the year, partly to discuss records submitted by members, but also to deal with the Sussex Bird Report and the scientific work of the Society. It also dealt with an enquiry conducted by the Royal Society for the Protection of Birds into possible sites for bird reserves in the county, for which a lengthy report was prepared.

Beachy Head Ringing Station enjoyed further success during the year, although the ringing total, at about 1,700, was well below the record 1965 total. Not so many observers were occupied in sea- and migration-watching as in 1965, but nonetheless some very interesting species and movements were recorded. Notable among these were the second county Desert Wheatear and third Yellow-browed Warbler.

Rye Harbour continued to occupy much time and attention in 1966. The Common Terns had a successful season at the new site, where some 40 chicks were raised, but at the old site at Nook Beach they seemed to fail utterly. Lamentably, the response to the appeal for help in wardening the area was very poor, and so the disturbance caused by boys taking eggs at Nook Beach was unchecked. Further studies are being undertaken to see what other approaches can be made to try and boost the nesting success.

All lecture meetings in the year had good attendances; three of these were held in Brighton, one in Chichester, and one in Eastbourne. Monthly field outings were held throughout the year, and a mixed bag of weather and birds greeted the members in a variety of places both coastal and inland. On one outing to the Beachy Head Ringing Station, a member found the male Desert Wheatear earlier referred to, a very lucky strike.

Four Newsletters were issued during the year. The Press once again reviewed these favourably, and in particular "Sussex Life" and the "Bognor Regis Post" showed considerable interest in the Society's affairs.

The Secretary's work was, as always, eased by the help from others, and in particular he would like to express his gratitude to Mr. Tom Palmer, who coped uncomplainingly with his perennial task of preparing the Society's envelopes and publications ready for posting; and to Mr. Clive Hope whose stirring work in arranging the field outings continues to bring pleasure to a great number of members.

REVIEW OF THE YEAR

Late Winter 1965/66

The year opened with a cold spell from the east, with very hard frost, continuing to Jan. 21st; some snow fell on the 11th and 17th but did not persist.

As is usual with such conditions considerable westerly movements took place at the coast involving Lapwings, Skylarks, thrushes, Starlings and finches. Skylarks, Song Thrushes and Starlings were the principal species and the largest movements occurred on the 15th when an estimated 16,425 individuals of 14 species flew W. at Brighton in 3½ hours; c.10,000 of these were Skylarks. Less usual movements were an arrival of c.2,000 Skylarks at Selsey Bill on the 16th and 30 Woodlarks flying W. at Seaford Head on the 17th.

There were also influxes of wildfowl, waders and finches. Wildfowl were mainly geese, with c.250 Whitefronts and 17 Greylags being recorded, and swans, with c.60 Bewick's and some Whoopers. The January wader count showed a marked increase of Curlew and Bar-tailed Godwits. As in March 1965, many Bramblings appeared at the coast, some 740 being noted, including flocks of 350 at Worthing and 250 at Shoreham. Twite were also unusually numerous and a flock of c.150 at the Rother estuary on Jan. 18th was the largest in the county for many years; 8 Lapland Buntings were also seen.

The cold spell ended on Jan. 21st and from then until March it was very mild with much rain; more, in fact, than in the same period during the previous 3 years.

Numbers of duck, especially Wigeon and Teal, which were little affected by the cold spell were considerably higher than in early 1965. This was probably due to the more extensive flooding caused by the higher rainfall. Pintail, however, were scarce and Brent Geese were fewer, with a maximum of c.1,700 in the county during February; these included 5 of the pale form, *hrota*, at Pett Level on the 20th and 27th. About 70 Whitefronts remained in February and Bewick's Swans were present until March in 2 localities. Two further parties of Greylags were also seen in March.

The wader counts in these months produced no unusual records and, without complete counts for this period in previous years, comparisons cannot be made. Single Greenshank, Spotted Redshank and Little Stint were wintering, however, but no Common Sandpipers.

There were some interesting sea-bird records in February. A Black-throated Diver was seen near Horsham on the 19th, a Gannet was picked up dead inland at East Dean (West Sx.) on the 13th and another was found stranded near Brighton on the 22nd. Two Great Skuas were recorded, on the 22nd at Camber (which was eventually picked up dead on Mar. 6th) and on the 28th at Brighton and Kitiwakes were seen inland at Weir Wood Res. on the 13th and at Glynde on the 20th.

Winter passerines appeared rather scarce after the cold spell but this may be due to lack of reporting rather than birds. Most Twite and Bramblings, however, clearly departed at the end of January; only 8 Twite were seen in February and none in March, and there were only 2 Brambling records after January. About 196 Siskins from 13 localities and 140 Redpolls from 14 localities were reported, more than in 1965; perhaps the increase in records was a result of our appeals for information rather than an increase in birds. Two Great Grey Shrikes were present and Chiffchaffs again wintered, single birds being present at Chichester G.P. and Plumpton but, unlike 1965, there were no wintering Blackcaps. Waxwings, following the big invasion of late

1965, were still fairly widespread, some 96 birds being seen in 15 localities; 22 at Horsham on Feb. 13th was the largest party. The last were seen at Bexhill on Apr. 5th, only the second April record for the county.

Other unusual winter visitors noted were 6 Red-necked Grebes during January and February, more than are usually seen, a Bittern at Chichester G.P. between Jan. 16th and 19th, 2 Hen Harriers, one a male, and 2 Quail, one of which was shot. There were 3 Avocets in the Chichester/Pagham Harbour area until Feb. 2nd and 2 or 3 Mediterranean Gulls were seen in the Sidlesham/Selsey area. Bearded Tits were again fairly numerous with c.23 in 5 localities, some remaining until mid-March. No Merlins were seen, which is unusual, and Short-eared Owls were much scarcer than in 1965.

Spring Migration

After the heavy rainfall in February, March was mainly dry and unusually mild and warm, with generally light westerly winds, except for a SW. gale on the 27th.

In this fine calm weather arrivals of summer visitors began exceptionally early. The first to appear were Chiffchaff on the 6th followed by Wheatear on the 8th, and during the next fortnight Garganey, Sandwich Tern, Turtle Dove, House Martin, Sand Martin, Redstart, Blackcap and Whitethroat all arrived, followed by Swallow on the 26th and Willow Warbler on the 31st. All these species, except Sandwich Tern, were early and Turtle Dove on the 22nd, House Martin on the 13th, Redstart on the 22nd and Whitethroat on the 19th were abnormally so. Visible movement of other passerines was not very marked but Goldcrests were moving from about the 6th and the peak arrival of Meadow Pipits occurred on the 27th. There was a Firecrest at Beachy Head on the 20th but only one Black Redstart was seen in this period.

The wind moved easterly during the first week of April and remained there, often from the SE., for the next three weeks. The weather was more variable than in March but often fine and warm, although there was a freak blizzard from the SE. on the 14th. Following a period of westerlies with a good deal of rain from Apr. 20th to the 30th there was another short spell of E. winds with fine clear skies in early May. Thereafter May was very variable but winds were predominately W. and there was little rain.

The March pattern of early arrivals continued into early April with the first Black Tern on the 9th, Little Tern on the 8th, Nightingale on the 2nd (the last two were earliest records for the county), Grasshopper Warbler on the 4th, Reed Warbler on the 9th, Sedge Warbler on the 2nd and Garden Warbler on the 10th; more House Martins appeared before the 4th and the first Swifts were seen on the 16th. A Quail was seen at Beachy Head on the 10th, a very early date if a migrant.

The period of E-SE. winds in early April produced some large movements at sea, mainly of sea-ducks and terns. The spring peak of Scoter, Common/Arctic Terns and Sandwich Terns occurred on the 9th with 4,100 Scoter, 123 Common/Arctic and 610 Sandwich Terns flying E. off Selsey Bill; there was another large Scoter movement there on the 5th when c.4,000 flew E. In late April and May, sea-bird movements were rather poor, although this is usually the best time for many species, and some were rather scarce, particularly divers, Gannets, Arctic Skuas, Black and Common/Arctic Terns. It seems likely that the main passage of these had passed unrecorded earlier, and it should be noted that Apr. 9th is an early date for Common/Arctic Terns to be moving in any numbers. Although Arctic Skuas were rather few some Great and Pomarine

Skuas were seen, including 8 of the latter flying E. off Beachy Head on May 1st. Fulmars were also unusually abundant and there was a movement of 24 W. off Selsey Bill on May 8th in a southerly gale. Rarer sea-birds seen were a Gull-billed Tern on May 7th and a Roseate Tern on Apr. 30th, another very early date.

There were no outstanding falls of passerines during the period and the general picture throughout the spring was of steady movements in rather small numbers rather than one big rush such as occurred in early May, 1965. Such peaks as were discernible occurred between Apr. 8th and 10th, with the largest Swallow and Wheatear movements and fairly large falls of *phylloscopi*, and between the 16th and 23rd, with the largest movements of Sand Martins, Whinchats, Redstarts, Whitethroats and *phylloscopi* and fairly large falls of Wheatears. More unusual species with these movements were a Red Kite on Apr. 6th, 5 Hoopoes, including 3 together on the 15th, Bluethroat on the 23rd, Firecrests on the 8th and 10th, both birds staying to 11th and the outstanding bird of the spring, a male Desert Wheatear at Beachy Head from 17th to 21st. Wader passage was also unexceptional. The peak Whimbrel passage occurred about May 7th but species such as Bar-tailed Godwits, so often a feature of the spring sea watches, were few.

May, a quiet month for movements produced, as usual, some uncommon or rare species. At the beginning of the month there was a Little Bittern at Steyning and a Little Egret was seen in Chichester Harbour. Two Kentish Plovers were reported on the 10th and 2 more Hoopoes were seen, on the 5th and 6th and between the 7th and 14th. Other unusual records were a Quail coming in off the sea at Selsey Bill and a very late Fieldfare at Pilsey Island on the 22nd.

There was little movement in June but another Hoopoe was seen in the middle of the month and a Spoonbill was present at Sidlesham Ferry from the 19th to 26th.

The Breeding Season

It was an excellent breeding season, particularly for passerines, despite a set-back in April due mainly to the blizzard on the 14th. Although its impact on breeding birds was only sparsely documented this was observed to have a disastrous effect on early Chaffinch nests at Plumpton and all Stonechals in the Marley area lost their first clutches. Some hirundines were also found dead but Swallows at any rate were little affected. House Martins were possibly harder hit and several observers have commented on their subsequent scarcity. Foliage was also slow in breaking in April and a high nest predation rate was noted at Plumpton as a consequence. Later broods were much more successful and in particular thrushes, tits and finches were noted as having a very good season.

The annual Heronry census revealed little change compared with 1965 and, in the Society surveys, counts of Redshank showed a similar overall picture, although there were local variations. However, counts of Snipe and Yellow Wagtail indicated declines of both species, most marked with the latter. Great Crested Grebes were also fewer but without a complete census this may not be significant. There was a notable increase in Kestrels, about 20% on the Downs and Coastal Plain, and they had another good breeding season. Other raptors also did well and both Buzzards and Sparrowhawks had increased; the latter species is clearly re-establishing itself in the county. There were also more breeding season records of Hobbies than in any year since 1947.

The Woodland Survey revealed some increase in Green Woodpeckers, Nuthatches and Long-tailed Tits and a further marked increase in Wrens.

Most other species had varied little from 1965 but Great Tits were rather fewer, perhaps only an annual fluctuation, and Nighthawks continue to decrease.

The policy of making special requests for breeding information on certain species has obviously paid dividends, resulting in many more records as the Systematic List shows. These records cannot yet be used comparatively but some species, for example Kingfisher, Grey Wagtail and possibly Barn Owl are evidently less scarce than previously thought. Woodlarks, however, are still very rare; only 3 pairs were found, with birds present in one other area. Eight pairs of Teal were recorded, more than usual, but again no comparisons can be made.

Of the less common breeding species Garganey were scarce, only 3 pairs being noted. Shoveler were found in one more area than in 1965 and Pochard summered in 4 localities. This seems to be an increasing tendency and the species may possibly establish itself as a regular breeding bird in the future. Fulmars once again summered in the Beachy Head area but breeding has yet to be proved. Fewer Quail were present than in the previous two years being noted in only 4 localities and no breeding Black Redstarts were found. Once again Golden Orioles were present, in the same locality as in 1965; breeding was not proved but may have occurred. A second pair was seen elsewhere in May but could not be found on subsequent visits. Dartford Warblers maintain their numbers at their main station and a pair bred successfully in a new site. Finally terns did quite well. The Rye Ternery continues to survive and 49 pairs of Common Terns were found in another site. Little Terns show some sign of increasing and 3 pairs of Sandwich Terns bred, our first breeding record.

Autumn Migration

The first major event of the autumn was the Crossbill invasion. A few had been seen in June but the main influx was in early July and during the month about 400 were recorded in parties widespread over the county. They were still fairly numerous in August and a further influx occurred in September.

After a rather wet June, July was mainly dry and sunny, with westerly winds throughout the month.

As usual there were some signs of returning wader passage in late June, with a scattering of Green and Common Sandpipers being recorded. Wader passage continued in July but on a smaller scale than in the previous two years. Although the peak Curlew count occurred on the 17th, the main movements of most species were not until August and September. There was a large Swift movement on July 16th when c.1,000 flew W. at Langney Point, and as last year, chat and warbler passage had started by the end of the month. One rarity was seen, a Caspian Tern at Chichester G.P. from the 11th to 13th and again on the 31st.

The westerly weather of July continued into the first fortnight of August, when rainfall was rather high. The rest of the month was fine and hot with fairly constant E. winds. This fine easterly weather continued through September, except for a short break of about 6 days in the middle of the month.

There were some large Swift movements in early August, particularly on the 7th when c.1,500 flew W. at Beachy Head, and 13th when c.1,000 flew SW. There and similar numbers left Selsey Bill. The first large movements of chats, warblers and flycatchers also occurred in the first week of August and passage of these species continued steadily throughout the period. As with the spring, peaks were less clearly defined than in 1965, perhaps because of the more settled weather. The largest movements were noted between mid-August and mid-

September, particularly between Aug. 21st-31st and Sept. 7th-11th. Few species peaks coincided but the largest falls of Whinchats, Redstarts, Reed and Sedge Warblers, Garden Warblers, Whitethroats, Lesser Whitethroats and Tree Pits at Beachy Head occurred in the first period, and of Turtle Doves, Wheat-ears, Blackcaps, *phylloscopi* and Spotted Flycatchers in the second. Unusual numbers of Pied Flycatchers were associated with these movements and the autumn total of c.120 birds was much higher than in any year since 1947. Firecrests were also quite numerous at Beachy Head and records included 4 there on Sept. 11th.

Other rarer species noted were a White-winged Black Tern at Chichester G.P. from Aug. 27th to 30th, 5 Hoopoes between Aug. 17th and Sept. 11th, 5 Wrynecks between Aug. 27th and Sept. 11th, 5 Bluethroats between Aug. 29th and Sept. 17th, Melodious Warblers on Aug. 14th and 21st, Tawny Pits on Aug. 28th and Sept. 18th, Ortolan on Sept. 18th and 2 or 3 Lapland Buntings between Sept. 21st and 25th. Four other *hippoboscids* warblers were also seen between Aug. 18th and Sept. 3rd but were not specifically identified.

Peak passage of Yellow Wagtails occurred at the end of August and most hirundine movement was in September, with peaks over the 7th, 9th and 17th/18th. The largest Meadow Pipit movements were at the end of September, with, as usual, small numbers of Grey and *alba* wagtails also moving at the same time. Finch passage had also started at this time but the peak movements were in October.

October

The October weather was much more variable and unsettled than in 1965 with much rain, mainly heavy storms. Apart from a spell of easterlies between 12th and 16th and north-easterlies from 24th to 31st winds were westerly.

Passage of many summer visitors continued well into October and a large fall at Beachy Head on the 9th included 15 Wheatears, 6 Redstarts, 50 Blackcaps, 3 Whitethroats, 2 Lesser Whitethroats, 80 *phylloscopi* and single Whinchat, Reed Warbler, Pied Flycatcher and Tree Pipit. There was also a large hirundine movement at this time and, with extensive thrush movements also taking place, this proved to be one of the busiest periods of the autumn.

Ring Ouzels again provided an outstanding feature of these October movements and were even more abundant than in 1965. The largest numbers were again at Beachy Head where a total of over 400 was recorded, with a maximum of c.200 on the 9th. They were fairly widespread elsewhere along the coast with a total of c.53 being seen. There were also large movements of other thrushes. The first Fieldfare had been recorded on Sept. 23rd, a rather early date, and the first Redwing was seen on Oct. 8th, and passage of both species and of Song Thrushes and Blackbirds was marked throughout the month. Two other species, Goldcrests and Black Redstarts, were associated with these movements in rather larger numbers than usual. There were large falls of the former at Beachy Head on the 2nd, 9th and 16th and the autumn total of c.37 Black Redstarts was very high and included a count of 10 at Beachy Head on the 15th. Rarer species were few but Firecrests were seen on three dates during the month, and an Ortolan was seen on the 2nd. Four Ospreys were also seen during the month and the first of an unusual influx of Great Grey Shrikes appeared on the 16th.

As in 1965 there were some very late records of summer visitors. A Garganey was seen on the 29th, 2 Swifts on the 6th, Whinchat on the 29th,

Redstart on the 25th, Grasshopper Warbler on the 15th, Reed Warbler on the 22nd, Garden Warbler on the 16th and a Spotted Flycatcher on the 25th. The Grasshopper Warbler, Reed Warbler and Spotted Flycatcher records are the latest for the county.

Visible finch passage during the month again presented few unusual features but movements, particularly of Linnets, Chaffinches, Bramblings and Tree Sparrows, were rather larger than in 1965. Peak movements of most species occurred in the middle of the month but most Chaffinch passage occurred at its end.

At the end of the month one of the most important events of the autumn took place, the influx of Rough-legged Buzzards. The first was recorded on the 28th and a total of between 7 and 11 was eventually reported, more than in any year since 1910. Some birds apparently moved through the county but about 5 remained to winter. Apparently associated with this influx were unusual numbers of other predators; namely Hen Harriers, Merlins and Great Grey Shrikes. Hen Harriers were particularly abundant, some 14 birds being seen and at least 8, possibly more, remained to winter, but all three species were more numerous than for a number of years.

Waders

Compared with the previous two years there was little wader passage in late June, and July movements were smaller. Peak passage of most species occurred in August and September and the earlier peak in July, often noted in the past, did not occur.

Numbers of some species, Lapwing, Golden Plover, Curlew, Whimbrel, Common Sandpiper, Redshank, Little Stint and Ruff were lower than in 1965, Redshank and Ruff being markedly fewer. Most other species were more numerous and two, Bar-tailed Godwit and Knot, exceptionally so. The peak counts in Chichester Harbour of 1,300 Bar-tailed Godwits on Sept. 18th and 520 Knot on October 16th were both county records and Knot continued to be present in larger numbers than usual for the rest of the year. Uncommon species were few but a Dotterel was seen on Aug. 17th, a flock of 21 Avocets on Oct. 8th and the autumn total of 11 Curlew Sandpipers was rather higher than last year. No phalaropes were seen.

Seabirds

It was again an unexceptional autumn for seabirds, without outstanding movements and in particular Arctic Skua and tern passage was rather poor. However, divers and Gannets were rather more numerous than in 1965, divers especially so in November, and there were more autumn records of Fulmars than usual, including one on Oct. 15th, a late date. Kittiwakes continued to be scarce and the autumn total of c.10 Little Gulls was less than last year. Four shearwaters were seen, a Manx, a Balearic and a Sooty on Sept. 4th and another Sooty on Oct. 2nd. Other unusual species were 4 Great Skuas, a Pomarine Skua on Aug. 13th, Roseate Terns on Aug. 31st and Sept. 4th and a Leach's Petrel on Oct. 19th.

In late October and November there was some interesting offshore passage of wildfowl, involving such species as Widgeon and Brent Geese and associated with this were unusual numbers of Long-tailed Ducks. Most were recorded at Selsey Bill where a total of 25 flew W. between Oct. 15th and the end of the year.

The Early Winter 1966/67

The spell of dry cold weather with NE. winds in late October continued until Nov. 5th but thereafter mild westerly weather prevailed for the rest of the year; rainfall was average.

Thrush and finch passage continued in November but on a much smaller scale than in October, although there was a fairly large arrival of Chaffinches at Beachy Head on Nov. 20th. Ring Ouzels were still moving to the 7th, about 17 birds being involved, and a Yellow-browed Warbler was seen at Beachy Head on the 13th, staying to the 17th. Some other late summer visitors were seen in November and December. In November, 2 Whimbrel on the 13th, Common Tern on the 7th, Sand Martins on the 13th and 19th, Wheatear on the 9th and Blackcap on the 22nd and, in December, a Common/Arctic Tern on the 30th and 31st, Swallow on the 25th, House Martins on the 9th, 11th and 12th and a Blackcap on the 14th, were all late. There was some argument about the specific identity of the December tern, but Arctic seems most likely at this time.

Wildfowl numbers in the period, with the notable exception of Pintail, were generally rather higher than in late 1965, Shoveler being particularly abundant at Glynde, where the largest concentrations of surface feeding species were recorded. Scoter numbers in the Rye area were also noteworthy and the maximum of c.700 there at the year's end was greater than for a number of years, although records for many recent years are incomplete. A Surf Scoter was seen at Rye Harbour on Dec. 3rd, the first county record.

Brent Geese attained a maximum of c.900 in Chichester Harbour in December and about 60 Whitefronts were seen during the period, with 40 flying S. over Berwick on Nov. 14th as the largest party. Twelve Greylags flew W. off Beachy Head on the 19th and a single bird remained in the Glynde area from the 11th to the end of the year. Four Whoopets were reported in December and about 40 Bewick's Swans in both months.

Wader populations, as shown by the December count along the coastline, were rather lower than in 1965, but, in view of the difficulties being encountered with this survey as outlined on page 59, this may not be significant. The complete absence of Black-tailed Godwits, however, was most unusual and the low counts of Lapwing, Curlew and Redshank seem genuine.

Records of winter passerines were much as usual but there was another influx of Bearded Tits. The first were recorded on Oct. 22nd and, by the end of the year, c.45 individuals had been seen in 7 localities; most were seen in November. Both Siskins and Redpolls were more widely reported than in late 1965 and Twite were again fairly widespread on the coast. Crossbills, after 2 Chiffchaffs were found wintering.

The main interest of this period was undoubtedly provided by predators. As already noted about 5 Rough-legged Buzzards and at least 8 Hen Harriers were wintering. Great Grey Shrikes were also more common than usual, with at least 5 wintering, and a similar number of Merlins was present. One or two Sparrowhawk records suggest that this species may also have been involved in this influx of predators and 2 Peregrines were seen, one wintering at Glynde and one at Sidlesham on Dec. 30th. Short-eared Owls, however, were unusually scarce and only 3, a very low number compared with most recent years, were seen in December.

Other unusual winter visitors were an Avocet in Chichester Harbour on Dec. 11th and 18th, at least one Mediterranean Gull in the Chichester Harbour/Pagham Harbour/Selsey area during the period and a Shorelark at Newhaven on Dec. 17th, our first record since 1963.

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Wildfowl counters for 1966 season:

R. B. Barstow (Powdermill Res.), J. W. Clark (Barcombe Mills Res.), D. R. Coda (Glynde Levels), J. Fowler (Chichester G.P.), E. S. P. Harrison (Cuckmere Valley and Seven Sisters), Miss V. Maxse (Burton Ponds), G. M. Moll (Knepp Lake and Warnham Mill Pond), M. H. Port (Weir Wood Res.*), J. Reaney (Darwell Res.*), H. P. Kay-Robinson (Pagham Harbour), A. B. Sheldon (Amberley* and Pulborough Levels*); T. C. Hale, Dr. M. Hollings, B. A. E. Marr, M. Shrubbs, E. T. Welland (Chichester Harbour).

* Priority Count Localities

CLASSIFIED RECORDS FOR 1966

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** (*Colymbus arcticus*).—One on Newells Pond, Horsham, on Feb. 19th; one, oiled, at Camber on Feb. 23rd; one in s/p off Selsey Bill on Apr. 23rd and 24th. Satisfactory details have been received.

2. **GREAT NORTHERN DIVER** (*C. immer*).—Two in Chichester Harbour until Mar. 26th; one off Selsey Bill on Mar. 13th and 20th. Satisfactory details have been received.

4. **RED-THROATED DIVER** (*C. stellaris*).—In the early months only 10 recorded at the coast, including a total of 5 oiled at Pagham Harbour. Two at Chichester G.P. on Mar. 26th and one at Darwell Res. on Mar. 13th.

In the autumn the first recorded were 2 off Selsey Bill on Sept. 24th and up to 4 there in October and November. Only 5 other birds at the end of the year.

DIVER SPECIES (*Colymbus sp.*).—At Selsey Bill totals of one E. and 16 W. in 6 days watching in January and 4 E. and 13 W. in 7 days in February. Fifteen off Pett Level on Jan. 23rd. Spring movements were again small, with 44 E. and 5 W. off Selsey Bill in 32 days watching March to May, peak 17 E. on Apr. 9th and 53 E. and 5 W. off Beachy Head in 30 days in the same period, peak 14 E. on Apr. 23rd.

More numerous in the autumn. At Selsey Bill totals of 56 E. and 111 W. in 27 days watching October to December, with peaks of 17 E. and 10 W. on Nov. 26th and 16 W. on Dec. 11th. Recorded on 3 dates at Beachy Head with a maximum of 15 E. on Nov. 20th.

5. **GREAT CRESTED GREBE** (*Podiceps cristatus*).—Few recorded offshore during the early months; a total of 23 in 3 localities, with 15 off Pett on Feb. 28th as the largest party. At 3 inland localities there was a total of 15 in January and 30 in February. In May one flew E. off Worthing on 1st, one flew W. off Selsey Bill on 8th and one at Manhood End, where it does not now breed, on the 28th. One in s/p off Thorney on June 5th.

A complete census of breeding birds was not made but pairs were recorded as follows:

Locality	No. of pairs	Locality	No. of pairs
Chichester G.P.	20 (21)	Balcombe Lake	2 (1)
Burton Park	2 (3)	Pond Leigh	1 (0)
Knepp	1 (4)	Frosted Keynes	1 (0)
Warham Mill Pond	1 (2)	Weir Wood Res.	2 (1)
Hammur Pond	1 (1)	Darwell Res.	1-2 (3)
Barnhouse Pond	0 (71)	Petworth Park	1 (1)
		Pett Level	1 (1)

Figures in brackets are for 1965.

BREEDING SUCCESS 1966

Pairs reported 40-43	Pairs known to have raised young 18	Young recorded 40	Average brood size 2.22
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This table does not include records from Chichester G.P. where the only count of young was of 11 on July 29th.

Two in s/p in Seaford Bay on July 6th. In November and December a total of 29 in 2 inland localities and a total of 33 at 6 localities along the coast.

6. **RED-NECKED GREBE** (*P. griseigena*).—An unusual number of records. In January 2 off Pilsey Island and one, badly oiled, at Newhaven on the 23rd and one off Selsey Bill on the 30th. One at Rye Harbour G.P. on Feb. 13th and 20th and apparently a different bird there on the 27th. One off Beachy Head on Mar. 20th and one off Selsey Bill on Apr. 10th and 16th.

One at Langney Point on Aug. 30th, the fourth August record for the county. In October single birds at Langney Point on 2nd, at Newhaven Tidemills, from 3rd to 25th and at Church Norton on 23rd. One at Darwell Res. from Nov. 5th to 25th, inland records are most unusual. Satisfactory details have been received of all these records.

7. **SLAVONIAN GREBE** (*P. auritus*).—Single birds near Exceat on Jan. 7th and 12th and at East Head on 9th. One at Amberley, a most unusual locality, on Feb. 13th. Single birds at Pett Level on Feb. 13th and 20th, at Rye Harbour G.P. on 27th; at Chichester G.P. from Mar. 1st to Apr. 17th and off Church

Norton on Mar. 27th. In April up to 5 off Church Norton from 3rd to 13th, 3 off Beachy Head on 16th and one there on 17th.

At the end of the year single birds at Church Norton on Oct. 16th, at East Head on 29th, at Thorney and Selsey Bill on Dec. 11th and in Pagham Harbour on 22nd and 23rd.

On Jan. 16th there was a party of 16 small grebes, either this species or the next off East Head.

8. **BLACK-NECKED GREBE** (*P. caspicus*).—Single birds off Pilsey on Jan. 23rd, at Fishbourne on Feb. 20th and off Selsey Bill on Mar. 27th.

Single birds off Pett Level on Sept. 7th and Nov. 7th and off Beachy Head on Nov. 12th. Two off Pilsey on Nov. 13th.

9. **LITTLE GREBE** (*P. ruficollis*).—In January and February c.50 recorded along the coast in 6 localities and 12 in 3 inland localities; maxima were 23 at Newhaven Tidemills in January and 15 at Pagham Lagoon in January and February.

Breeding pairs were recorded as follows:

Locality	No. of pairs	Locality	No. of pairs
Chidmere, Chidham	2	Swaubourne Lake	2
Severals Church Norton	1	Burton Pond	1
Sidlesham Ferry	1	Petworth Park	1
Pagham	1	Shillinglee Park	2
Chichester G.P.	c. 4	Steyning Mill Pond	1
West Harting Pond	c. 1		

Birds were also present in the breeding season at Aldsworth Ponds, Wiston Park, Weir Wood Res. and Piddinghoe Pond. All breeding season records of this species would be welcome.

At the end of the year 20 at Pagham Lagoon and Newhaven Tidemills during November and December and smaller parties totalling c.20 birds recorded in 4 other localities along the coast and 19 recorded in 4 inland localities.

12. **LEACH'S PETREL** (*Oceanodroma leucorhoa*).—One picked up exhausted in Saltdean on Oct. 19th and taken to the Patcham Sanctuary where it was seen by CFH *et al.* It was released on the 22nd. A description has been recorded.

16. **MANX SHEARWATER** (*Procellaria puffinus*).—Birds showing characters of the race *puffinus* were one W. off Selsey Bill on May 8th (PGHF, RJJ, HPKR, ETW) and one W. there on Sept. 4th (HPKR).

Birds showing characters of the race *mauretanicus* were one W. c.400 yards out off Langney Point on July 16th (KV) and one W. off Selsey Bill on Sept. 4th (HPKR, MS).

21. **SOOTY SHEARWATER** (*P. grisea*).—One flew W. off Beachy Head on Sept. 4th (PC, RHC, MCR). One flew W. off Selsey Bill on Oct. 2nd (HPKR, ETW).

26. **FULMAR** (*Fulmarus glacialis*).—Many more records than usual. First recorded on Mar. 6th at Beachy Head and 5 pairs present there, on the cliffs, until July 23rd. At Selsey Bill a total of 6 E. and 58 W. in 32 days watching between Mar. 27th and June 29th, peaks were 24 W. on May 8th and 6 W. on

May 30th. One flew W. overland at Church Norton on Apr. 2nd. Elsewhere along the coast up to 4 in several localities in April, May and June. In the autumn 4 records in August and 3 in September, and one off Beachy Head on Oct. 15th.

27. **GANNET** (*Sula bassana*).—One W. off Selsey Bill on Jan. 2nd and 8 W. there on Feb. 6th. One picked up dead at East Dean (West Sx.) on Feb. 13th and one in Preston Park, Brighton on the 22nd. In the spring 7 E. and 52 W. off Selsey Bill in 22 days watching in March and April, peak 22 W. on Apr. 24th. Off Beachy Head 28 E. and 17 W. in 22 days watching in April and May. On May 29th 24 E. off Worthing.

In the autumn 80 E. and 206 W. off Selsey Bill in 47 days watching August to November, with peaks of 64 W. over Oct. 1st/2nd and 28 E. on Nov. 19th. Recorded on 10 dates at Beachy Head and 10 W. there on Sept. 4th. Seven W. off Selsey Bill during December.

28. **CORMORANT** (*Phalacrocorax carbo*).—The only coastal records received were up to 25 regularly off Selsey Bill during the year; 20 W. off Beachy Head on Oct. 22nd and 25 offshore there on Dec. 11th.

Inland records during the year were: 15 at Chichester G.P. on Jan. 2nd, one there on May 7th and 8 on Dec. 23rd; 2 at Amberley Wildbrooks on Feb. 6th and Mar. 5th and again on Dec. 11th; one at Burton Pond on Feb. 6th and 2 on Mar. 13th; 3 at Darwell Res. on Feb. 26th; one at Swanbourne Lake on Oct. 8th and one at Glynde on Dec. 29th.

29. **SHAG** (*P. aristotelis*).—One or 2 recorded regularly off Selsey Bill until May and 4 there on Feb. 19th. One in Southwick Harbour on Jan. 23rd and 2 off Beachy Head on Mar. 20th.

Up to 3 in the Pagham/Selsey Bill area at the end of the year and 2 off Beachy Head on Nov. 6th.

30. **HERON** (*Ardea cinerea*).—All known Heronries were visited, the numbers of occupied nests were: Old Park Wood, Fishbourne, 21; Pagham, 6 on Mar. 22nd but only 3 eventually produced young; Parham, 25; Henfield, 5; Firle, 6-8; Glynde, one; Preisthaves, 2; Glynleigh, 3 plus one other possibly in use; Eridge Park, 8-10 plus 3 more possibly in use; Westham, 2; Leasam, 14. The total of 93-97 occupied nests plus 4 more possibly in use suggests little change from 1965. Two or 3 juveniles were again present at Lurgashall Pond at the end of the breeding season.

On Jan. 13th one swimming on Patching Pond; similar behaviour was recorded at Chichester G.P. on July 12th and 15th (*Brit. B.*, 60, 49-50).

Records indicating migration were one out SE. at Selsey Bill on June 19th and single birds out SW. there on Aug. 6th and Nov. 20th, out S. on Nov. 6th and out SE. on Oct. 22nd. One out SW. at Beachy Head on Sept. 15th.

32. **LITTLE EGRET** (*Egretta garzetta*).—One in Chichester Harbour on May 3rd (MS). This record has been accepted by *Brit. B.*

37. **LITTLE BITTERN** (*Isobrychus minutus*).—An adult male at Steyning Mill Pond from Apr. 30th to May 5th (BM, RJS *et al.*). This record has been accepted by *Brit. B.*

38. **BITTERN** (*Botaurus stellaris*).—One at Chichester G.P. from Jan. 16th to 29th. One watched at very close range on Pevensey Levels on Apr. 10th.

42. **SPOONBILL** (*Platalea leucorodia*).—One in the Sidlesham Ferry/Pagham area from June 19th to 26th (many obs.) and one in Pagham Harbour on July 18th (WWAP).

Ducks.—The table below sets out the recorded monthly maxima of the principal species at certain of the most important wintering areas in the county. For the first time systematic counts were made in Chichester Harbour. These were made at the same time as the wader counts, covering the same localities, i.e., Pilsay Island, Thorney Deep, Chidham and Chichester Channel from Birdham to Fishbourne. The figures in parentheses are the dates on which each count was made. The systematic list is largely confined to records outside the scope of this table.

MONTHLY MAXIMA OF DUCK AT SELECTED LOCALITIES

	Jan.	Feb.	Mar.	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Harbour								
Mallard	—	—	20 (20)	—	—	78 (16)	90 (13)	99 (11)
Teal	40 (23)	—	—	—	56 (18)	28 (16)	99 (13)	53 (11)
Wigeon	1775 (23)	—	—	—	28 (18)	10 (16)	96 (13)	400 (11)
Princal	90 (23)	54 (20)	—	—	0	1 (16)	12 (13)	28 (10)
Shoveler	—	—	—	—	5 (18)	3 (16)	13 (13)	3 (11)
Shelduck	3000 (30)	3400 (6)	530 (20)	—	199 (18)	295 (16)	546 (13)	530 (11)
Pagham Harbour								
Mallard	210 (16)	230 (13)	70 (13)	—	30 (18)	128 (16)	77 (13)	285 (18)
Teal	65 (16)	120 (13)	10 (13)	—	0	2 (16)	3 (13)	100 (8)
Wigeon	1750 (19)	150 (13)	45 (13)	—	0	9 (16)	225 (25)	300 (21)
Shelduck	500 (30)	450 (14)	150 (2)	—	40 (18)	24 (16)	120 (13)	250 (11)
Chichester G.P.								
Mallard	500 (23)	255 (13)	5 (13)	680 (27)	300 (18)	650 (16)	149 (13)	305 (18)
Teal	200 (23)	8 (13)	0	—	4 (18)	100 (16)	0	24 (18)
Wigeon	24 (16)	18 (13)	0	—	6 (18)	0	0	24 (18)
Shoveler	53 (16)	24 (14)	0	3 (27)	0	26 (29)	40 (12)	45 (22)
Tufted Duck	245 (16)	225 (13)	85 (13)	—	35 (18)	59 (16)	91 (13)	128 (30)
Pochard	245 (16)	190 (13)	4 (13)	—	23 (18)	48 (16)	115 (13)	135 (18)
Amberley/Pulborough								
Mallard	25 (16)	170 (13)	70 (13)	—	10 (18)	15 (16)	4 (13)	50 (18)
Teal	70 (6)	480 (6)	170 (13)	—	2 (-4)	200 (30)	50 (6)	30 (18)
Wigeon	150 (30)	1100 (6)	2225 (5)	—	0	300 (30)	50 (6)	255 (18)
Princal	24 (23)	75 (20)	30 (5)	—	0	0	0	0
Shoveler	0	35 (20)	15 (5)	—	0	5 (30)	0	0
Weir								
Wood Res.	—	—	—	—	—	—	—	—
Mallard	630 (16)	60 (13)	17 (13)	150 (12)	150 (18)	200 (2)	60 (13)	250 (18)
Teal	12 (16)	8 (13)	8 (18)	—	100 (18)	75 (2)	60 (17)	60 (17)
Wigeon	130 (16)	92 (13)	31 (18)	—	0	6 (16)	6 (13)	80 (17)
Tufted Duck	91 (16)	150 (19)	45 (13)	—	52 (18)	140 (2)	38 (13)	145 (18)
Pochard	117 (16)	100 (23)	7 (13)	—	8 (18)	80 (25)	80 (5)	57 (18)
Glynde Levels								
Mallard	300 (16)	400 (13)	68 (13)	—	24 (18)	40 (16)	100 (13)	1000 (30)
Teal	350 (16)	350 (13)	35 (13)	—	7 (18)	75 (16)	100 (13)	2000 (30)
Wigeon	2000 (1)	3000 (27)	300 (13)	—	0	0	150 (13)	450 (18)

NOTE: A dash indicates that no information was available.

45. **MALLARD** (*Anas platyrhynchos*).—In January 450 at Swanbourne Lake and 140 at Knepp on the 16th, 410 at Darwell Res. on the 15th, and 200 in Rye Bay on the 31st. In February 60 at Lurgashall Pond and 135 at Burton Pond on the 14th and 120 at the Midrips/Wicks on the 19th. Up to 200 off Selsey in both months.

Counts of breeding pairs were as follows: Chidmere, Chidham, one; Pagham-Sidlesham Ferry-Selsey-Bracklesham, 49; West Harting Pond, 4; Lavant, 9; Lower Arun marshes, 5; Amberley/Pulborough marshes, 8+; Steyning Mill Pond, one; Barcombe Mills, 2 or 3; Church farm, Littleington, 2; Pevensey Levels, 7 or 8; Rye Harbour G.P., 3. Fourteen broods totalling 97 young were recorded.

At the end of the year up to 400 at Warnham Mill Pond on Sept. 18th; up to 260 off Selsey in October and November and 430 there at the end of December; up to 500 in Rye Bay in November and December; 60 at Bayham on Oct. 13th; 150 at Knepp and c.125 off the Cuckmere on Dec. 18th and 300 at Barcombe Res. on the 20th.

46. **TEAL** (*A. crecca*).—On Jan. 9th 70 on Pevensey Levels.

In the breeding season 8 pairs were recorded as follows: Sidlesham Ferry, one; Lurgashall Pond, one; Shillinglee Park, 2; Weir Wood Res. 2, one rearing 8 young; Bayham, at least one, probably more; Midrips/Wicks, one with a nest, c/5, on May 14th. Birds also recorded at Aldsworth Ponds, Chichester G.P. and Knepp. In July up to 5 at the Midrips/Wicks, 4 at Barcombe Mills on the 17th, 11 in Pagham Harbour on the 18th and 7 at Thorney on the 21st. C.200 on Pevensey Levels on Oct. 30th, and up to 50 in the Selsey area during November and December; 100 at Powdermill Res. on Dec. 18th and 100 at the Midrips/Wicks on the 30th.

47. **GARGANEY** (*A. querquedula*).—One at the Severals, Church Norton, on Mar. 12th was the first recorded but no other March records. In April one E. off Selsey Bill on the 9th and small numbers elsewhere along the coast, with a maximum of 4 at the Midrips/Wicks on the 28th.

In the breeding season only one pair was located on Pevensey Levels and single pairs were present in 2 other localities; a male was seen at Barcombe Mills on June 13th and July 18th.

Few autumn records but 10 at the Midrips/Wicks on July 30th, and at Barcombe Mills 16 on Sept. 4th and 12 on the 24th and one on Oct. 29th, a very late date; satisfactory details have been received.

49. **GADWALL** (*A. strepera*).—Rather more records than usual. At Chichester G.P. wintering birds were again present at both ends of the year, with up to 10 during January and February and up to 12 during November and December. Other records were: 6 at Swanbourne Lake on Jan. 16th; one at the Severals, Church Norton, on Feb. 13th and 2 there on Mar. 17th; 2 at Wiggonholt on Feb. 13th and 5 near Pulborough on the 20th; one at Glynde on Mar. 6th.

Four at the Severals, Church Norton, on Oct. 2nd, up to 3 there during November and 2 on Dec. 31st; one flying E. off Hove on Oct. 7th; one at Darwell Res. on the 30th. Two at the Midrips on Oct. 29th and Dec. 22nd and one at Swanbourne Lake on Nov. 20th.

50. **WIGEON** (*A. penelope*).—Up to 300 off Selsey during January and February; 100 in Rye Bay on Jan. 17th; 250 at Knepp, 150 at Pett Level and 80

at the Midrips/Wicks on Feb. 13th and 250 off Seaford Head on the 20th; 250 on Wet Level (Rother Valley East Sussex) on Mar. 5th and 90 there on the 19th.

Two at Chichester G.P. on May 4th and one in Pagham Harbour on the 7th. In July there were up to 3 in the Pagham area.

In November 35 E. and 148 W. off Selsey Bill in 8 days watching, maximum 86 W. on the 29th. There were also up to 80 offshore there in November and December. In December 80 at Newhaven and c.300 off the Cuckmere on the 18th.

52. **PINTAIL** (*A. acuta*).—In January 10 at Glynde on the 1st and 10 off Ferring on the 15th. Seven at Burton Pond on Feb. 29th and 14 at the Midrips on Mar. 13th.

One flew E. off Selsey Bill on Mar. 27th and 2 likewise on May 1st when 4 also flew E. off Beachy Head.

Two at Barcombe Mills on Aug. 21st and 3 flying W. off Selsey Bill on Oct. 28th.

53. **SHOVELER** (*Spatula clypeata*).—In the first months of the year there were small parties in 4 localities not listed in the table, the largest being 20 at Glynde on Feb. 27th. Little evidence of any spring passage.

Records in the breeding season came from 6 well separated localities without proof of breeding, although 17 in Pagham Harbour on Aug. 7th may indicate successful breeding in the vicinity.

On Nov. 19th 36 flew W. off Selsey Bill and in December there were 39 at Barcombe Res. on the 27th and 100 at Glynde on the 30th.

54. **RED-CRESTED POCHARD** (*Netta rufina*).—A male at Chichester G.P. from Sept. 4th to Oct. 21st (many obs.)

55. **SCAUP** (*Anas marila*).—All records were: one at Church Norton on Jan. 1st; one at Chichester G.P. from Feb. 6th to Apr. 6th; one in Pagham Harbour and 7 flying E. off Selsey Bill on Mar. 12th and 8 E. off Selsey Bill on Apr. 9th.

A male, able to fly well, at Rye Harbour G.P. on July 24th. Two at Barcombe Res. from Oct. 28th to Nov. 14th and, in November, one on Pagham Lagoon on the 10th; one W. off Selsey Bill on the 12th and 12 E. there on the 19th. One at Newhaven, Tidemills, throughout November and December. One at Chichester G.P. on Dec. 18th.

56. **TUFTED DUCK** (*A. fuligula*).—In January and February up to 200 on Pagham Lagoon, 30 at Knepp, 70 at Burton Pond and 40 at Shillinglee Park. C.100 on Amberley Wildbrooks on Mar. 5th and 80 at Darwell Res. on Apr. 8th.

BREEDING PAIRS 1966

Locality	Pairs present	Pairs bred	Young recorded	Young reared
Aldsworth Ponds	1	1	?	?
West Harting Pond	3	?	?	?
Church Norton	1	—	16	11
Chichester G.P.	3 + 8 males	3	7	?
Burton Pond	7	3	6	?
Lurgashall Pond	2	1	4	?

TUFTED DUCK BREEDING PAIRS 1966 (Continued)

Locality	Pairs present	Pairs bred	Young recorded	Young reared
Shillinglee Park	1	1	5	2
Shortermill Ponds	1	1	7	3
Warrham Mill Pond	1 + 7 males	—	—	—
Birchen Bridge Pond Leigh	1	—	—	—
Balcombe Mill Pond	1	—	—	—
Barcombe Res.	3 in May	?	?	?
Glynde Reach	4	—	—	—
Sharpthorne	nil	?	?	?
Weir Wood Res.	2	—	10	10
Darwell Res.	4	4	—	25
Rye Harbour G.P.*	Max. of 22 birds	1	?	?
TOTALS	—	17	—	51+

* Access is now restricted to the main breeding areas.

Two off Beachy Head on Nov. 20th. At the end of the year up to 44 on Pagham Lagoon and 50 at Burton Pond; 80 at Powdermill Res. on Dec. 18th.

57. **POCHARD** (*A. ferina*).—C.70 at Burton Pond from January to March and, in January, up to 36 on Pagham Lagoon, 48 at Shillinglee Park and up to 40 at Knepp and Pett Level. In February 42 at West Wittering on the 5th and 54 at Amberley Wildbrooks on the 13th, an unusual number for this locality.

Five off Beachy Head on May 1st. A number of summer records as follows: one in the Pagham Harbour area on May 14th and 29th; a pair at Chichester G.P. on June 25th increasing to 10 there in July; a pair at Weir Wood Res. on May 8th increasing to 10, 7 males, by June 30th; one at Rye Harbour G.P. on June 4th.

Up to 75 at Knepp in October and November; c.275 at Rye Harbour G.P. in November; a maximum of 40 on Pagham Lagoon in December; 60 at Barcombe Res. during December and 50 at Powdermill Res. on Dec. 18th.

60. **GOLDENEYE** (*Bucephala clangula*).—Only small numbers along the coast in the first 3 months of the year, with a maximum of 33 in Chichester Harbour on Jan. 23rd. Inland one at Chichester G.P. from Jan. 4th to Mar. 22nd with 2 on Mar. 3rd; 5 at Burton Ponds on Jan. 23rd and 3 there until Mar. 20th; present at Weir Wood Res. until Mar. 30th with a maximum of 5 on the 13th; one at Darwell Res. until Feb. 19th, when 2; 2 at Wet Level on Feb. 26th and one there on Mar. 5th.

A female with an injured wing in Chichester Harbour on May 22nd. Between Oct. 29th and Dec. 31st a total of 7 flew W. off Selsey Bill. Otherwise at the end of the year 6 records from the coast, maximum 6 in Chichester Harbour on Dec. 11th. Inland one at Barcombe Res. on Oct. 27th and 30th; 3 at Chichester G.P. on Nov. 6th and one at Darwell Res. from Nov. 11th to Dec. 31st. One at Knepp on Dec. 18th.

61. **LONG-TAILED DUCK** (*Clangula hyemalis*).—Two off Selsey Bill on Mar. 12th. An unusual number of records in the autumn, mainly off Selsey Bill where a total of 25 flew W. in 20 days watching between Oct. 15th and Dec. 31st, including parties of 7 and 3 on Nov. 26th. Elsewhere 2 at Pett Level from Nov. 12th to 17th; one at Thorney on Nov. 13th; one at Newhaven, Tidemills, during December; one at Middleton on Dec. 11th.

62. **VELVET SCOTER**. (*Melanitta fusca*).—On Feb. 12th 36 off the Midrips/Wicks; otherwise only 3 single birds in the early months. One flew E. off Selsey Bill on Apr. 15th and 14 likewise off Beachy Head on the 16th.

In the autumn 8 off Pagham beach on Sept. 14th and one E. and 32 W. off Selsey Bill in 10 days watching between Oct. 29th and Nov. 27th. Elsewhere 4 off Langney Point on Nov. 13th and a maximum of 35 in Rye Bay on Dec. 4th.

63. **SURF SCOTER** (*M. perspicillata*).—One at Rye Harbour on Dec. 3rd (RJB, TPD). This record has been accepted by Brit. B. and is the first for the county.

64. **COMMON SCOTER** (*M. nigra*).—The largest number offshore in the early months was c.400 in Rye Bay on Feb. 13th, when 15 were also found dead at Rye Harbour G.P.

SPRING MOVEMENTS TO THE END OF JUNE

Locality	March		April		May		June	
	Days obs.	Peak	Days obs.	Peak	Days obs.	Peak	Days obs.	Peak
Selsey Bill	9	26	13	9192	10	348	10	109
				on 5th 4100				on 22nd
Beachy Head	8	9	13	3250	9	286	—	197
				on 9th				on 1st
				— 1360				on 11th 1002
				on 16th				on 16th

The very large movements of early April were noted right along the coast. No significant movements in the autumn. At the end of the year up to 700 in Rye Bay.

67. **EIDER** (*Somateria mollissima*).—In the first 3 months of the year c.87, 4 adult males, recorded along the coast, with 18 off East Head on Jan. 16th and 25 off Selsey Bill on Mar. 27th as the largest parties. During April c.43 were recorded and in early May c.25 off Selsey Bill decreasing to 8 at the end of the month. Six there during June and birds present there for the rest of the year, with a maximum of 24 on Dec. 4th.

Elsewhere a male off the Midrips/Wicks on July 17th and at the end of the year a total of c.63, one adult male, recorded, including parties of 15 in Chichester Harbour on Nov. 24th and 30 at Rye Harbour on Dec. 3rd.

69. **RED-BREADED MERGANSER** (*Mergus serrator*).—One at Chichester G.P. on Jan. 16th and on the 23rd there were 4 at Darwell Res. which departed NE., inland records are unusual. At the coast 25 off Ferring on Jan. 15th was the largest party recorded in the first 3 months of the year but there were 22 in Thorney channel on Apr. 17th.

In the spring a total of 285 E. off Selsey Bill in 21 days watching in March and April, with peaks of 82 on Apr. 9th and 40 on the 16th. At Beachy Head 78 E. and 1 W. in 17 days watching from Apr. 1st to May 15th, peak 48 E. on Apr. 11th. One flew E. off Selsey Bill on May 21st.

Autumn movements recorded only at Selsey Bill where 56 E. and 167 W. in 27 days watching October to December, peaks 50 W. over Oct. 29th/30th and 27 W. on Nov. 13th. One on the Ouse below Lewes on Nov. 19th. The largest party at the end of the year was 20 in Chichester Harbour during December.

70. **GOOSANDER** (*M. merganser*).—Two at Burton Pond from Jan. 2nd to Feb. 15th; 2 at Weir Wood Res. on Jan. 3rd and one there on the 16th; one at Chichester G.P. from Jan. 16th to 27th. One flew W. off Selsey Bill on Oct. 29th and single birds at Pett Level on Nov. 27th; at Newhaven, Tidemills, on the 30th; at Darwell Res. on Dec. 1st and at Burton Pond on the 30th.

71. **SMEW** (*M. albellus*).—Single birds at Pett Level on Jan. 9th and at Chichester G.P. on Feb. 6th. Two at Money Penny G.P. from Feb. 27th to Mar. 19th and one there until Mar. 29th.

73. **SHELDUCK** (*Tadorna tadorna*).—Inland in the first 3 months of the year there were up to 4 in the Amberley/Pulborough marshes and at Weir Wood Res.; 7 at Darwell Res. on Jan. 9th and 58 flying SW. there on 23rd; 2 at Burton Pond during February; 2 near Hurstmoor on Feb. 13th and 8 at Wet Level on the 26th and up to 80 there in March.

In April c.600 at Thorney on the 17th, 20 at Amberley Wildbrooks on the 21st and 28 flying E. off Beachy Head in 4 days, maximum 21 on the 24th. C.100 at Thorney on May 22nd.

A number of inland records in the breeding season as follows: a pair at West Harting Pond; a pair at Lavant until May 23rd; one at Weir Wood Res. from May 8th to July 14th; 6 in the Cuckmere valley on May 21st; 2 pairs at Pulborough on the 29th and up to 60 on Wet Level until late May. Counts of young were 31 at Thorney/Chidham and 55 at Pagham on June 19th; 40 at Sidlesham on June 20th; 77 at Thorney Deepes on July 17th; 34, reared by 6 pairs, at Rye Marsh and Harbour; 5, reared by one pair, at the Midrips/Wicks.

In the autumn 2 at Weir Wood Res. on Aug. 3rd and 9 flying out SE. at Seaford Head on the 23rd. In December 2 at Amberley Wildbrooks on the 13th and 3 at Wet Level on the 18th.

75. **GREY LAG GOOSE** (*Anser anser*).—Seventeen in Pagham Harbour on Jan. 16th and 2 there on Feb. 18th. In March 2 flying W. over Berwick on the 23rd and 3 on Pevensey Levels on the 28th. One at Glynde Level from Nov. 11th to the end of the year and 12 from the 27th. In February c.50 on Amberley Wildbrooks from the 6th to the 20th; these records have been received.

76. **WHITE-FRONTED GOOSE** (*A. albifrons*).—In January 25 flew W. over Sidlesham on the 14th; one at Sidlesham and 12 on Pevensey Levels on the 16th; 200 at Winchelsea Beach on the 18th; 16 on Pett Level and 42 in the Rye area on the 23rd; 5 on Pevensey Levels on the 21st and one there on the 27th. In February c.50 on Amberley Wildbrooks from the 6th to the 20th; 5 at East Head on the 6th; 11 on Pett Level on the 13th and 8 flying E. off Langney Point on the 19th.

An apparently perfectly healthy bird, which may have been an escape, at Manhood End on May 22nd. At the end of the year 40 flew S. over Berwick

on Nov. 14th and in December 4 flying SW. over Weir Wood Res. on the 21st and 17 flying W. off Rottingdean on the 29th.

78. **PINK FOOTED GOOSE** (*A. brachyrhynchus*).—One from the N. flew off E. over Sidlesham on Oct. 14th (MS). Two flew W. off Selsey Bill on Nov. 19th (ETW).

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

	Jan.	Feb.	Mar.	Oct.	Nov.	Dec.
Chichester Harbour	1,500+	1,500+	200	160	650	900
Pagham Harbour	50	101	60	1	17	20

Elsewhere a total of c.70 birds recorded in January and c.90 in February in small parties scattered along the coast from Shoreham to the Midrips. An injured bird spent the entire year at Pett Level.

In the spring definite E. movement recorded only at Selsey Bill, with a total of 116 E. and 16 W. in 22 days watching in March and April, peak 64 E. over Mar. 12th/13th. Three at Pilsey on Apr. 17th and 4 at the Midrips on the 12th. Autumn arrival was early with 27 in Chichester Harbour on Sept. 18th. Westerly movement on the coast totalled 217 birds on 9 dates between Oct. 22nd and Dec. 5th.

Five showing the characters of the race *hrota* at Pett Level on Feb. 20th and 27th.

82. **CANADA GOOSE** (*Branta canadensis*).—Largest counts for each locality were: up to 70 at Knepp in the first 3 months of the year; up to 89 at Amberley Wildbrooks in February and 10 at Weir Wood Res. on Mar. 13th. Two pairs reared 7 young at Rye Harbour. On Sept. 18th there were 10 at Chichester G.P. and 26 at Knepp; 18 at Weir Wood Res. on Nov. 13th and 119 at Pulborough on Dec. 18th. Up to 10 on Warnham Mill Pond during the year.

85. **WHOOPER SWAN** (*Cygnus cygnus*).—In January 5 from the E. flew off N. at Worthing on the 15th (RJS); 3 at Pilsey on the 23rd (MH) and one at Thorney on the 30th and until Feb. 12th (many obs.). One at Amberley on Feb. 13th (ABS). Four flew W. at Rustington on Dec. 5th (MH).

86. **BEWICK'S SWAN** (*C. bewickii*).—In the first three months of the year there were 5 at Glynde from Jan. 1st to Feb. 27th; c.10 at Amberley Wildbrooks from Jan. 2nd to Mar. 6th; 16 flying SW. over Pagham Harbour and 19 at Chichester G.P. on Jan. 8th; 8 at Darwell Res. from Jan. 9th to 15th; 5 flying W. over the Crumbles on Jan. 18th; 3 on Pagham Lagoon on the 23rd; 2 at Thorney from Jan. 30th to Feb. 12th; 14 on Wet Level on Mar. 5th and 2 there on the 19th.

At the end of the year there were 4 at Thorney on Nov. 4th increasing to 12 by the end of the year; 2 at Wet Level on Nov. 15th increasing to 10 on Dec. 18th; one at Pett Level on Dec. 3rd; 6 at Sidlesham Ferry on the 4th and 7 at Glynde on the 10th with 9 there on the 30th.

91. **BUZZARD** (*Buteo buteo*).—A further increase in records. In the spring single birds flew NE. over Shoreham on Mar. 3rd and Warnham on the 8th.

In April one near Plumpton on the 1st, one E. at Seaford on the 16th and one likewise at Findon on the 24th.

In the breeding season 6 pairs were present, of which one raised 2 young and two others were seen displaying. Single birds present in 3 other areas were possibly connected with these pairs, which appear to be resident throughout the year.

Records suggesting autumn passage were: one E. over Darwell Res. and one N. over Belle Tout on Sept. 6th; single birds flying out SE. at Selsey Bill on Oct. 1st and 9th; at Sidlesham on the 12th and 14th; at Beachy Head on the 21st and another on the 22nd, which flew out SW., and flying N. over Worthing on the 26th and Nov. 21st.

92. **ROUGH-LEGGED BUZZARD** (*B. lagopus*).—An unusual influx occurred in SE. England towards the end of the year and between 7 and 11 were recorded in Sussex between late October and early December. The first was seen on the Downs behind Worthing on Oct. 28th (RJS), which was picked up dead on Nov. 13th (MHP, GAS, JAW); the body was sent for analysis. A second bird was seen there on Nov. 14th which stayed until at least Dec. 4th (many obs.) and a possibly different bird flew W. over Cissbury on Nov. 15th (RJS). At Beachy Head there were 3 on Oct. 29th (KV) and one on Nov. 20th (RHC, MEN). One flew SW. off Goring on Oct. 30th (PH) and there were 2 at the Wicks between Nov. 2nd and Dec. 4th, and 2 in the Falmer/Woodingdean area on Nov. 7th (NAGL); these last were possibly those subsequently seen in the Worthing area. Several stayed on into 1967.

93. **SPARROWHAWK** (*Accipiter nisus*).—A further increase in reports and a genuine increase seems evident, with records widespread over the county. On the coast, in the early months, one at Beachy Head on Jan. 3rd and 2 on Mar. 13th.

In the breeding season 4 pairs were proved to breed, raising 9 young in broods of 4, 2, 2, and one; 13 other pairs were regularly seen and probably bred and a further 18 single birds were recorded, 10 of which were seen more than once. There were 12 other inland records outside the breeding season.

Autumn coastal records were of single birds at Beachy Head on 7 dates between Aug. 22nd and Nov. 10th, one at Sidlesham on Sept. 16th, flying S. and one flying E. on Oct. 29th, 2 at the Midrips on Oct. 30th and one on Dec. 4th and one at Pagham on Nov. 8th and 17th.

95. **RED KITE** (*Milvus milvus*).—One flew NW-SE. over Sidlesham on Apr. 6th (MS).

99. **MARSH HARRIER** (*Circus aeruginosus*).—Four single birds, including a sub adult male, in the Rye/Midrips area between Aug. 24th and Sept. 21st; one on the Downs near Worthing on Sept. 8th and one flying NW. over Beachy Head on Oct. 15th.

100. **HEN HARRIER** (*C. cyaneus*).—In the first months of the year one in the Earham area from Jan. 2nd to 12th and a male in Ashdown Forest on Mar. 13th. A first summer male near Steyning on Apr. 25th may have been on passage.

In the autumn an unusual number of records as follows: at Beachy Head one on Oct. 9th and one from Nov. 27th to Dec. 7th; one at Sidlesham from Oct. 17th to Nov. 3rd; one on the Downs behind Worthing from Oct. 25th to Dec. 30th, with 2 there on Nov. 3rd; 2 at the Rye/Midrips area from Oct. 29th

to Dec. 4th; a male on Pevensey Levels on Oct. 30th and Nov. 5th; one in Rewell Wood from Nov. 7th to 14th and a male there on Dec. 30th; single males in Charlton Forest and the Goodwood area on Dec. 19th; one at Cooden on Dec. 23rd and one at Amberley Wildbrooks on the 27th.

Thus about 14 birds were seen, more than in any autumn since the war. Normally numbers have averaged about 3 with a maximum of 8 in 1956 and none in 1951 and 1961.

102. **MONTAGU'S HARRIER** (*C. pygargus*).—A ring-tail was seen in the East of the county on 4 dates between May 21st and June 25th and there was one at Didling Hill on July 3rd.

In the autumn a ring-tail at Cissbury Ring and an immature at Devil's Dyke on Aug. 20th and single birds at Beachy Head on the 24th and Sept. 3rd.

103. **OSPREY** (*Pandion haliaëtus*).—Fewer records than in 1965 and all in the autumn. One at Weir Wood Res. from Aug. 7th to 17th and another from Oct. 15th to 29th; one at Warnham Mill Pond from Sept. 3rd to 24th and at Knepp from the 8th to 27th were possibly the same; single birds at Amberley on Oct. 10th and Ferring on the 16th when one also flew SW. at Beachy Head.

104. **HOBBY** (*Falco subbuteo*).—First recorded on May 4th. Five pairs certainly bred, 2 raising 2 young each and 2 one young each; success of the fifth pair not known. Six other pairs and 8 single birds were present in different localities in the breeding season.

In the autumn single birds at Beachy Head on Sept. 15th, 21st and 25th, which flew out SE.; one flew out SE. at Selsey Bill on Sept. 25th and one flew W. there on the 30th.

105. **PEREGRINE** (*F. peregrinus*).—More records than in 1965 but still very scarce. One at Beachy Head on Mar. 5th and 6th and one at Thorney on Aug. 20th. At the end of the year single birds at Glynde Level from Nov. 11th to Dec. 18th, Beachy Head on Nov. 27th and Dec. 4th and flying W. over Sidlesham on Dec. 30th.

107. **MERLIN** (*F. columbarius*).—None recorded in the early months. In the autumn rather more numerous than in recent years, with twice as many records as in any autumn since 1960, when 14 were recorded. Records were: one flying W. at Langney Point on Sept. 23rd; one at the Midrips from Oct. 1st to Dec. 4th, with 2 on Oct. 29th; one flying S. at Selsey Bill on Oct. 1st and singles there on the 9th and Dec. 31st; one near Rackham on Oct. 8th; one at Arundel on Nov. 6th; one at Duncton on Nov. 26th and one at Rye Harbour on Dec. 4th.

110. **KESTREL** (*F. tinnunculus*).—The only record indicative of migration in the first half of the year was one flying out SE. at Selsey Bill on Feb. 13th.

Autumn movements were one out SE. at Selsey Bill on Sept. 11th and one likewise on the 18th, when one also came in SW-NE. One out S. there on Oct. 15th and 2 out SE. on Nov. 6th. At Beachy Head one flew W. out at sea on Oct. 2nd.

Breeding Survey

Once again there was an increase in records received and in the area searched in comparison with 1965. All the records were plotted, as in previous years,

on the one-inch O.S. maps and are summarized, using the same method and categories as in 1965. Full details of this survey will be published on completion, it is hoped, in 1967.

1966 RECORDS

Pairs proved to breed (a)	51	Pairs Probably Breeding (b)	69-74	Pairs Possibly Breeding (c)	59-69
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Although the increase shown in these figures is partly due to increased observation, a genuinely higher population in 1966 is evident, at least on the Downs and Coastal Plain, as the table of densities shows. The increase in these areas is of the order of 20%. The density recorded from the Wealden area is almost certainly low as less coverage of this very large area could be achieved. Thus there were only 2 single records from the West Grinstead/Cowfold area where 4 or 5 pairs were present in 1965. Another area of the Weald, near Plumpton, of c.8 square miles was thoroughly searched and the density recorded was one pair to 2.65 square miles.

POPULATION DENSITY

	Area surveyed (square miles)	Number of Pairs	Square miles per Pair
Coastal Plain	29	12	2.42
Downland	11	3 or 4	3.7 or 2.75
The Weald	33.2	12	2.76
	43	16-18	2.68-2.39
	79.5	13	6.1

NOTE: These areas are the same as in 1965.

BREEDING SUCCESS

Pairs proved to breed	51	Pairs known to have raised young (left nest)	105+	Average Brood size	2.24+	Pairs known to have failed	nil
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No nests were investigated in 1966. Two young were picked up dead after fledging. Exact details were not recorded for 4 proven breeding pairs. It is interesting that the average brood size recorded, based on young fledged, has varied very little over the 3 years of the survey.

The survey continues for one more year in 1967, when the Nature Conservancy is also repeating the Small Raptor Survey which first took place in 1964. All records are therefore urgently wanted, not only for our own survey, but for the benefit of the Nature Conservancy to whom all our 1967 records will be sent.

117. **QUAIL (*Coturnix coturnix*)**—Two winter records: one shot at Winchelsea on Jan. 13th and one seen at Sidlesham on Feb. 6th and 7th. Satisfactory details have been received.

One at Beachy Head on Apr. 10th, a very early date for spring passage, and one came in from the S. at Selsey Bill on May 22nd.

Unlike 1964 and 1965 very few summer records and only one from the Downs. These were: one at Winchelsea from June 5th to 7th; one at Amberley Wildbrooks on June 19th; one at Knepp on June 25th and one near Brighton from July 4th to 14th. Only one autumn record, at Beachy Head on Sept. 18th.

120. **WATER RAIL (*Rallus aquaticus*)**.—In the early months of the year 12 recorded in 7 localities. More widespread at the end of the year with c.25 birds in 12 localities; 2 of these were recorded in the Brighton/Hove area, on Nov. 8th and Dec. 4th.

Breeding Survey

Between 7 and 9 pairs were located at 6 sites, 3 of the sites were new. Breeding was only proved at one site where a pair raised at least one young, but at the others pairs were known to be present throughout the season. Birds were also seen at Barcombe Res. during August. Once again none in the levels except for a pair in Pulborough Wildbrooks.

Results of Breeding survey 1962-66

The survey on this species has now been discontinued. Full results will be found on page 53.

121. **SPOTTED CRAKE (*Porzana porzana*)**.—One at Weir Wood Res. on Sept. 26th (CFT).

125. **CORNCRAKE (*Crex crex*)**.—Single birds at Ambersham on May 14th, near Steyning on July 2nd and at Harting on Sept. 22nd.

127. **COOT (*Fulica atra*)**.—Counts during the year at stated localities were as follows:

Locality	Jan.	Mar.	Sept.	Oct.	Nov.	Dec.
Chichester Channel	—	—	—	—	—	300
Chichester G.P.	450	—	300	640	—	920
Swanbourne Lake	—	—	—	—	125	—
Knepp	—	—	—	110	—	75
Weir Wood Res.	200	—	—	—	150	250
Darwell Res.	—	—	—	170	260	315
Pett Level	300	50	—	—	—	—

These figures are the maximum recorded in each month, a dash indicates no figures.

At the Severals, Church Norton, 10-15 pairs bred. An almost complete albino at Chichester G.P. during October.

Waders

As in 1964 and 1965 a series of monthly counts were organised in Chichester and Pagham Harbours, with a count along the whole coast on Dec. 11th. Full results of these counts are tabulated on page 59. The classified list is largely confined to records outside the scope of these tables which should be consulted in conjunction with the list for all 1966 information.

131. **OYSTERCATCHER (*Haematopus ostralegus*)**.—In the first 3 months of the year up to 54 at Climping and 20 at Ferring. C.180 in Pagham Harbour on Jan. 29th. A total of 11 E. and one W. off Beachy Head in 30 days watching March to May.

Breeding pairs were: Chichester Harbour 2, nests c/4 and c/3 being found; Pagham Harbour 2, one reared 3 young; Rye Harbour G.P. 3 raising 6 young, 2 nests c/4 were found but produced only 3 young; Midrips/Wicks 2.

*See also wader count tables page 60

to Nov. 12th; 100 at Winchelsea Marsh on Oct. 30th increasing to c.1,000 by the end of December; c.300 at Selsey on Oct. 31st increasing to c.550 during December; c.1,000 at Pevensey Levels on Nov. 5th and c.500 at Earnley on the 9th.

Birds showing the characters of the northern race *altifrons* were one at Pagham on Mar. 22nd and c.50 there on the 28th and c.100 at Earnley on Apr. 16th.

142. DOTTEREL (*C. morinellus*).—One at the Midrips on Aug. 17th (RHC).

143. TURNSTONE (*Arenaria interpres*)*.—There were 36 at Rye Harbour G.P. on Feb. 28th, 38 on Apr. 29th, 22 on May 12th and one on June 11th. Spring movements were one E. off Selsey Bill on May 7th and 3 in SW-NE, at Beachy Head on the 28th.

In the autumn a maximum of 34 at Rye Harbour G.P. on Aug. 14th. C.90 at Glyne Gap on Oct. 29th. At the end of the year a maximum of 118 at Selsey Bill on Dec. 4th.

145. SNIPE (*Capella 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.	Apr.	Aug.	Sept.	Oct.	Nov.	Dec.
258(8)	160(3)	235(8)	180(7)	35(4)	100(5)	390(6)	1260(6)	240(4)

Largest counts were c.100 at Pulborough Wildbrooks on Feb. 6th; c.85 at Sidlesham Ferry on Apr. 7th; c.150 at Amberley/Pulborough and c.200 at Pevensey Levels on Oct. 30th; c.1,000 at Pevensey Levels on Nov. 5th and 13th and c.150 on Dec. 30th, and c.120 at Glynde on Nov. 13th.

The areas in which the above counts were made were: Thorney, Sidlesham Ferry, Selsey, West Harting Pond, Swanbourne Lake, Amberley/Pulborough marshes, Shoreham, Steyning, Newhaven Tidemills, Glynde Level, Barcombe Res., Weir Wood Res., Pevensey Levels, Pett Level, Winchelsea, Wet Level. In September 2 flew W. at Beachy Head on the 8th and 3 flew E. there on the 10th.

Breeding Survey

A total of 44 pairs found present. Counts were made in all the major levels except Brede Level, but there are as yet few records from the interior of the county where suitable sites are known to exist. The figures for Amberley Wildbrooks and Pevensey Levels are based on single counts made in late May or June. No information on breeding success recorded. The figures show a small reduction in breeding pairs; in areas counted in both years there were 42-44 pairs in 1965 and 34 pairs in 1966.

Area	Extent Surveyed	Number of Pairs	Area	Extent Surveyed	Number of Pairs
Lower Arun valley	North Stoke to Lymminster	5	Adur Levels	Beeding-Wyckham Wood W. of river E. of river	3 ?
Amberley/Pulborough Marshes	All between Amberley-Pulborough E. of the river	11	Ouse valley	S. of Lewes	2
			Barcombe Res.		1

*See also wader count tables page 60

Summering birds were c.275 in Chichester Harbour, c.55 in Pagham Harbour and 25 at Rye Harbour. One at Pulborough Wildbrooks on Sept. 4th and one flew out SE. at Selsey Bill on the 8th. On Nov. 13th 300 on Camber sands.

133. LAPWING (*Vanellus vanellus*)*.—Cold weather movements in January were 220 SW. over Sidlesham on the 11th, 325 likewise on the 18th and 260 out S. at Selsey Bill on the 16th. Winter flocks in the first 3 months of the year were c.1,000 at Newhaven Tidemills, on Jan. 2nd; 300 on Pevensey Levels on the 9th; c.1,000 at Thorney and 400 at Pulborough Wildbrooks on Feb. 6th and c.1,000 on Glynde Level on the 27th. Some passage recorded in February with 49 in S-N. at Selsey Bill over 5th/6th and 150 W. at Darwell Res. on the 19th. Birds were also heard at the Owers Light on the nights of Mar. 26th and 29th and one flew in S-N. at Selsey Bill on Apr. 3rd.

Counts of breeding pairs were: lower Arun Marshes (between South Stoke and Burpham) 10; Barcombe Res. 8; Rye Marsh and Harbour 51; Midrips/Wicks 35. In July 7 came in S-N. at Selsey Bill on the 19th and 32 likewise at Seaford Bay on the 20th.

Winter flocks at the end of the year were c.1,550 in the Amberley/Pulborough marshes on Oct. 30th; 250 at Selsey in November increasing to c.580 by Dec. 31st; c.2,000 at the lower Cuckmere on Dec. 11th; c.1,000 at the Midrips/Wicks on the 22nd and c.10,000 at Glynde Level on the 30th.

134. RINGED PLOVER (*Charadrius hiaticula*)*.—Breeding pairs were recorded as follows: Pilsley Island 2, one reared at least one young; Pagham Harbour 2 or more; Chichester G.P. 2; Barcombe Res. 2; Rye Harbour 13; Midrips/Wicks 6. Birds were also present at Newhaven Tidemills in the breeding season.

C.70 in Shoreham Harbour on Aug. 17th and during December; 60 at Lancing Beach during November.

135. LITTLE RINGED PLOVER (*C. dubius*)*.—Two at Glynde on Apr. 3rd and one at the Midrips on the 4th. No breeding pairs reported but a single bird was present in April and May in the area where breeding was attempted in 1965.

In the autumn single birds at Darwell Res. in July/August; Barcombe Res. on Aug. 8th; Midrips/Wicks on the 23rd and 2 at Camber on the 24th.

136. KENTISH PLOVER (*C. alexandrinus*)*.—Single birds at Littlehampton (KGA) and the Midrips (JA) on May 10th.

139. GREY PLOVER (*C. squatarola*)*.—There were 45 on Goring beach on Jan. 13th and 16 at Rye Harbour on Feb. 28th. On Apr. 17th 15 E. at Beachy Head. C.30 summered in Pagham Harbour.

140. GOLDEN PLOVER (*C. apricarius*)*.—Wintering flocks in the early months were c.300 on Pevensey Levels in January and February; c.400 on Rye Marsh on Jan. 3rd; c.1,000 at Earnley on the 5th; 140 at Harting and c.200 at Pett Level on the 10th. At Selsey numbers increased from c.90 during January to c.500 at the end of February and in March and decreased to c.350 on Apr. 3rd and 15 on the 10th.

One flew in SE-NW. at Selsey Bill on Oct. 22nd and 2 likewise on the 26th. Flocks at the end of the year were c.250 at the Midrips/Wicks from Oct. 29th

*See also wader count tables page 60

to Nov. 12th; 100 at Winchelsea Marsh on Oct. 30th increasing to c.1,000 by the end of December; c.300 at Selsey on Oct. 31st increasing to c.550 during December; c.1,000 at Pevensey Levels on Nov. 5th and c.500 at Earnley on the 9th.

Birds showing the characters of the northern race *altifrons* were one at Pagham on Mar. 22nd and c.50 there on the 28th and c.100 at Earnley on Apr. 16th.

142. DOTTEREL (*C. morinellus*).—One at the Midrips on Aug. 17th (RHC).

143. TURNSTONE (*Arenaria interpres*)*.—There were 36 at Rye Harbour G.P. on Feb. 28th, 38 on Apr. 29th, 22 on May 12th and one on June 11th. Spring movements were one E. off Selsey Bill on May 7th and 3 in SW-NE, at Beachy Head on the 28th.

In the autumn a maximum of 34 at Rye Harbour G.P. on Aug. 14th. C.90 at Glyne Gap on Oct. 29th. At the end of the year a maximum of 118 at Selsey Bill on Dec. 4th.

145. SNIPE (*Capella 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.	Apr.	Aug.	Sept.	Oct.	Nov.	Dec.
258(8)	160(3)	235(8)	180(7)	35(4)	100(5)	390(6)	1260(6)	240(4)

Largest counts were c.100 at Pulborough Wildbrooks on Feb. 6th; c.85 at Sidlesham Ferry on Apr. 7th; c.150 at Amberley/Pulborough and c.200 at Pevensey Levels on Oct. 30th; c.1,000 at Pevensey Levels on Nov. 5th and 13th and c.150 on Dec. 30th, and c.120 at Glynde on Nov. 13th.

The areas in which the above counts were made were: Thorney, Sidlesham Ferry, Selsey, West Harting Pond, Swanbourne Lake, Amberley/Pulborough marshes, Shoreham, Steyning, Newhaven Tidemills, Glynde Level, Barcombe Res., Weir Wood Res., Pevensey Levels, Pett Level, Winchelsea, Wet Level. In September 2 flew W. at Beachy Head on the 8th and 3 flew E. there on the 10th.

Breeding Survey

A total of 44 pairs found present. Counts were made in all the major levels except Brede Level, but there are as yet few records from the interior of the county where suitable sites are known to exist. The figures for Amberley Wildbrooks and Pevensey Levels are based on single counts made in late May or June. No information on breeding success recorded. The figures show a small reduction in breeding pairs; in areas counted in both years there were 42-44 pairs in 1965 and 34 pairs in 1966.

Area	Extent Surveyed	Number of Pairs	Area	Extent Surveyed	Number of Pairs
Lower Arun valley	North Stoke to Lymminster	5	Adur Levels	Beeding-Wyckham Wood W. of river E. of river	3 ?
Amberley/Pulborough Marshes	All between Amberley-Pulborough E. of the river	11	Ouse valley	S. of Lewes	2
			Barcombe Res.		1

*See also wader count tables page 60

Area	Extent Surveyed	Number of Pairs	Area	Extent Surveyed	Number of Pairs
Glynde Levels	Area around Glynde Reach	1	Rother Levels	Wet Level Newenden/Bodiam area	c.3
Glynde Marl Pits	White Dyke/Whilpley Level	1	Greattham Common		c.2
Pevensey Levels	Marsnes E. of Pevensey Street Boreham Street road	3			(1*)
		12		TOTAL	c.44

NOTE: Birds were looked for but not found in suitable areas round Chichester, Pagham/Selsey/Bracklesham, Harting, Pett Level, Rye Marsh and Harbour and the Midrips/Wicks. No proper search was made in the Cuckmere valley or in the Adur Levels below Beeding.

147. **JACK SNIPE** (*Lymnocyptes minimus*).—All records were: one at Pond Leigh on Jan. 6th and 2 there on Feb. 20th; one at Shoreham on Jan. 13th, and 2 at Chichester G.P. on the 30th. Three at Thorney and one at Pilsley on Feb. 6th and single birds at Pagham on the 21st and Shoreham on the 27th. One at Chichester G.P. on Mar. 5th and at Thorney Deepes on the 20th; one at Glynde on Apr. 3rd.

Single birds at the Midrips/Wicks on Oct. 9th; Shoreham on the 20th; Runcton on the 25th and Nov. 21st; Glynde on Nov. 13th; Winchelsea on Dec. 4th and Pilsley on the 12th.

148. **WOODCOCK** (*Scolopax rusticicola*).—Roding birds were recorded in the following areas in the period March to July, Marley Common; Harting 2; Elsted Marsh one; North Marden Down 3; Linchball wood/Venus wood/Hacking Copse 5; Open Winkins one; Red Copse 5; Charlton forest 9; Duncton; Rackham woods one; St. Leonard's Forest one (Lily Beds); Haywards Heath one; Sharpthorne, Courtlands wood; Wych Cross one; 500 Acre wood one; Chailley where described as common and widespread and Darwell Res. 2. Birds also seen in the breeding season at Rewell wood, Pulborough, Ardingly, Eartham wood where a brood of 4 seen and at Goring where KGA recorded an adult carrying young between its thighs; injury feigning on the ground with a harsh jay-like call followed.

In November one at Sidlesham on the 12th, one at Beachy Head on the 20th and one flying NW. there on the 27th which had apparently just arrived from the sea.

150. **CURLEW** (*Numenius arquata*).—C.70 at Newhaven on Feb. 5th and c.300 at Pett Level on the 28th and Mar. 6th. Little visible spring passage; at Selsey Bill 15 E. on Apr. 9th and at Beachy Head 11 E. and one W. in 21 days watching from Mar. 5th to May 1st. Seven flew E. over Chichester G.P. on Apr. 8th and 3 at Darwell Res. on the 23rd.

A pair again bred in the NW. of the county, rearing 2 young, and one breeding pair was found in Ashdown Forest. In the autumn 40 W. at Beachy Head on Sept. 14th and 41 W. and 5 E. off Selsey Bill in 41 days watching September to December. On Dec. 27th c.150 at Pett Level.

*See also wader count tables page 60

151. **WHIMBREL** (*N. phaeopus*).—First recorded on Apr. 10th and the largest spring party was c.100 in Pagham Harbour on May 7th. Records of visible passage were, Selsey Bill 11 E. on 2 dates in April and 14 in from the SW. on the 30th; 35 E. and 3 W. at Beachy Head in 10 days watching from Apr. 16th to May 15th and one in S-N. on May 14th. Seven flew N. over Linch Down on May 7th.

One summered in Chichester Harbour, and there were 6 in Pagham Harbour on June 12th. In the autumn 6 W. and 41 out SW. at Selsey Bill in 11 days watching in August; one flew N-S. over Devils Dyke on Aug. 6th and 7 W. off Beachy Head on Sept. 4th. One in Pagham Harbour and one at the Midrips on Nov. 13th.

154. **BLACK-TAILED GODWIT** (*Limosa limosa*).—In Pagham Harbour there were c.200 on Jan. 13th, c.100 on Feb. 21st and c.350 on Mar. 11th and Apr. 24th. One summered in Chichester Harbour and one likewise in Pagham Harbour. C.125 at Dell Quay on July 11th and 68 in Pagham Harbour on Dec. 23rd. Inland records were one in Glynde Levels on Apr. 21st and one at Chichester G.P. on Aug. 29th.

155. **BAR-TAILED GODWIT** (*L. lapponica*).—C.150 in Pagham Harbour on Feb. 20th. Very little spring passage, at Selsey Bill 37 E. between Apr. 8th and May 1st; at Beachy Head 136 E. between Apr. 17th and May 1st, peak 42 E. on Apr. 29th. One flying E. over Wet Level, about 7 miles from the coast on Apr. 30th, apparently the first inland record for the county. Two summered in Chichester Harbour and c.20 did so in Pagham Harbour.

156. **GREEN SANDPIPER** (*Tringa ochropus*).—In the first 3 months of the year up to 4 recorded in 4 localities, 2 inland and 2 coastal; in December 4 in 2 inland localities.

Spring passage was again small. Autumn passage was first recorded on June 10th and continued until about Nov. 27th. Peak periods were the last week of August, 20 birds, and the third week of September, 20 birds. Monthly totals were:

Apr.	5	May	1	June	3	July	18	Aug.	39	Sept.	33	Oct.	13	Nov.	6
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157. **WOOD SANDPIPER** (*T. glareola*).—One at Upper Beeding on May 30th; one at Chichester G.P. on June 17th. Autumn passage first recorded on July 20th, with one at Weir Wood Res., and one at Sidlesham Ferry on the 24th. From Aug. 1st to Oct. 16th a total of c.27 recorded, mainly at the coast but with inland records from Chichester G.P. and Weir Wood Res.

159. **COMMON SANDPIPER** (*T. hypoleucos*).—No wintering birds recorded at either end of the year.

Spring passage from Apr. 2nd to June 5th, with rather more records than in 1965. Autumn passage which was first noted on June 20th continued until Oct. 19th. Peak periods were the third week of July, c.48 birds, and the last week of August, c.76 birds. Inland records came from 5 localities in the spring and 9 in the autumn. Monthly totals were:

Apr.	11	May	8	June	10	July	57	Aug.	91	Sept.	48	Oct.	8
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*See also wader count tables page 60

161. REDSHANK (*T. totanus*). *—There were c.900 at Thorney on Feb. 6th.

Breeding Survey

A total of between 133 and 149 pairs found present. Counts were made in all the major levels except Brede Level and in all the known colonies in the interior. The figures for Amberley Wildbrooks and Pevensey Levels are based on single counts made in late May or June. No information on breeding success recorded except for 2 young seen at the Goodwood motor-racing track, a most unusual nesting site, and a brood of 3 at Sidlesham Ferry.

The overall figures from areas counted in both 1965 and 1966 indicate little change, but there was some decrease in the coastal marshes in the SW. of the county and at Pevensey Levels, and increases at Rye Marsh and Harbour and the Midrips/Wicks.

Area	Extent Surveyed	Number of Pairs	Area	Extent Surveyed	Number of Pairs
Chichester Harbour	Thorney Island Fishbourne Creek and S.F. Manhood End	c.6 6-8 2	Pevensey Levels	White Dyke/Whelpley Level Marshes E. of Pevensey to Boreham Street road	6
Selsey-Sidlesham Ferry-Bracklesham	All suitable	12-15	Pett Level		3
Pagham Harbour	Marshes behind north wall	2-3	Rother Levels	Wet Level Newenden/Bodiam area	0
Lower Arun valley	North Stoke to Lyminster	10	Rye Marsh and Harbour		3
Amberley/Pulborough Marshes	All between Amberley-Pulboro E. of the river	6-10	Midrips/Wicks		4-5
Adur Levels	Beeding-Wyckham Wood E. of river	4	Lavant		21
Ouse Valley	S. of Lewes	15	Goodwood		12
Cuckmere Valley	Area around Glynde Reach	3-6	Chichester G.P.		4-6
Glynde Levels		c.6	Barcombe Res.		3
				TOTAL	133-149

162. SPOTTED REDSHANK (*T. erythropus*). *—At the beginning of the year single birds were wintering in Chichester and Pagham Harbours and one in the former locality on Dec. 11th.

Spring passage was again small and one apparently summered in Chichester Harbour. Autumn passage started about July 21st and continued to Nov. 13th. Peak periods were the third week of September, c.52 birds, and the last week of October, c.22 birds. Inland records came from Iford in the spring and Chichester G.P., Weir Wood Res., Pevensey Levels and Darwell Res. in the autumn. Monthly totals were:

Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
4	4	2	4	30	65	28	6

*See also wader count tables page 60

165. GREENSHANK (*T. nebularia*). *—Single birds were wintering at both ends of the year in Chichester and Pagham Harbours.

Spring passage from Apr. 2nd to June 5th. Autumn passage first recorded on June 19th and continued until about Nov. 13th. Peak periods were the third week of August, c.81 birds, and the third week of September, c.117 birds. Inland records came from Chichester G.P. in the spring and from Harting, Chichester G.P., Pulborough, Burgess Hill, Lewes Brooks, Barcombe Res., Weir Wood Res. and Darwell Res. in the autumn. Monthly totals were:

Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
9	4	3	27	114	140	41	6

169. KNOT (*Calidris canutus*). *—C.40 at Goring beach on Jan. 13th; 20 at Pilsey on Feb. 6th and 25 at Pagham on Mar. 5th. Nine flew E. off Beachy Head on May 28th. In early June there were 13 at the Midrips/Wicks on the 4th and 7 in Pagham Harbour on the 10th. On Aug. 14th c.50 flew out SW. at Selsey Bill.

170. PURPLE SANDPIPER (*C. maritima*).—All records were: Pagham Harbour, 2 wintering at both ends of the year; Selsey Bill, up to 2 from Sept. 14th to Oct. 22nd; Climping, 2 on Dec. 11th; Newhaven, up to 13 from Feb. 5th to Mar. 27th and 7 still present on Apr. 17th, and up to 14 from Nov. 6th to the end of the year; Langney Point, one on Aug. 28th; Bexhill area, singles on Jan. 31st and Oct. 16th and up to 5 from Nov. 11th to the end of the year.

171. LITTLE STINT (*C. minuta*). *—Two in Chichester Harbour on Jan. 23rd and one there on Mar. 20th. One at Sidlesham Ferry from May 26th to 29th. In July one at Church Norton on the 24th. Otherwise c.15 on autumn passage between Aug. 17th and Oct. 19th, all from the coast.

178. DUNLIN (*C. alpina*). *—C.450 at Shoreham on Jan. 11th and c.100 at Rye Harbour on the 18th. In the spring 46 E. and 14 W. off Selsey Bill in 23 days watching in April and May and one flew in S-N. at Beachy Head on Apr. 3rd. In December c.200 at Goring beach on the 22nd and c.400 at Shoreham. Inland records during the year were one at Chichester G.P. on Jan. 23rd; 10 at Glynde on Feb. 28th and 3 on Mar. 6th; one at Wet Level on Apr. 16th; 3 at Barcombe Res. on May 21st and 12 on the 26th; one at Weir Wood Res. on Aug. 12th and one on Pevensey Levels on Oct. 30th.

179. CURLEW SANDPIPER (*C. testacea*).—No spring records. In the autumn c.11 birds recorded from the coast between Aug. 7th and Oct. 2nd.

181. SANDERLING (*Croceithia alba*). *—C.80 at Newhaven on Jan. 2nd and 105 at Climping on the 24th; 153 in the latter locality on Feb. 7th. In the spring 46 E. and 6 W. off Selsey Bill in 23 days watching in April and May; not recorded at Beachy Head. In June 7 at the Midrips on the 7th and 2 W. off Selsey Bill and 6 at Rye Harbour on the 12th.

At the end of the year 166 at Climping on Nov. 1st, 80 at Goring beach on Dec. 22nd and 40 at Camber on the 30th.

184. RUFF (*Philomachus pugnax*). *—Many fewer records than in 1965, but recorded in every month with more in January than any other. Little evidence

*See also wader count tables page 60

of any through passage in the spring, except perhaps in early April. Three at Rye Harbour on June 12th and one at Barcombe Res. on the 20th, which may have summered there. Autumn passage from about July 9th to Oct. 30th without any clear peak. Monthly totals were:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	21	19	16	2	4	8	16	18	12	1	2

185. **AVOCET** (*Recurvirostra avosetta*).—An unusual number of records. Two in Pagham Harbour on Jan. 4th and 3 there on the 23rd; 3, perhaps the same, at Dell Quay on the 17th and Feb. 2nd. Two at the Midrips on Mar. 31st and one there on Apr. 10th and 12th; 3 at Pett Level on May 12th. One at Rye Harbour on June 4th and 3 there on the 11th. A flock of 21 at Camber on Oct. 8th and, in December, one at Pilsey on the 11th and 18th.

189. **STONE CURLEW** (*Burhinus oedichenemus*).—Single pairs or birds located in 6 localities during the breeding season, all in West Sussex. One of these localities did not hold the species during the 1962-1964 survey.

193. **ARCTIC SKUA** (*Stercorarius parasiticus*).—First recorded on Apr. 9th when 3 E. off Selsey Bill. Between then and June 12th a total of 34 E. and 2 W. there in 25 days watching; peak 6 E. on May 8th. At Beachy Head in the spring 19 E. and 1 W. in 16 days watching between Apr. 17th and June 5th.

One flew E. off Selsey Bill on July 2nd. Otherwise in the autumn c.36 recorded along the coast between Aug. 3rd and Nov. 6th; the maximum in any day was 4 W. off Selsey Bill on Sept. 24th.

194. **GREAT SKUA** (*S. skua*).—One at Camber on Feb. 27th was found dead there on Mar. 6th; one was found in a bedroom at Sussex University on Feb. 28th and released at Black Rock 2 days later. These are the fifth and sixth February records for the county.

In the spring at Selsey Bill 3 W. on May 8th, one E. on the 14th and one W. on the 16th. At Beachy Head one E. on Apr. 16th. In the autumn one W. off Selsey Bill on July 30th and 2 offshore there on the 31st, one at Beachy Head on Aug. 28th and one off Selsey Bill on Sept. 24th.

195. **POMARINE SKUA** (*S. pomarinus*).—In the spring one E. off Selsey Bill on Apr. 24th (RJJ, ETW) and one W. there on May 8th (RJJ, ETW) and 8 E. off Beachy Head on May 1st, including a party of 6 (JWC, BAEM, JS *et al*). In the autumn one off Selsey Bill on Aug. 13th (CMD).

198. **GREAT BLACK-BACKED GULL** (*Larus marinus*).—The only large concentrations reported were c.280 at Camber sands on Feb. 13th and c.220 there on Nov. 27th.

Inland records in the early months were: 4 at Warnham Mill Pond on Jan. 15th and 3 on the 16th; 2 E. over Haywards Heath on Jan. 16th, 2 S. there on Feb. 2nd, 2 E. on the 15th and one W. on Mar. 1st; 2 at Amberley and 2 at Glynde on Feb. 20th. None reported inland in the latter part of the year.

199. **LESSER BLACK-BACKED GULL** (*L. fuscus*).—During January and February a total of 40 recorded from 7 localities, including a flock of 30 at Itchingfield on Jan. 2nd.

In the spring 116 flew E. and 10 W. off Selsey Bill in 25 days watching from Mar. 27th to May 29th, peak 51 E. on Apr. 16th; at Beachy Head 17 E. between

Apr. 11th and May 29th. In June c.40 adults at Chichester G.P. and c.80 at Pagham on the 25th.

A pair nested on a chimney stack of a house in Hastings. A number of flock pairs for the autumn as follows: 150 at Chichester G.P. on July 17th, c.600 there on Aug. 20th, 190 on Aug. 28th and 175 on Oct. 22nd; c.100 at the Crumbles on Oct. 30th. Autumn passage off Selsey Bill totalled 36 E. and 720 SW. in 52 days watching from July 15th to the end of November, peak 234 SW. on Aug. 14th.

In December a total of c.70 recorded in 4 localities, including a flock of c.46 at Christ's Hospital on the 17th.

200. **HERRING GULL** (*L. argentatus*).—Breeding pairs were recorded as follows, between Birling Gap and Cow Gap 101 nests counted on May 7th, compared with 108 on May 23rd, 1965; c.30 pairs at Rye Harbour G.P. which reared c.33 young.

201. **COMMON GULL** (*L. canus*).—In the spring, movements at Selsey Bill were 468 E. in 18 days watching between Apr. 11th and the end of May, peak 208 E. on Apr. 12th; at Beachy Head 247 E. and 167 W. in 28 days watching from Mar. 12th to the end of May, peaks 140 W. on Mar. 19th and 180 E. on Apr. 24th; 15 came in from the SW. at Langney Point on Mar. 18th.

Autumn movements only from Selsey Bill where 275 E. and 297 W. in 44 days watching from July 31st to Nov. 12th, peaks 140 E. on Sept. 24th and 148 W. on Nov. 12th.

203. **ICELAND GULL** (*L. glaucooides*).—An adult flew W. along the Seven Sisters on Mar. 19th (BAEM).

205. **MEDITERRANEAN GULL** (*L. melanocephalus*).—An adult in w/p of Selsey Bill on Jan. 2nd and Feb. 5th and one in s/p flying E. there on Mar. 6th; an adult, still largely in w/p at Sidlesham Ferry on Mar. 6th and one in s/p there on Mar. 19th and 20th; an adult in s/p W. off Beachy Head on Mar. 19th. An immature E. off Selsey Bill on May 1st and one at Chichester G.P. on the 29th.

One adult in Pagham Harbour on July 2nd; an adult in w/p at Pilsey Island on Sept. 18th and a similar bird there on Dec. 11th. An adult apparently wintered in the Selsey/Sidlesham area, there being a number of records from this area between Oct. 1st and the end of the year. Satisfactory details of all these records have been received.

207. **LITTLE GULL** (*L. minutus*).—Few records. In the spring one at Thorney on Apr. 8th. In the autumn one at Langney Point on July 24th and singles there on Aug. 28th and Sept. 11th. Single birds at Chichester G.P. from Aug. 23rd to 26th, at Newhaven Tidemills on Sept. 11th, 16th and Oct. 1st also at Pagham on Sept. 14th. Two flew W. off Selsey Bill on Sept. 17th; single birds at the Midrips on Sept. 21st and at Church Norton on Oct. 8th and 9th.

208. **BLACK-HEADED GULL** (*L. ridibundus*).—Spring movements at Selsey Bill totalled 418 E. and 38 W. in 32 days watching March to May, peaks 80 E. on Mar. 12th and 96 E. on May 1st; at Beachy Head 300 E. and 261 W. in 30 days watching in the same period, most W. movement was in March.

C.300 pairs bred at Rye Harbour G.P. rearing over 100 young. In the autumn at Selsey Bill 840 E. and 1290 W. in 26 days watching from Aug. 1st to Oct. 1st, peaks 568 E. on Sept. 24th and 682 W. on Oct. 1st. Two birds in full s/p recorded in December.

211. **KIITWAKE** (*Rissa tridactyla*).—An immature at Weir Wood Res. on Feb. 13th was found dead there on Mar. 13th; an immature at Glynde on Feb. 20th.

Spring movements at Selsey Bill were 58 E. and 9 W. in 32 days watching March to May, peak 26 E. on May 14th; at Beachy Head 53 E. in 22 days in April and May, peak 17 E. on May 14th. C.11 recorded offshore during June and 40 in Seaford Bay on July 22nd.

Autumn movements only from Selsey Bill, where 21 E. and 63 W. in 63 days watching July to December; 23 W. on Aug. 6th was the largest movement.

212. **BLACK TERN** (*Chlidonias niger*).—Very few on spring passage. First recorded on Apr. 9th, when one E. off Ferring, an early date, but apart from one at Chichester G.P. on May 2nd no more until May 22nd. Between then and June 5th c.30 recorded, with 18 E. off Selsey Bill on May 28th as the largest movement.

Four recorded in July between the 17th and 31st. Otherwise in the autumn c.38 recorded between Aug. 21st and Sept. 21st, mainly at the coast, but inland records from Chichester G.P., Weir Wood Res. and Pond Leigh; 14 E. off Langney Point on Aug. 29th was the maximum.

213. **WHITE-WINGED BLACK TERN** (*C. leucopteris*).—An immature at Chichester G.P. on Aug. 27th stayed until the 30th (GRG, MH, CMJ, JVS *et al*). This record has been accepted by *Brit. B.*

215. **GULL-BILLED TERN** (*Gelochelidon nilotica*).—One flew E. off Selsey Bill on May 7th (BK, JCR). This record has been accepted by *Brit. B.*

216. **CASPIAN TERN** (*Hydroprogne caspia*).—One at Chichester G.P. on July 11th, 12th, 13th and 31st (CMJ, JVS, MS *et al*). This record has been accepted by *Brit. B.*

217. **COMMON TERN** (*Sterna hirundo*).—C.55 pairs bred at Rye Harbour G.P. but breeding success was poor, only some 40 young known to have been reared. At another site 49 nests were counted, containing 184 eggs. It is not known how many young were reared.

One picked up freshly dead at Pagham on Nov. 6th, a very late date.

COMMON/ARCTIC TERN (*S. hirundo/macrura*).—First recorded on Apr. 7th off Shoreham. Spring movements were rather small. At Selsey Bill 725 E. and 42 W. in 23 days watching from Apr. 8th to June 4th, peaks 123 E. on Apr. 9th and 93 E. on May 29th, with c.100 offshore on June 4th. At Beachy Head 150 E. and one W. in 16 days watching from Apr. 16th to May 29th. C.30 off Selsey Bill at the end of June.

In the autumn at Selsey Bill 56 E. and 725 W. in 49 days watching July to October, peak 168 W. on Aug. 28th. Inland 10 at Weir Wood Res. on Aug. 28th. One off Worthing on Oct. 31st; one in Pagham Harbour, thought to be an Arctic Tern (*S. macrura*), on Dec. 30th and 31st, apparently the first December record of either species for the county.

219. **ROSEATE TERN** (*S. dougallii*).—One flew E. off Selsey Bill on Apr. 30th, the earliest record for the county. Two apparently summered in the Pagham/Selsey area, being seen on a number of dates between June 5th and July 31st; 2 at Church Norton on Aug. 31st and 2 flying W. off Selsey Bill on Sept. 4th. Satisfactory details of these records have been received.

222. **LITTLE TERN** (*S. albigifrons*).—First recorded on Apr. 8th at Selsey Bill, the earliest county record. Spring movements were again small with a total of 40 E. off Selsey Bill on 4 days in April and only 4 birds at Beachy Head. One at Darwell Res. on Apr. 23rd.

Breeding pairs were recorded as follows, Pilsley Island, 3 failed to rear young; Pagham Harbour, c.30; Rye Harbour, c.8; Midrips/Wicks, c.12. At another colony 37 nests with 119 eggs were counted, but no information on breeding success recorded.

Autumn passage at Selsey Bill in August and September totalled 6 E. and 106 W. in 19 days watching, peak 48 W. on Aug. 6th.

223. **SANDWICH TERN** (*S. sandvicensis*).—First recorded on Mar. 23rd off Selsey Bill. Spring passage totals were 1,316 E. and 28 W. at Selsey Bill in 26 days watching from Apr. 1st to June 4th, peak 610 E. on Apr. 9th; 485 E. and one W. at Beachy Head in 22 days in April and May, peak 107 E. on May 1st.

Three nests, c.4, were found but breeding success is not recorded. This is the first breeding record for the county. Small numbers recorded elsewhere along the coast in June, maximum c.10 off Selsey Bill.

In the autumn 31 E. and 279 W. off Selsey Bill in 35 days watching July to September, peak 68 W. on Sept. 4th. One at Chichester G.P. on Sept. 1st, inland records are very unusual. One off Selsey Bill on Oct. 25th was the last recorded.

224. **RAZORBILL** (*Alca torda*).—Ten oiled birds picked up along the coast in the first 3 months of the year and one in April; 2 picked up in December.

On July 9th a very small juvenile was found, oiled, on Brighton beach and taken to the Patcham Sanctuary, where it was seen by CFH and BAEM. This bird was either a runt or a very young bird; if the latter it is just conceivable that it was bred in Sussex.

227. **GUILLEMOT** (*Uria aalge*).—Eleven oiled birds picked up along the coast in the first 3 months of the year; of 6 at Pagham Harbour 4 were of the race *aalge* and 2 of the race *albionis*; 4 oiled birds picked up in December.

232. **STOCK DOVE** (*Columba oenas*).—The only large winter flocks recorded were c.45 in Slammer Park on Feb. 27th and c.40 near Steyning on Nov. 26th. In the breeding season recorded from Harting, Stansted Park, Chidham (13 June 5th), Philliswood (c.10 Apr. 8th), Linchball Wood, Charlton Forest, Hahnaker, Houghton, Bury Hill, Arundel Park (c.10 May 7th), Burpham, Amberley Wildbrooks, Pulborough, Cissbury, Wiston Park, Hollingbury, Westmeston, Weir Wood Res., Pevensey Levels (c.25 June 18th), and Cooden. Only recorded from 2 out of 14 Woodland survey areas, which suggests some decline over 1965. The species was absent from 3 areas in which it was present in that year.

234. **WOOD PIGEON** (*C. palumbus*).—At Selsey Bill one flew in S-N. on Mar. 20th and one likewise on May 15th; 5 out S. there on May 22nd and 35 out SE. on June 4th. In the autumn 11 out SE. there on Oct. 9th, 42 out S. on Nov. 26th and 6 out SE. on Dec. 4th.

A large NW. movement over Rottingdean on Nov. 17th.

235. **TURTLE DOVE** (*Streptopelia turtur*).—One at Plumpton on Mar. 22nd, the earliest spring record for the county. A fairly widespread arrival in the third week of April. Spring numbers at Selsey Bill and Beachy Head were

small with a maximum of 6 at Selsey Bill on May 21st and not more than 3 at Beachy Head on any day, but there were 14 at West Chiltington on May 9th and 40 there on the 27th.

In the autumn the maximum at Selsey Bill was 18 on Aug. 28th and at Beachy Head 10 on Sept. 10th. Two flew in SE-NW. at Selsey Bill on Oct. 1st and one at Beachy Head on the 25th was the last recorded.

COLLARED DOVE (*Streptopelia decacota*).—A paper on the spread of this species in Sussex appears on page 63 and therefore only a summary of the 1966 position is given here. The estimated total population at the end of 1966 was c.1,400. Very approximately 250 pairs bred. The largest concentration was from the Little Common-Cooden area where c.300 birds were present during the breeding season. A total of 13 new localities were populated, 7 of which were inland.

Large winter flocks at the end of the year were recorded at East Wittering, c.150; Beachy Head, c.130; Little Common-Cooden, c.300; St. Leonards, c.250; Steyning, c.40; Ditchling, c.30 and Patcham up to c.90.

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

241. BARN OWL (*Tyto alba*).—With an active search being made for the species there was a welcome increase in records. In the breeding season 15 pairs were reported, mainly in West and Mid Sussex. Of these 3 pairs certainly bred successfully, raising broods of 5, 2 and 1+. In a further 11 localities single birds were seen at least once. Regrettably it is no longer possible to publish localities for this species; in some birds have been found shot!

Outside the breeding season there were a further 12 records of birds seen.

246. LITTLE OWL (*Athene noctua*).—About 55 pairs were located but only 2 were known to have raised young, near Shoreham (2) and near Ardingly (2).

Three pairs were counted at Blackdown and in the parishes of Sidlesham and Plumpton, and 2 pairs in Charlton Forest, at Darwell Res. and in the parishes of Duncton, West Chiltington, Findon, Wiston and Bishopstone. Single pairs were recorded from a further 31 localities and there were 16 other records of single birds being seen or heard.

247. TAWNY OWL (*Strix aluco*).—An estimated total of 81 pairs was located, largely by plotting birds calling. Successful breeding was recorded at Charlton Forest, 2 young; Chantonbury, 3 young; Stanmer Park, 2 young; Wramore, 2 young; near Ardingly, 3 young; Plumpton, 3 young; Chailey, 3 young.

Counts of pairs recorded were as follows: West Dean Woods/Linchball Wood, c.10; Selhurst Park-Red Copse, 4; Charlton Forest, 7; Clapham Wood-Arundel Forest-Rewell Wood, 5; Findon/Worthing, 10; Horsham, 8; Waltham-Duncton, 5; West Chiltington, 3; Plumpton, 4. Single pairs were also reported from 18 other localities.

248. LONG-EARED OWL (*Asio otus*).—Two single birds were recorded in possible breeding areas, one on Feb. 10th and one on several dates in April. One at the Midrips on May 12th. Satisfactory details of these records have been received.

249. SHORT-EARED OWL (*A. flammeus*).—Many fewer recorded than in 1965, particularly in February, November and December. The only large

number reported together was up to 7 in the Chantonbury area in March and a late bird was seen there on May 10th. Other inland records were one at Glynde on Jan. 8th, 2 at Amberley Wildbrooks from Jan. 16th to Mar. 5th and 2 at Henfield in April.

Not recorded in the autumn until Oct. 8th when there were 2 at the Midrips; on the 29th one was seen flying to and fro well out to sea off Ovingdean. The low numbers in the late autumn are particularly interesting in view of the unusual numbers of other predators present, especially Hen Harriers. Monthly totals were:

Jan.	Feb.	Mar.	Apr.	May	Oct.	Nov.	Dec.
4	1	12	5	1	5	5	3

252. NIGHTJAR (*Caprimulgus europaeus*).—First recorded on May 7th at Ambersham Common. Breeding pairs recorded were: Iping Common, c.7; Blackdown, c.4; Selhurst Park, c.2; Ambersham Common, 2; Madgelands and Marlpost Woods, 3 each; Wych Cross, one. In addition single records in the breeding season from Stansted Park, Chidham, Rogate Common, Duncton Common, Cissbury area, Washington sandpit, Southwater and Darwell Wood. None was present on Marley Common, where the species has bred until recently. This species is now the subject of a Society Breeding Survey and all records are required.

One at the Midrips on Sept. 24th was the last recorded.

255. SWIFT (*Apus apus*).—First recorded on Apr. 16th at Aldwick, an early date. The largest spring movements at Selsey Bill and Beachy Head were 24 in S-N. at Selsey Bill and 50 W. at Beachy Head on May 22nd. C.25 pairs breeding at Lavant.

June departures were 7 out S. at Selsey Bill on the 4th and 24 SE. there on the 5th. In July 27 flew in S-N. there on the 2nd and 40 likewise on the 17th; at Langney Point c.1,015 W. on the 16th. There were some large August movements; at Beachy Head c.1,500 W. on the 7th, c.1,000 SW. on the 13th and 200 W. on the 14th; at Selsey Bill c.1,245 out SE/SW. and c.240 W. on the 13th and c.185 out SE/SW. on the 14th. Two over Worthing on Oct. 6th, a late date.

258. KINGFISHER (*Alcedo atthis*).—A considerable increase in records received, probably reflecting a genuine increase in population.

In the first three months of the year c.12 recorded along the coast and 4 from 3 inland localities.

Breeding pairs recorded were: Chichester G.P., at least one, CRG ringed 12 first year birds there between July 25th and Sept. 18th; Burton Pond, one; Ardingly, one with young in nest; Glynde, one; Wych Cross, one; Darwell Res., probably one. Breeding was also proved in 2 other localities in East Sussex and 5 first year birds were ringed along the county boundary on the river Wey. Other breeding season records came from Thorney, North Stoke, Petworth, 2 sites in St. Leonard's Forest, Warnham Mill Pond, Lower Beeding, Ditchling Pond and Weir Wood Res.

Between September and December c.28 recorded from 10 coastal and 13 inland localities.

261. HOOPOE (*Upupa epops*).—One at Harting on Apr. 9th and 3 at Coombes on Apr. 15th. Single birds at Ripe on the 16th, Eastergate on May 5th and 6th, Rotherfield from May 7th to 14th and at Shoreham on June 13th and 14th; June records are unusual.

In the autumn single birds at East Dean (East Sx.) on Aug. 17th, Brighton on the 21st, Southwick on the 26th, Warnham on the 27th and Bosham on Sept. 11th.

Woodpeckers.—All woodpecker records are urgently required.

262. GREEN WOODPECKER (*Picus viridis*).—Many more records received than in 1965 and the species appears to be recovering its former status. In the woodland survey reported from 8 out of 13 areas, with 30 contacts; analysis of the figures shows a small increase over 1965. C.60 birds recorded from 37 other localities, with breeding proved and successful in 4—Bosham, Iping Common, Amberley Wildbrooks and Cissbury.

263. GREAT SPOTTED WOODPECKER (*Dendrocopos major*).—In the woodland survey 39 contacts in 8 out of 13 areas compared with 64 in 13 out of 19 in 1965. With fewer areas counted in 1966 analysis of the figures suggests little change in status. Elsewhere c.70 birds recorded in 33 localities in the breeding season, with breeding proved and successful in 4—Bosham, Marley Common, Iping Common and Rackham.

264. LESSER SPOTTED WOODPECKER (*D. minor*).—More records received than in 1965. During the breeding season found present at Marley Common, Runcton, Petworth Park, West Chilington, where 2 pairs, St. Leonard's Forest, Highbrook, Burgess Hill, Worthlodge Forest and Newick; no successful breeding reported.

Outside the breeding season single birds recorded from Wiggonholt, Rackham Woods, Clapham Woods, Balcombe, Groombridge and Horam.

265. WRYNECK (*Jynx torquilla*).—Single birds at Sidlesham (MS) and Beachy Head (BAEM, ETW) on Aug. 27th; one trapped in the latter area on Sept. 3rd (DCL, AQ, KV, *et al.*) and another likewise on the 7th (BEC, MEN, RRG, *et al.*); one found dead in a greenhouse at Sidlesham on Sept. 15th (per MS).

271. WOODLARK (*Lullula arborea*).—On Jan. 17th, during very cold weather, there were 5 on the Crumbles and 30, in 3 parties, flew W. at Seaford Head, with another single bird present there. Two at Pagham on Apr. 7th.

In the breeding season single pairs recorded at Mackerels Common, St. Leonard's Forest and Worthlodge Forest, and birds present, presumed breeding, at Cooden. This species is now the subject of a Society Breeding Survey and all records are required.

In the autumn one at Selsey Bill on July 10th, an unusual date for the coast, and 3 single birds at Beachy Head between Oct. 9th and 29th.

272. SKYLARK (*Alauda arvensis*).—Some large cold weather movements recorded in January. On the 15th c.10,000 W. at Brighton in 3 hours and smaller W. movements at Newhaven, c.350 per hour, and Darwell; c.2,000 in S-N. at Selsey Bill on the 16th and 86 likewise on the 22nd; 100 E. in one hour at Newhaven on the 23rd and 2 in S-N. at Langney Point on the 25th. In March 40 out S. and 7 in S-N. at Selsey Bill in 9 days watching and 15 in S-N. on Apr. 8th.

Some breeding counts were: c.35 pairs on c.900 acres of downland golf-

courses at Worthing; c.9 pairs on 100 acres of grass and glasshouses at Littlehampton; 3 pairs on 137 acres of farmland at Plumpton.

In the autumn numbers at Selsey Bill increased from c.20 to c.230 in October and movements there were c.239 out SE/SW. and 12 in S-N. in 36 days watching September to November. At Beachy Head numbers increased from c.200 on Oct. 21st to c.2,000 on Dec. 4th and 30 flew NE. there on Oct. 30th.

273. SHORE LARK (*Eremophila alpestris*).—One at Newhaven Tidemills, on Dec. 17th (DCL).

274. SWALLOW (*Hirundo rustica*).—First recorded on Mar. 26th, when 3 at Selsey Bill. The largest spring movement was c.46 in S-N. there on May 8th. In the autumn a roost of c.3,000 at Barcombe Res. on Aug. 24th and one of c.4,000 at Chichester G.P. on Sept. 24th. Peak movements at Selsey Bill were c.18,200 out SE/SW. over Sept. 7th/9th and c.10,180 likewise on Oct. 8th; at Beachy Head c.10,000 out SW. over Sept. 17th/18th. One at Worthing on Nov. 28th and one at Eastbourne on Dec. 25th, a very late date. See also table below.

276. HOUSE MARTIN (*Delichon urbica*).—Spring arrival was very early with one at Chichester G.P. on Mar. 13th, the earliest county record, and 4 other records between Mar. 22nd and Apr. 4th. No significant arrivals noted at Selsey Bill or Beachy Head. C.28 breeding pairs in Harting village, a decrease of 12 over 1965; 2 pairs still feeding young in nest at Lewes on Oct. 10th. All breeding counts of colonies or whole villages would be most welcome.

In the autumn peak movements at Selsey Bill were 2,014 W. and 248 out SE/SW. on Sept. 17th; at Beachy Head 3,500 SW. the same day. A number of records for late November and 2 at Alfriston on Dec. 9th and 11th and one on the 12th. See also table below.

AUTUMN MOVEMENTS OF HIRUNDINES AT COASTAL STATIONS

	SELSEY BILL (Days watched: 11 in Aug., 14 in Sept. and 14 in Oct.)			BEACHY HEAD (Days watched: 13 in Aug., 17 in Sept. and 10 in Oct.)		
	E.	W.	SW./N.	E.	W.	SW./N.
August	4	80	265	—	—	—
Swallow	—	28	54	—	—	No
House Martin	—	440	1285	5	—	significant
Sand Martin	—	—	—	4	—	movement.
September	2800	5105	24380	23	6000	5000
Swallow	115	2615	1560	—	—	15500
House Martin	105	50	1215	—	200	5100
Sand Martin	—	—	—	—	7200	400
October	455	—	12995	—	—	2100
Swallow	685	10	750	—	—	2500
House Martin	—	—	—	—	—	—
Sand Martin	—	—	—	—	—	—

277. SAND MARTIN (*Riparia riparia*).—First recorded at Chichester G.P. on Mar. 12th. Spring movements at Selsey Bill and Beachy Head were negligible; at Chichester G.P. a spring passage roost of c.100-200 from Apr. 19th to 24th.

Counts at breeding colonies were: Chichester G.P., c.125 pairs in an artificial mound of sand; Hassocks, c.50 birds; Streait sandpit, c.25 pairs; Rye Harbour, c.50 pairs in one site and c.12 pairs in a new site. Information about breeding colonies of this species would be welcomed.

In the autumn peak movements at Selsey Bill were 650 out SE/SW. and 310 W. on Aug. 20th and 510 out SE/SW. on Sept. 11th; at Beachy Head 4,000 W. on Sept. 3rd and c.2,000 W. on the 5th. One at Selsey Bill on Nov. 13th and one at Beachy Head on the 19th, both very late dates. See also table above.

278. GOLDEN ORIOLE (*Oriolus oriolus*).—A male was again present throughout the summer in the area in which breeding probably took place in 1965. Although a female was not seen the behaviour of the male strongly suggested that territory was being defended and breeding, in fact, may have occurred. On May 21st a male was seen in a locality in the east of the county and a female was seen in the same area on the 29th. Neither bird was found on subsequent visits.

281. HOODED CROW (*Corvus cornix*).—One at Beachy Head on Oct. 9th.

282. ROOK (*C. frugilegus*).—Eleven colonies totalled 233 nests in Harting parish, fewer than in 1965, when 10 colonies totalled 267 nests. Counts also from Bishopstone Wood, 45 nests compared with 70 in 1965, and Plumpton Place, 45 nests. Information and counts of Rookeries would be welcome.

288. GREAT TIT (*Parus major*).—The increase recorded in the Woodland Survey in 1965 was not maintained; in areas counted in both years the species had declined in 7 and showed no change in 4.

289. BLUE TIT (*P. caeruleus*).—The Woodland Survey continues to show a fairly stable population. In the autumn at Beachy Head increases from c.20 to c.50 on Sept. 25th and c.120 on Oct. 9th, when some moved E. and 40 also flew E. at Hove seafont. Up to 60 at Beachy Head to the end of the year and c.60 at Selsey Bill at the end of October.

292. MARSH TIT (*P. palustris*).—Little change in status indicated by the Woodland Survey compared with 1965 and the species seems scarce; recorded in 7 out of 13 areas with only 31 contacts.

293. WILLOW TIT (*P. atricapillus*).—Single birds at Beachy Head on Mar. 27th and, trapped, on May 1st. Recorded in the breeding season in 16 localities, with nesting pairs in 6, Greatham Common, South Stoke, Bedham, Devil's Dyke, Coney Hill and Worthlodge Forest. All breeding season records of this species would be welcome.

Two were trapped at Beachy Head on Sept. 10th and one on the sea-wall at the Midrips on Oct. 9th.

294. LONG-TAILED TIT (*Aegithalos caudatus*).—A general increase in records. In the breeding season recorded in 22 localities, with successful breeding at Harting, Chichester G.P., Iping Common, Goring Wood 2 pairs, Roffey, and Ashdown Forest. In the Woodland Survey a further marked increase, except at Blackdown where a very marked decrease, with only 4 contacts compared with 31 in 1965.

In the autumn CRG ringed 32 at Chichester G.P. between Aug. 12th and Sept. 18th and elsewhere 10 parties totalling c.80 in 8 localities.

295. BEARDED TIT (*Panurus biarmicus*).—In the first 3 months of the year there were 3 at Thorney on Jan. 23rd and Feb. 6th and one on Feb. 12th; one

at Sidlesham on Jan. 26th; up to 4 at Church Norton until Mar. 13th and one on the 20th; 2 at Pagham on Feb. 17th and up to 12 at Chichester G.P. in January and February with 4 on Mar. 9th. CJM trapped 10 there on Jan. 30th, of which one had been ringed at Chew Valley, Somerset on Nov. 14th., 1965, and one was recovered at Minsmere, Suffolk on Sept. 23rd.

Another influx in the autumn, records were: Church Norton, c.8 on Oct. 22nd, c.6 during November and 2 on Dec. 31st; Pagham, 4 on Nov. 22nd and c.6 during December; Chichester G.P., 2 on Oct. 14th and 4 on the 24th; Crumbles, 3 on Nov. 3rd increasing to 15 on the 6th; Pett Level, 10 on Oct. 26th decreasing to 4 on Nov. 27th and one on Dec. 31st. Single birds also recorded at Pond Leigh on Dec. 10th and Thorney on the 11th.

299. WREN (*Troglodytes troglodytes*).—All available information indicates a very marked increase over 1965. In areas counted in both years in the Woodland Survey numbers doubled, except at Blackdown and Crowborough, where there was little change. An influx at the coast during the autumn was also recorded, but without figures, except at Beachy Head where an increase from c.10 to c.40 on Dec. 3rd.

301. MISTLE THRUSH (*Turdus viscivorus*).—An influx at Selsey Bill on Oct. 22nd when c.45 present and 2 flew out S.; one, first seen far out, flew in S-N. there on the 28th and 5 flew W. on the 30th and 17 E. on Nov. 19th.

302. FIELDFARE (*T. pilaris*).—During the January cold spell c.200 W. at Brighton in 3½ hours on the 15th and smaller movements at Newhaven, 10-50 per hour, and Worthing; on the 18th c.1,000 at the Rother estuary. A roost of c.2,000 at Glynde on Mar. 9th. A number of late spring records, with 5 records totalling 74 birds between Apr. 21st and May 1st and one at Thorney on May 22nd, the latest spring record for the county.

First recorded in the autumn on Sept. 23rd, an early date. In October 67 S. over Horsham on the 6th, 100+ at Sidlesham on the 14th, 47 N. over Ferring on the 20th, 200+ near Pulborough on the 22nd and c.40 at Selsey Bill and 150 N. at Beachy Head on the 30th. On Nov. 9th 45 N. over Worthing.

303. SONG THRUSH (*T. ericetorum*).—During the January cold spell a W. movement of c.400 per hour at Newhaven and 300 W. at Brighton in 3½ hours on the 15th.

In the autumn maxima at Beachy Head were c.40 on Sept. 25th and c.60 on Oct. 25th and Dec. 4th; c.100 at Sidlesham Ferry on Oct. 14th and an increase from c.10 to c.28 at Selsey Bill on Nov. 12th.

304. REDWING (*T. musicus*).—During the January cold spell c.250 W. in 3½ hours at Brighton and W. movement of 1-20 per hour at Newhaven on the 15th. Five at Cissbury on Apr. 21st.

First recorded in the autumn on Oct. 8th at Selsey Bill, Arundel and Warn-ingcamp. On the 9th c.100 at Beachy Head and maxima there were 150 SW. on Oct. 21st and c.150 on Nov. 26th. At Selsey Bill 3 flew in SE-NW. on Oct. 25th and 29 on the 26th.

307. RING OUZEL (*T. torquatus*).—In the spring 8 recorded between Apr. 6th and May 1st.

Even more numerous in the autumn than in 1965. First recorded at Beachy Head on Sept. 8th and up to 4 regularly there during the month. In October

50 there on the 2nd, c.200 on the 9th, of which parties totalling 140 departed SW. out to sea in the evening; c.100 on the 16th and smaller numbers for the rest of the month, maximum 60 on the 29th. Elsewhere a total of c.53 recorded, maximum 9 at Sidlesham on the 17th. In November 10 at Beachy Head on the 1st, 5 on the 6th and 2 at Woodingdean on the 2nd and 7th.

308. **BLACKBIRD** (*T. merula*).—An unmated albino at Ditchling was watched trying to feed the unfledged young of other Blackbirds and Song Thrushes.

Autumn influxes were c.100 at Sidlesham Ferry on Oct. 14th, c.100 in one patch of gorse at Udimore on the 16th, and c.50 at Selsey Bill on Nov. 5th. At Beachy Head increases from c.30 to c.45 on Nov. 13th and c.60 on Dec. 4th.

311. **WHEATEAR** (*Oenanthe oenanthe*).—First recorded at Selsey Bill on Mar. 8th. Spring maxima were 35 at Selsey Bill on Apr. 8th, 46 on the 9th and c.40 on the 16th.

Very few breeding pairs reported; at Rye Harbour only 3 found and 5 at the Midrips/Wicks. A pair probably bred in the Cissbury area and there was a female at Pound Common on May 29th.

Autumn passage between July 20th and Nov. 9th, with peaks of c.50 at Selsey Bill on Aug. 31st and Sept. 30th, c.75 at Cissbury on Aug. 29th and c.50 at Beachy Head on Sept. 7th.

312. **DESERT WHEATEAR** (*O. deserti*).—A male at Beachy Head from Apr. 17th to 21st (BEC, DDH, BAEM, AQ, et al.). This record, which is the second for the county, has been accepted by *Brit. B.*

317. **STONECHAT** (*Saxicola torquata*).—In the early months c.17 wintering birds recorded from 7 localities along the coast. Breeding pairs were recorded as follows: Blackdown, one; Iping Common, 3; Pound Common, one; Ambersham Common, one; Rottingdean area, c.2; Wych Cross, one; Ashdown Forest, 5 on the eastern third; Newhaven, one; Crowlink to Holywell, c.7; also breeding at Chailey Common. In all six broods totalling 16 young seen.

In the autumn an increase from c.20 to c.45 at Beachy Head on Oct. 2nd and, at the end of the year, c.30 wintering in 15 localities along the coast.

318. **WHINCHAT** (*S. rubetra*).—First recorded on Apr. 20th at Beachy Head. Spring maxima were 5 at Beachy Head on Apr. 23rd and 6 at Selsey Bill on May 14th. No breeding pairs were recorded.

Autumn passage from July 29th to Oct. 29th, when there was one at Sidlesham, a late date. Peaks were: at Selsey Bill 14 on Aug. 29th and 9 on Sept. 11th; at Beachy Head 50 on Aug. 28th and 35 on Sept. 9th; also 15 at Cissbury on Aug. 28th and 11 at Steyning on Sept. 11th.

320. **REDSTART** (*Phoenicurus phoenicurus*).—Two at East Dean (West Sx.) on Mar. 22nd were the first recorded, an early date. Spring maxima of 5 at Beachy Head on Apr. 10th and 13 at Selsey Bill on the 16th.

Breeding pairs were recorded as follows: Marley Common area, 8, 7 nests found; Worthlodge Forest, one; Ashdown Forest, 4; Bayham, c.5. Four pairs also bred in the centre of the county and pairs were breeding at Lynchmere and Milland. Single singing males were found at Tillington, Petworth Park and Bells Yew Green and there were 2 at Little Bognor. This species is now the subject of a Society Breeding Survey and all breeding season records are urgently required.

Autumn passage from July 24th to Oct. 25th, with peaks at Beachy Head of 20 on Aug. 28th and 16 on Sept. 8th.

321. **BLACK REDSTART** (*P. ochruros*).—Single birds at Lancing on Mar. 13th, Selsey Bill on Apr. 3rd and Beachy Head on the 12th were the only spring records. No breeding records received.

In the autumn c.37 recorded between Aug. 28th and Nov. 29th, maximum 10 at Beachy Head on Oct. 15th. Singles at the Cuckmere Haven and Beachy Head in December were probably wintering.

322. **NIGHTINGALE** (*Luscinia megarhynchos*).—Two at Milton Hide on Apr. 2nd, the earliest county record. Breeding season counts were: Harting parish, c.6 pairs; Westmeston, 4 singing males in 10 acres of woodland; Darwell Wood, 12 singing males May 14th. A decrease was again shown in the Woodland Survey.

Not more than 2 together on any day on autumn passage and one at Horsham on Sept. 9th was the last recorded.

324. **BLUETHROAT**. (*Cyanosylvia svecica*).—One at Beachy Head on Apr. 23rd (EA, KV). In the autumn single birds at Cowbeech on Aug. 29th (MSS), trapped at Chichester G.P. on Aug. 30th and another from Sept. 9th to 16th (CRG), at Beachy Head on Sept. 17th (REG, CFH) and at Belle Tout on the 21st (BM).

325. **ROBIN** (*Erithacus rubecula*).—Autumn increases at Beachy Head from c.15 to c.50 on Oct. 9th and c.30 on the 16th and 22nd.

327. **GRASSHOPPER WARBLER** (*Locustella naevia*).—Spring arrival was early with 14 records between Apr. 4th and 10th. Counts of breeding pairs, based on singing males, were: Blackdown, 2; West Harting Pond, c.3; Elsted Marsh, one; Selsey Bill, one; forestry plantations from Linchball Wood to Oxen Down (SU930140), c.23; Open Winkins, c.3; Chiseldown, 2; Benges Wood, one; Selham, one; Duncton Hill, c.3; Gumber farm, c.2; Cissbury, one; Woodingdean, 2; Beachy Head, c.3; Darwell Wood, one.

In the autumn one at Beachy Head on Oct. 2nd and one on the 15th, the latest county record.

333. **REED WARBLER** (*Acrocephalus scirpaceus*).—First recorded on Apr. 9th at Selsey Bill, an early date. C.22 breeding pairs at Church Norton; 8 singing males along the Chichester canal between the B.2201 and the B.2145 on June 15th; c.93 pairs in approximately 600 acres of the marshes between North Stoke and Burpham; c.20 pairs around Lymminster water-cress beds; 6 pairs along ½ mile of the Adur above Shoreham Toll-bridge; 3 pairs along the Ouse S. of Southsea.

Autumn passage from about July 31st and peaks were 8 at Beachy Head on Aug. 29th and 10 at Selsey Bill on Sept. 18th. At Chichester G.P. CRG ringed 154 between July 3rd and Oct. 1st. Five October records, the last at Beachy Head on the 22nd being the latest county record.

337. **SEDGE WARBLER** (*A. schoenobaenus*).—First recorded on Apr. 2nd at Selsey Bill; no large numbers on spring passage. C.14 pairs breeding at Church Norton; at least 165 pairs in c.600 acres of the marshes between North Stoke and Burpham; c.13 pairs on 100 acres of Church Farm, Litlington.

In the autumn CRG ringed 1,107 at Chichester G.P. between July 3rd and Oct. 1st. Peaks at Selsey Bill were 26 on Aug. 21st and at Beachy Head 12 on the 29th. One at the Lower Cuckmere on Oct. 9th was the last record.

339. MELODIOUS WARBLER (*Hippolais polyglotta*).—Single birds at Beachy Head on Aug. 14th (BEC, BAEM, MEN, ABS) and Selsey Bill on the 21st (HPKR, ETW).

343. BLACKCAP (*Sylvia atricapilla*).—First recorded on Mar. 11th at Chichester G.P. The spring maximum was 10 at Beachy Head on Apr. 23rd. Little evidence of any change of status in the Woodland Survey compared with 1965.

Autumn passage from July 18th to Nov. 13th with peaks at Beachy Head of c.75 on Sept. 7th, c.100 on the 9th and 11th, 85 on the 17th and c.50 on Oct. 9th. Single birds at Worthing on Nov. 22nd and Arundel on Dec. 14th.

346. GARDEN WARBLER (*S. borin*).—First recorded on Apr. 10th at Beachy Head; no large numbers on spring passage. The Woodland Survey indicated little change in status compared with 1965.

Autumn peaks at Beachy Head of 40 on Aug. 21st and 25 on Sept. 7th. Two October records, the last being at Worthing on the 16th.

347. WHITETHROAT (*S. communis*).—One at Southsea on Mar. 19th, the earliest county record. Spring peaks were 30 at Selsey Bill and c.65 at Beachy Head on Apr. 23rd.

Autumn passage from the end of July to Oct. 9th with peaks at Beachy Head of c.250 on Aug. 21st and 28th, c.175 on Sept. 5th; also c.120 at Cissbury on Aug. 21st.

348. LESSER WHITETHROAT (*S. curruca*).—First recorded on Apr. 23rd few on spring passage, maximum 6 at Beachy Head on May 1st. A total of 17 breeding pairs recorded from 11 localities. Counts of breeding pairs of this species would be welcome.

In the autumn peaks at Beachy Head of c.90 on Aug. 18th and c.80 on the 20th and 24th; 2 there on Oct. 9th were the last recorded.

352. DARTFORD WARBLER (*S. undata*).—Breeding recorded in 2 localities, with c.4 pairs breeding in the usual area and one pair in another site rearing 2 young. One at Church Norton on Dec. 26th.

354. WILLOW WARBLER (*Phylloscopus trochilus*).—First recorded on Mar. 31st at Chichester G.P. Not more than 15 on any spring date at the coast; one at Selsey Bill on June 4th was probably a very late arrival.

356. CHIFFCHAFF (*P. collybita*).—In the early months single birds wintering at Chichester G.P. and Plumpton. A general arrival between Mar. 6th and 8th with records at the coast and inland; not more than 10 on any spring date at the coast. Two wintering birds at Chichester G.P. during December. One showing the characters of the race *abietinus* at Beachy Head on Oct. 29th.

WILLOW WARBLER/CHIFFCHAFF.—A wintering bird at Swanbourne Lake in January. Spring passage peaks were c.55 at Selsey Bill on Apr. 16th and c.32 on May 8th; at Beachy Head c.50 on Apr. 10th.

Autumn passage peaks were c.50 at Selsey Bill on July 21st and 32 on Sept. 17th; at Beachy Head c.220 on Sept. 7th and c.115 on the 18th; in October there c.80 on the 9th.

357. WOOD WARBLER (*P. sibilatrix*).—Four spring passage records on the coast between Apr. 21st and May 8th. At least one pair bred at Harting and pairs also recorded at Lodsworth, Bexley Hill and Hesworth Common; common in the Marley area where 11 nests found. In the Woodland Survey 32 contacts in 6 out of 13 areas. Thirteen territorial males recorded in 6 other localities; Stanstead Park, Charlton Forest, St. Leonard's Forest, Worthlodge Forest, Bayham and Bells Yew Green. Breeding season records of this species would be welcome.

360. YELLOW-BROWED WARBLER (*P. inornatus*).—One at Beachy Head from Nov. 13th to 17th (BEC, RHC, AQ, BM), the third county record.

364. GOLDCREST (*Regulus regulus*).—In the spring at Beachy Head up to 12 on 4 days between Mar. 6th and 27th and 6 April records to the 10th. Analysis of the Woodland Survey suggests little increase over 1965; elsewhere c.32 singing males and 4 nesting pairs recorded from 14 localities and 4 observers noted an increase.

In the autumn the highest numbers yet recorded at Beachy Head, with movement between Sept. 9th and Nov. 20th and peaks of c.70 on Sept. 25th, c.30 on Oct. 2nd, 45 on the 9th and c.30 on the 16th.

365. FIRECREST (*R. ignicapillus*).—Single birds at Beachy Head on Mar. 20th and from Apr. 8th to 11th and at Selsey Bill on Apr. 10th and 11th. In the autumn only at Beachy Head where 13 records, although perhaps not 13 individuals, between Sept. 9th and Oct. 21st, including 4 on Sept. 11th.

366. SPOTTED FLYCATCHER (*Muscicapa striata*).—First recorded on May 37th at Beachy Head. In the breeding season c.8 pairs at Burpham, 5 pairs in Horsham Park and c.4 pairs at Battle; elsewhere c.35 pairs recorded from 26 localities. All breeding season records would be most welcome.

In the autumn, maxima of 15 at Selsey Bill on Aug. 20th, 26 at Cissbury and Beachy Head on the 21st, 30 at Beachy Head on Sept. 7th and 25 on the 9th. One there on Oct. 25th, the latest county record.

368. PIED FLYCATCHER (*M. hypoleuca*).—In the spring 4, all males, recorded between Apr. 20th and 29th. Unusual numbers in the autumn when c.121 recorded between Aug. 18th and Oct. 9th. Peak movements occurred between Aug. 18th and 24th when c.62 were seen.

373. MEADOW PIPIT (*Amthus pratensis*).—In the January cold spell 40 W. in 3½ hours at Brighton on the 15th and 19 found dead at the Owers Lightship on the 17th. Spring passage from about Mar. 6th to Apr. 23rd with peaks of 285 in S-N, at Selsey Bill on Mar. 27th and 50 N. at Beachy Head on Mar. 27th and Apr. 3rd. Four came in SW-N. at Selsey Bill on May 28th.

Autumn movements were:

SELSEY BILL				BEACHY HEAD			
Days obs.	E.	W.	SE/SW.	N.	Days obs.	E.	W.
Sept.	14	135	1325	0	17	110	275
Oct.	14	5	62	4	10	0	400
Nov.	8	6	3	1	7	0	300
							No movement

Peaks were: at Selsey Bill 660 W. and 325 SE/SW. on Sept. 24th, 650 SE/SW. on the 29th and 330 likewise on Oct. 8th; at Beachy Head 200 W. and 400 N. Sept. 16th to 18th.

375. **TAWNY PIPIT** (*A. campestris*).—One at Beachy Head on Aug. 28th (RHC) and one on the Crumbles on Sept. 18th (RHC). These records have been accepted by *Brit. B.*

376. **TREE PIPIT** (*A. trivialis*).—First recorded on Apr. 8th at Selsey Bill and a late migrant there on June 4th. Breeding season counts were: Blackdown, 3 pairs; Upperton Common, one pair; Linchball Wood, c.5 pairs; Iping Common, 4 pairs; Pound Common, 5 singing males; Cocking Park, 2 pairs; Ambersham Common, 8 singing males; Singleton Forest, c.5 pairs; Cissbury/Steyning, c.2 pairs; St. Leonard's Forest, c.30 birds in 2 square miles; Worth Forest, c.10 pairs; Ashdown Forest, 11 singing males; Bayham, 2 singing males; Bells Yew Green, 3 singing males. Also breeding at Milland, Lynchmere, Marley, Duncton Common and Welsh's Common. This species is now the subject of a Society Breeding Survey and all breeding season records would be most welcome.

Autumn passage from Aug. 14th to Oct. 9th with peaks of 12 at Selsey Bill on Aug. 21st and 15 at Beachy Head on the 29th.

379. **ROCK PIPIT** (*A. spinoletta*).—During the first 3 months of the year c.8 at Selsey Bill, 5 at Porto Bello on Jan. 2nd, c.10 at Chidham on the 23rd and c.35 round the Thorney peninsula on Feb. 6th. One flew in from the SE. at Selsey Bill on Nov. 19th.

Single birds showing the characters of the race *spinoletta* at Porto Bello on Jan. 2nd, Thorney on Feb. 6th and the Cuckmere on Nov. 23rd.

380. **PIED WAGTAIL** (*Motacilla alba*).—C.50 roosting in Brighton Station during February and c.200 at Revell Wood on Nov. 7th.

Single birds showing the characters of the race *alba* at Shoreham on Jan. 19th and the Midrips on Apr. 12th. A female *alba*, paired with a male *yarralli*, bred at South Stoke.

Subspecific identification was not possible with the following: 13 in S.-N. at Selsey Bill on 3 days in March. Autumn movements there totalled 167 E.; 60 W., and 139 out SE. in 28 days watching in September and October, peaks 102 E. and 28 SE. over Sept. 29th/30th and 19 E. and 38 SE. on Oct. 8th.

381. **GREY WAGTAIL** (*M. cinerea*).—Many more records than in 1965 and probably a genuine increase. Breeding pairs were recorded as follows: 8 and one male on the Rother between Durdorf and Petworth; Duncton/Sutton, 3; Pulborough, 2; St. Leonard's Forest, 3; Balcombe, 3. Single pairs at West Harting, on the river Wey, Lurgashall Mill Pond, Petworth Mill, Burton Pond, Swanbourne Lake, Warnham Mill Pond, Pippingford Park and Bells Yew Green. Nine of these pairs are known to have raised c.16 young. Birds were also present in the breeding season at Aldsworth Ponds, Horsted Keynes, Barcombe Res., Burwash, Eridge and Dallington Forest.

In the autumn one E., 2 W. and 4 out SE. at Selsey Bill between Aug. 20th and Sept. 24th and 18 W. and 9 in the area at Beachy Head between Aug. 27th and Oct. 22nd.

382. **YELLOW WAGTAIL** (*M. flava*).—First recorded on Apr. 3rd, spring movements observed were again negligible with totals of 11 at Selsey Bill and 13 at Beachy Head.

Breeding Survey

A total of between 122 and 128 pairs found present. Counts were made in all the major levels except Brede Level. The figures for Amberley Widbrooks and Pevensey Levels are based on single counts made in late May or June. Information on breeding success was rather sparse but 16 pairs were known to have raised young. The figures from areas counted in both 1965 and 1966 show there was a considerable decrease from c.120 pairs in 1965 to c.80 pairs in 1966.

Area	Extent Surveyed	Number of Pairs	Area	Extent Surveyed	Number of Pairs
Chichester Harbour	Thorney Island Fishbourne S.F.	1	Glynde Levels	Area around Glynde Reach	4
Lower Arun valley	North Stoke to Lyminster	1	Pevensey Levels	White Dyke/Wheelpley Level Marshes E. of Pevensey to Boreham Street road	9
Amberley/Pulborough Marshes	All between Amberley-Pulborough E. of the river	10	Fett Level	Wet Level Newenden/Bodiam area	15-18
Adur Levels	Reading-Wyckham Wood W. of river Shoreham Bridge to Coombes	4-5	Rother Levels		13
Ouse valley	S. of Lewes	13	Rye Marsh and Harbour		10
Cuckmere valley		?1	Barcombe Res.		3
			TOTAL		122-128

No birds were found in the Pagham, Sidlesham Ferry or Bracklesham areas, Darwell Res. or the Midrips/Wicks.

In the autumn 89 E., 190 W., and 327 SW. at Selsey Bill in 25 days watching in August and September, peaks 85 E. on Aug. 20th and 135 SW. on the 29th. At Beachy Head a peak of 130, with 50 W. on Aug. 29th. One at Clapham on Nov. 13th, a very late date.

Single birds showing the characters of the nominate race *flava* at Chichester G.P. on Apr. 7th and Beachy Head on Aug. 28th.

383. **WAXWING** (*Bombycilla garrulus*).—Following the invasion in late 1965 still fairly numerous in the first 3 months of the year with a total of c.96 in 15 localities. The largest parties were 12 at Hailsham on Jan. 16th, 22 at Horsham on Feb. 13th, 20 at Haywards Heath on Mar. 6th. The last recorded were 2 at Bexhill on Apr. 5th, the second April record for the county.

384. **GREAT GREY SHRIKE** (*Lanius excubitor*).—In the first 3 months of the year single birds near Tunbridge Wells on Feb. 23rd and at Iping Common on Mar. 16th.

An unusual number of records in the autumn. At Beachy Head 4 or 5 different birds seen between Oct. 16th and Dec. 31st, including one which came in from the S. on Oct. 30th and 2 which departed NE. on Nov. 19th. Elsewhere single birds at Darwell Res. during October, at Swanbourne Lake from Nov.

20th to 23rd and possibly the same bird near Burpham on Dec. 10th and one near Cissbury on the 11th. One chased and caught a House Martin at Beachy Head.

388. **RED-BACKED SHRIKE** (*L. collurio*).—No reports for the first year on record.

389. **STARLING** (*Sturnus vulgaris*).—On Jan. 15th c.5,000 W. at Brighton in 3½ hours. In the first 3 months of the year 188 E., 16 W., 617 S., and 53 N., in 22 days watching at Selsey Bill, maxima were 255 S. on Jan. 22nd and 190 S. on Feb. 27th. On June 1st a roost of c.50,000 at Cissbury.

Some very large movements in October and November. At Selsey Bill 1,080 flew out SE/SW. and 3,370 in S-N. in 14 days watching in October, peaks 320 out SE/SW. on Oct. 8th and 3,190 in S-N. over Oct. 25th/27th. At Beachy Head 3,850 came in S-N. between Oct. 24th and Dec. 4th, peak 3,000 on Nov. 19th. Elsewhere c.5,000 on the Downs near Steyning on Oct. 29th, c.17,000 flying NW-SE. there on Nov. 5th and c.30,000 at Chancetonbury on the 20th. There were vast flocks, too large to count, near Southwick on Nov. 6th and c.600 came in SW-NE. at Langney Point on Nov. 18th and 20th.

391. **HAWFINCH** (*Coccothraustes coccothraustes*).—All records were: single birds at Midhurst on Jan. 21st, Lavington Common on Feb. 6th and Burgess Hill on the 28th. Two near Newick on Mar. 19th, 5 near Haywards Heath on the 22nd and one at Pagham on the 28th. Single birds in Charlton Forest on May 30th and June 5th, at Church Norton on Sept. 24th and Bignor Hill on Dec. 17th. Also seen at Marley and Chailey during the year. All records of this species would be welcome.

392. **GREENFINCH** (*Chloris chloris*).—On Jan. 15th c.200 flew W. at Brighton in 3½ hours. Two flew out S. at Selsey Bill on Apr. 23rd. In the autumn peaks there were 204 S. on Oct. 8th and 178 W. on Nov. 20th. The peak count at Beachy Head was 150 on Sept. 8th and other autumn/winter flocks were c.300 in the Cissbury area from October to December and c.100 at Newhaven on Oct. 30th. See also table of finch passage.

A male trapped by PGD at Marley on Jan. 18th had the normally yellow areas bright orange and the normally green areas copper.

393. **GOLDFINCH** (*Carduelis carduelis*).—On Jan. 15th 40 flew W. at Brighton in 3½ hours. Spring movements at Selsey Bill were 75 E., 16 W. and 4 out SE. from Apr. 30th to June 4th. Autumn peaks there were 120 E. and 308 S. on Oct. 8th and 310 S. on the 15th. Peak counts at Beachy Head were c.600 on Oct. 2nd and c.500 on the 9th and 22nd, and 150 at West Harting Down on Sept. 23rd. See also table of finch passage.

394. **SISKIN** (*C. spinus*).—In the first 3 months of the year c.196 recorded from 13 localities, including flocks of c.46 at Blackdown, 34 at Burton Park and 20 near Ardingly in January. In April 2 pairs displaying at Westmeston on the 10th and 3 likewise at Storrington on the 21st.

In the autumn movements were: at Selsey Bill 18 E. and 6 N. between Oct. 8th and Nov. 20th; at Beachy Head 45 W. and 10 N. between Sept. 25th and Dec. 4th. Elsewhere c.90 recorded in 11 localities, including flocks of c.30 at Pevensey on Nov. 15th and 15 near Plumpton on Dec. 4th. Winter records of this species would be welcome.

AUTUMN FINCH PASSAGE

	SELSEY BILL				BEACHY HEAD			
	E.		S. N.		E. W. S. N.			
	Days obs.				Days obs.			
Greenfinch								
Oct.	14	20	30	530	—	—	—	No movement during period
Nov.	8	14	260	42	3	7	1	
Dec.	5	—	14	2	—	—	—	
Goldfinch								
Sept.	14	40	—	22	—	17	—	No significant movement during period
Oct.	14	210	63	860	6	10	—	
Nov.	8	14	6	60	1	7	—	
Dec.	5	—	—	4	—	1	—	
Linnet								
Sept.	14	375	—	180	—	17	—	No movement
Oct.	14	880	180	7250	6	10	—	No movement
Nov.	8	26	62	130	4	7	—	— 60
Dec.	5	—	5	100	—	1	—	— 300
Redpoll								
Sept.	14	No movement	—	—	—	17	—	No movement
Oct.	14	40	—	—	6	10	—	— 260 250
Nov.	8	4	—	—	—	7	—	— 12
Dec.	5	—	—	3	—	1	—	— 8
Chaffinch								
Oct.	14	95	40	—	220	10	—	— 150
Nov.	8	55	16	—	115	7	—	— 120
Dec.	5	—	16	4	—	1	—	— 40
Tree Sparrow								
Oct.	14	500	7	180	—	10	—	— 120
Nov.	8	No movement	—	—	—	7	—	No movement
Dec.	5	—	—	—	—	1	—	— 50

395. **LINNET** (*C. canabina*).—On Jan. 15th c.200 W. at Brighton in 3½ hours. Spring movements at Selsey Bill totalled 36 E., 34 out S., and 11 in S-N. between Mar. 27th and Apr. 11th; at Beachy Head 170 in S-N. on Apr. 3rd and 50 on the 11th.

Autumn peaks were c.4,350 out S. at Selsey Bill over Oct. 15th/16th and a maximum count of c.500 at Beachy Head on the 2nd. See also table of finch passage.

396. **TWITE** (*C. flavirostris*).—Once again fairly numerous along the coast at both ends of the year, monthly totals were:

	Jan.	Feb.	Oct.	Nov.	Dec.
	228	8	58	40	18

The large numbers in January were apparently associated with the cold spell and included a flock of c.150 at the Rother estuary on Jan. 18th. At the end of the year the largest flocks were c.50 on the Rother saltings on Oct. 31st and c.20 at Sidlesham Ferry on Nov. 29th.

397. **REDPOLL** (*C. flammea*).—In the first 3 months of the year small parties of up to c.18, totalling c.140 birds, recorded from 15 localities; c.30 at Cross-in-Hand on Apr. 16th. Breeding season records were 2 at Groombridge during May and one singing in Ashdown Forest on July 1st; all records at this time of year would be most welcome.

The largest autumn movements were c.200 W. at Beachy Head on Oct. 9th and c.250 SW. there on the 22nd. At the end of the year c.240 recorded in 10 localities. See also table of finch passage.

400. **SERIN** (*Serinus canarius*).—One at Beachy Head on Nov. 20th (BEC, RHC, *et al.*). This record has been accepted by *Brit. B.*

401. **BULLFINCH** (*Pyrrhula pyrrhula*).—On Nov. 20th 8 came in from the sea at Beachy Head.

404. **CROSSBILL** (*Loxia curvirostra*).—The only record in the first part of the year was one at Heyshott on Jan. 9th.

A considerable invasion in the summer and early autumn and birds thereafter fairly numerous to the end of the year. The first was recorded on May 22nd and the largest numbers occurred in July with, apparently, a second influx in September. A total of c.80 flocks was recorded, the largest being c.40 in Charlton Forest on July 1st, but 15 flocks of 20 or more birds were seen. Approximate monthly totals were:

Month	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
May	1	38	c.400	c.100	c.180	c.85	c.50

407. **CHAFFINCH** (*Fringilla coelebs*).—On Jan. 15th c.100 flew W. at Brighton in 3½ hours. On Apr. 8th 8 flew out SW. and 22 came in S-N. at Selsey Bill. Autumn peaks were 165 N. at Selsey Bill over Oct. 25/26th and 120 likewise at Beachy Head on Nov. 20th.

An almost complete albino at Chidham on Mar. 20th and June 5th. See also table of finch passage.

408. **BRAMBLING** (*F. montifringilla*).—On Jan. 15th c.20 flew W. at Brighton in 3½ hours, and a large influx elsewhere along the coast during this cold spell, with a total of c.740 recorded, including flocks of c.100 at Chichester G.P., c.350 at Worthing and c.250 at Shoreham. Two at Rotherfield on Feb. 2nd and 4 flying out SW. at Beachy head on Mar. 6th were the only other records in the first months of the year.

More numerous in the autumn than in 1965 with peaks of 25 SW. at Beachy Head on Oct. 22nd and 30 on the 25th and 14 E. and 24 in the area at Selsey Bill on the 30th. In November and December only 7 records of 24 birds. Winter records of this species would be welcome.

409. **YELLOWHAMMER** (*Emberiza citrinella*).—On Jan. 15th c.30 flew W. at Brighton in 3½ hours; one flew out SE. out of sight at Selsey Bill on Apr. 3rd.

410. **CORN BUNTING** (*E. calandra*).—Breeding season counts were: 7 pairs on 400 acres of farmland at Sidlesham; 5 singing males at Amberley Mount; 15 singing males on c.1 square mile of Downland between Cissbury and Chantonsbury; 2 singing males at Plumpton. There were also 3 at Wet Level on Apr. 16th and a roost at Belle Tout held c.30 on May 7th; the maximum there in the autumn was c.100 on September 11th.

415. **GIRL BUNTING** (*E. cirillus*).—Present at Thorney, Coney Hill Brighton, the Cuckmere valley and Beachy Head all the year. In the breeding season

also recorded from Selsey, Aldwick, Heath End sandpit, Clapham brickworks, Cissbury, Steyning, Lancing, Upper Beeding, Southwick and Milton Hide; all single birds except at Aldwick, where there were 2 singing males. Outside the breeding season singles at Patcham on Oct. 16th and Ferring on the 20th. All breeding season records of this species would be welcome.

416. **ORTOLAN BUNTING** (*E. hortulana*).—One at Sidlesham on Sept. 18th (MS) and one at Beachy Head on Oct. 2nd (BEC, RHC, AQ, *et al.*).

421. **REED BUNTING** (*E. schoeniclus*).—On Jan. 15th 25 flew W. at Brighton in 3½ hours. Fourteen breeding pairs on 400 acres of Amberley Wildbrooks and 97 on c.6 square miles of the eastern half of Pevensey Levels. In the autumn at Selsey Bill 130 E. and 7 out SE. between Sept. 18th and Nov. 20th, peak 58 E. on Oct. 8th.

422. **LAPLAND BUNTING** (*Calcarius lapponicus*).—In January 2 on the Crumbles (RHC) and 4 at Pett Level (JA) on the 17th and 4 on the Crumbles on the 18th (RHC). Three at the Midrips/Wicks from Sept. 21st to 24th and 2 there on the 25th (RHC, REE, RES, *et al.*). Two flew S. over Brighton on Dec. 21st (ARK).

423. **SNOW BUNTING** (*Plectrophenax nivalis*).—In the first 3 months of the year totals were January (15), February (9), and March (1), with 7 at the Midrips on Feb. 13th as the largest party.

At the end of the year first recorded on Oct. 26th and monthly totals were October (4), November (25), and December (72). The largest parties were 16 at Camber on Nov. 5th, 20 at Rye Harbour on Dec. 11th and c.30 at Woodingdean from Dec. 14th to 19th.

425. **TREE SPARROW** (*Passer montanus*).—On Jan. 15th 20 flew W. at Brighton in 3½ hours. The largest winter flock recorded was 40 at Falmer on Dec. 23rd.

Breeding pairs were recorded as follows: Sidlesham, 6 in one colony; North Chapel, 8; Selham Common, 2; Billingshurst, 2; West Chilmington, one; Plumpton, 2; Street sandpit, 30+ in old Sand Martin burrows; Money Penny G.P., 3. Birds also recorded from Chichester G.P., Pound Hill, Weir Wood Res., Exceat and Barcombe Res., where c.20 on May 16th.

Peak autumn movements were 123 out S. at Selsey Bill on Oct. 22nd and 385 E. on the 29th; the maximum count at Beachy Head was c.500 on Nov. 26th. See also table of finch passage.

ADDITIONS AND CORRECTIONS TO THE 1965 REPORT

43. **GLOSSY IBIS** (*Plegadis falcinellus*).—One at Pagham Harbour on Apr. 22nd and 23rd (AA). This record has been accepted by *Brit. B.*

212. **BLACK TERN**. On May 1st c.420 moved through Chichester G.P., not c.300.

365. **FIRECREST**.—There were 2 at Beachy Head on Sept. 27th, not one.

415. **GIRL BUNTING**.—Singing males also recorded at Newhaven and Dyke Road, Brighton.

SOCIETY INVESTIGATIONS, 1966

Details of the wader counts are set out on page 59. Summarised details of the breeding surveys and general information on the woodland survey are included in the Systematic List under the individual species headings.

BREEDING SURVEYS

No new surveys were started and work continued on Kestrel, Water Rail, Snipe, Redshank and Yellow Wagtail.

It is very gratifying to record a continuing increase in the records received and the area being studied; all the major levels, except Brede Level, were visited during the breeding season, some for the first time. Some of the results from these areas are again based on single counts made in late May or June. Kestrel records also came from a wider area of the county and an increase is evident from the results.

Surveys of Kestrel, Snipe, Redshank and Yellow Wagtail are being continued for one more year in 1967, when new surveys of Nightjar, Woodlark, Redstart and Tree Pipit are being started. We have, however, decided to end the Water Rail survey since a reasonably clear picture of its status and distribution has emerged. A summary and discussion of the results is given on page 53.

We wish to thank again the many observers listed below who have contributed to these surveys, their efforts are greatly appreciated. We also wish to thank S. W. M. Hughes for once more collecting and collating Kestrel records from the Horsham area.

CONTRIBUTORS

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PREDATORS

In addition to the breeding surveys, a pilot survey of raptor and owl populations was also started, studying these in a number of sample areas in the breeding season and at other times of year. Some very interesting and valuable results were obtained and this work is continuing in 1967. Results have been incorporated in the Systematic List but, for security reasons, we have not published localities in most instances.

We are most grateful to R. J. Sandison for organizing, and handling all the records from this survey and to the following observers for their considerable help:

R. B. Barstow, F. W. Dougharty, G. R. Gervis, Dr. M. Hollings, C. E. Hope, S. W. M. Hughes, M. A. Jennings, S. F. Knight, R. J. Lanaway, R. Lagen, B. A. E. Marr, G. Peate, D. R. Park, S. W. Rickards, K. Ridgewell, K. N. Sayers, M. Shrubbs, G. A. Sutton, K. L. Walker, E. T. Welland.

WOODLAND SURVEY

The aims and methods used in this survey were outlined in the 1963/64 *Sussex Bird Reports*. Rather fewer counts were received in 1966 than in 1965, only 13 compared with 19. Continuity, however, continues to be good with all but two of the areas counted in 1966 being counted in 1965.

As hoped this survey is proving valuable in providing information on the population of our common woodland birds and a number of changes or fluctuations in these are becoming apparent. These and other points are dealt with under the species headings in the Systematic List as in 1965.

The survey continues in 1967 when it is hoped to extend the coverage once again. We would like to thank the following observers for counts in 1966:

H. A. C. T. Clark, F. W. Dougharty, J. R. Harper, Dr. M. Hollings, J. P. McTear, D. J. Riley, R. J. Sandison, M. Shrubbs, E. T. Welland.

A SUMMARY OF THE BREEDING SURVEY OF WATER RAILS, 1962-66

This species has proved a difficult subject for a survey because of its elusive habits and our records are probably still incomplete. The full results for the 5 years 1962-66 are given in Table 1 below.

Breeding status

Prior to 1962 the most recent assessment of breeding status was given by J. Walpole-Bond in 1938 (*History of Sussex Birds III* 337/338) who believed that the population did not exceed c.50 pairs and stated that it was very locally distributed. Unfortunately no sites are quoted so accurate comparison with our present results is not possible. Between 1947 and 1962 breeding was recorded once only, at Pond Leigh in 1961, and there were 2 other breeding season records, on Apr. 27th, 1947 and May 19th, 1956, both at Manhood End.

During the present survey the species has bred or been found present in the breeding season in 13 sites, mainly reed-beds or boggy areas with dense aquatic vegetation on the margins of large fresh-water ponds. Few have been found in the major levels or coastal marshes, although much apparently suitable habitat exists; the only such sites at which the species was recorded were Thorney Deepes, Pulborough and Coombes.

Breeding has been proved only 3 times, at Coombes in 1962, Thorney Deepes in 1963 and West Harting Pond in 1966. August records are included as it seems most likely that these refer to local birds, not migrants; our earliest date for a definite migrant is Sept. 15th. Four of these areas, Severals Church Norton, Chichester G.P., Lurgashall Millpond and Burton Pond are probably regularly occupied, and others may be but our records neither prove nor disprove this.

TABLE 1: BREEDING SEASON RECORDS, 1962-66

Locality	Number of Pairs present					Other Breeding Season Records				
	'62	'63	'64	'65	'66	'62	'63	'64	'65	'66
West Harting Pond					1					1 29/8
Thorney Deepes										
Fishbourne										
Severals, Church Norton										
Chichester G.P.										
Lurgashall Millpond										
Shillingee Park										
Burton Pond										
Pulborough Wildbrooks										
Coombes										
Pond Leigh										
Barcombe Res.										
Wear Wood Res.										

NOTE: A dash indicates that there were no records; nv.; that the area was not visited.

The species does not breed anywhere on the Selsey Peninsula except at Church Norton and is almost certainly absent from Amberley Wildbrooks. It has not been found in the Adur Levels above Bramber, the Ouse Levels, Glynde Level, the Cuckmere valley, Pevensy Levels or Rye Marsh and Harbour, although all these areas have been fairly thoroughly covered. It seems unlikely that it would have been entirely overlooked, if present, in five years. The pond sites listed are the only ones known but there may be others undiscovered. Many similar areas have, however, been regularly visited to look for Great Crested Grebes if not specifically for Water Rails. A full list of these is given in *Sussex Bird Reports* 1964 and 1965 and Water Rails have only been found in the breeding season in those localities listed in Table 1. Small ponds and patches of bog exist in many places in the interior of the county and the possibilities of this type of habitat have not been investigated. It is probable that here some pairs have been overlooked.

It is difficult to estimate the total breeding population very closely from our records. These indicate a population of the order of 15 pairs or less but if possible areas which were not searched were investigated more pairs may well be found. It seems evident, however, that the species has decreased since Walpole-Bond's assessment in 1938. Although it cannot yet be proved it is thought unlikely that the total number of pairs in any year would exceed half his figure.

SUMMARY OF BIRD RINGING IN SUSSEX, 1966

Compiled by
A. QUINTON

Fifteen ringers or groups operating in widespread localities throughout the county sent in reports of their activities this year, and between them they ringed a total of 11,336 birds of 84 species.

Both the Chichester Ringing Group and the Beachy Head Ringing Station functioned again in 1966. At Chichester the numbers of Sand Martins ringed were down on most previous years but the group were compensated by ringing the exceptional total of over 1,000 Sedge Warblers. Two Bluethroats and 10 Bearded Tits which were trapped by C. J. Mead were among the rarer species ringed. At Beachy Head ringed totals of the commoner warblers were below average, but some species, Ring Ouzel for instance, were much more abundant than in previous years and the grand total for this species was more than doubled. A Firecrest and 2 Wrynecks were also trapped during the year. Most nestlings were again ringed by two ringers, P. G. Davis, who marked a wide variety of species as *pulli* including no less than 89 Wood Warblers, a Sparrowhawk and 5 Woodlarks, and Guy Mountfort whose total included nearly 800 tits.

Other interesting birds ringed were a number of young Common Terns at the Rye ternery by B. A. E. Marr and 5 Bearded Tits by R. H. Charlwood.

SELECTED LIST OF RECOVERIES REPORTED IN 1966

Key to symbols and terms
(Ring numbers are omitted)

Age
pull.—nestling or chick, *not yet flying*
juv.—young, *able to fly freely*
1st W.—bird in its first winter;
fg.—full grown (age uncertain)
ad.—adult, at least one year old

Manner of Recovery
v—caught or trapped and released with ring;
+—shot or killed by man;
x—found dead or dying;
o—caught or trapped alive and not removed.
/?—Method of recovery unknown

Sex
♂—male
♀—female

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

Birds ringed in Sussex

Common Tern	Sex	Age	Distance
	pull.		23.6.65 Rye Harbour. (RHC)
	x		22.4.66 Accra, Ghana
			Previous recoveries suggest that W. Africa is the normal wintering ground of British bred Common Terns.
Swallow	juv.	x	3.8.64 Chichester G.P. (CRG)
			c.5.11.66 Orihuela, Alicante, Spain
	juv.	v	5.8.66 Chichester G.P. (CRG)
			21.8.66 Lower Withington, Macclesfield, Cheshire. 175m. NNW.

The direction of movement of the second bird would seem to be very unusual for the time of year and is suggestive either of a random movement or reverse migration.

Sand Martin
 Chichester G.P. (CRG)
 as juvs. by (CRG)

Date ringed at Chichester G.P. (CRG) as juvs. by (CRG)	Date Recovered	Key	Locality recovered
2.9.62	8.9.66	+	Hernani, Guipuzcoa, Spain
11.8.63	2.6.66	v	Llanillywel, Monmouth. 110m. WNW.
3.8.63	21.10.66	v	Llanthorn, Dumfries. 310m. N.
7.9.63	15.6.66	v	Blairdyryne, Banchory, Kincardine. 440m. N.
8.9.63	21.7.66	v	Lanholm, Dumfries. 310m. N.
3.8.64	9.9.64	+	St. Ciers-sur-Gironde, Gironde, France
3.8.64	30.5.66	v	Kinfauns, Nr. Perth. 400m. NNW
7.8.64	2.6.66	v	Guay, Ballinluing, Perth. 425m. NNW.
9.8.64	7.9.64	+	St. Ciers-sur-Gironde, Gironde, France
14.8.64	14.5.66	v	Lower Sheardale, Dollar, Clackmannan. 385m. NNW.
19.8.64	28.5.66	v	Muckart, R. Devon, Perth. 390m. NNW.
6.8.65	21.6.66	x	Drymen, Stirling. 390m. NW.
7.8.65	12.6.66	v	Boat o' Brig, Fochabers, Moray. 480m. N.
7.8.65	12.6.66	v	Boat o' Brig, Fochabers, Moray. 480m. N.
7.8.65	3.7.66	v	Gatehouse of Fleet, Kircudbright. 310m. NNW.
7.8.65	31.7.66	x	Morfa Nefyn, Pwllheli, Caernarvon. 215m. NW.
8.8.65	6.6.66	v	Ruthven, Kingussie, Inverness. 455m. NNW.
10.8.65	2.7.66	v	Waterheads, Eddleston, Peebles. 350m. N.
12.8.65	12.5.66	v	Nether Falla, Eddleston, Peebles. 360m. NNW.
14.8.65	10.6.66	v	Drynachen, R. Findhorn, Nairn. 480m. NNW.
14.8.65	9.5.66	x	Ladybank, Falkland, Fife. 385m. N.
29.8.65	29.5.66	v	Kirkforthar, Freuchie, Fife. 390m. NNW.
4.9.65	7.8.66	v	Tarcoon, Canonbie, Dumfries. 305m. N.
5.8.66	13.10.66	/?	Ledux, Oloron St. Marie, Basses Pyrenees, France

The two double recoveries below demonstrate the homing instinct of this species to its breeding areas.

juv. 7.8.64 Chichester G.P. (CRG)
 v 25.5.65 Burrow, Carnforth, Lanes. 240m. NNW.
 v 6.5.66 Burrow, Carnforth, Lanes. 240m. NNW.

ad. 16.8.64 Chichester G.P. (CRG)
 v 18.7.65 Llanymynech, Montgomery. 170m. NW.
 v 16.5.66 Llanymynech, Montgomery. 170m. NW.

Bearded Tit
 fig. 30.1.66 Chichester G.P. (CMJ)
 v 23.9.66 Minsmere, Suffolk. 140m. NE.

The recent tendency of Bearded Tits to erupt in the autumn and winter from their breeding quarters has produced several recoveries similar to this. Another bird trapped at Chichester G.P. on the same date had previously been ringed in Somerset.

Blackbird
 1st W. 20.11.60 Shoreham. (JS)
 1st W. 24.6.65 Bjurtjärn, Övebro, Sweden

Reed Warbler
 juv. 15.8.66 Chichester G.P. (CRG)
 17.9.66 Abrantes, Ribatejo, Portugal

Sedge Warbler
 juv. 4.8.64 Chichester G.P. (CRG)
 x 13.6.66 Kilmore, Drumsna, Roscommon. 370m. NW.

juv. 20.9.64 Chichester G.P. (CRG)
 v 3.5.66 Wilsford, Sleaford, Lincs. 145m. N.

juv. 16.8.65 Chichester G.P. (CRG)
 v 28.7.66 Weston Turville, Wendover, Bucks. 65m. N.

juv. 22.8.65 Chichester G.P. (CRG)
 v 11.7.66 Attenborough, Beeston, Notts. 142m. N.

juv. 23.8.65 Chichester G.P. (CRG)
 v 10.5.66 The Calf, Isle of Man. 280m. NW.

juv. 24.8.65 Chichester G.P. (CRG)
 v 23.6.66 Polesworth, Warwick. 125m. N.

juv. 29.8.65 Chichester G.P. (CRG)
 0 11.4.66 Colomb-Becchar, Algeria

juv. 29.8.65 Chichester G.P. (CRG)
 x 14.9.65 Bordeaux, Gironde, France

juv. 16.9.66 Chichester G.P. (CRG)
 x 18.9.66 Westfield, Battle, Sussex. 57m. E.

Reed and Sedge Warblers are now the subjects of a special B.T.O. ringing enquiry on similar lines to the Sand Martin enquiry. It is hoped that by large scale ringing and weighing of these two species during the breeding and migration seasons, it will be possible to make a comparison of the migratory habits of the two species to and from their wintering quarters in W. Africa.

Blackcap
 fig. ♀ 14.9.63 Beachy Head. (BHRS)
 x 17.8.66 West Monkton, Taunton, Somerset. 145m. W.

Whitethroat
 ad. ♀ 3.9.65 Beachy Head. (BHRS)
 + 7.9.66 Braganca, Tras os Montes, Portugal

ad. ♀ 7.6.64 Beachy Head. (BHRS)
 x 25.4.66 Worthing. 27m. W.

ad. ♂ 9.5.65 Beachy Head. (BHRS)
 x 7.5.66 Newquay, Cardigan. 225m. WNW.

juv. 25.8.64 Chichester G.P. (CRG)
 x 14.6.66 Great Leighs, Chelmsford, Essex. 85m. NE.

Willow Warbler
 fig. 13.8.63 Marley. (PGD)
 v 12.6.66 Aysgarth, Leyburn, Yorks. 228m. N.

Goldfinch
 fig. 21.8.66 Holywell, Eastbourne. (RHC)
 v 13.12.66 El Escorial, Madrid, Spain
 Goldfinches are now recovered annually in Spain during the winter months and it seems probable that most of the British population winters in this region.

Redpoll
 fig. x 21.10.64 Marley. (PGD)
 x 16.8.66 Norwich, Norfolk. 136m. NE.

fig. v 13.3.65 Marley. (PGD)
 v 26.10.66 Gousainville, Gonesse, France

REPORT ON WADER COUNTS IN 1966

By
M. SHRUBB

Birds ringed elsewhere and recovered in Sussex

Woodcock	? x	8.8.58 9.3.65	Manskop, near Horby, Sweden West Chilmington. (FWD)
Black-headed Gull	pull. x	30.5.66 22.7.66	De Beer, Zuid Holland, Netherlands Fairlight, Hastings. (JAH)
Swallow	juv. v	21.9.66 1.10.66	Lower Withington, Macclesfield, Cheshire Chichester G.P. 175m. SSE. (CRG)
	juv.	21.9.66 29.9.66	Bedworth, Warwick. Chichester G.P. 115m. S. (CRG)
			These recoveries give an indication of the southerly or south-easterly orientation of this species through the British Isles in autumn. Foreign recoveries have proved that almost all birds re-orient themselves in a south-westerly direction as soon as they have crossed the Channel.
Sand Martin	juv. v	19.7.66 5.8.66	Drymen, Loch Lomond, Stirling Chichester G.P. 395m. SE. (CRG)
	ad. v	20.5.64 15.8.66	Sedburgh, Yorks. Chichester G.P. 250m. SSE. (CRG)
	ad. v	29.5.65 29.8.65	Llanvihangel, R. Usk, Monmouth. Chichester G.P. 110m. SE. (CRG)
	v	16.6.66	Newbridge-on-Usk, Monmouth.
	ad. v	17.7.65 4.9.65	New Marton, Ellesmere, Shropshire Chichester G.P. 170m. SE. (CRG)
	v	17.7.66	New Marton

The two double recoveries again illustrate the homing instinct of the adult Sand Martin.

Bearded Tit	fg. v	14.11.65 30.1.66	Chew Valley, Somerset Chichester G.P. 85m. ESE. (CJM)
Sedge Warbler	juv. v	31.7.66 15.8.66	Chew Valley, Somerset Chichester G.P. 85m. ESE. (CRG)
	juv. v	24.8.66 9.9.66	Chew Valley, Somerset Chichester G.P. 85m. ESE. (CRG)
	juv. v	8.8.66 16.8.66	Old Denaby, Mexborough, Yorks. Chichester G.P. 185m. S. (CRG)
	fg. v, juv.	29.8.66 9.9.66	Holbrook, Ipswich, Suffolk Chichester G.P. 110m. SW. (CRG)
			These recoveries give an example of the widespread origins of Sedge Warblers which pass through Sussex on migration.
Blackcap	ad. ♂ v	29.8.65 11.4.66	Brancaster, Norfolk Beachy Head. 155m. S. (BHRS)
Chaffinch	ad. ♀ x	8.10.66 14.11.66	Oost Zwartmeer, IJsselmeer, Netherlands Hartfield. (PCB)
			Radar watchers have noted a particularly concentrated autumn migration of Chaffinches down the continental coastline and across the Channel from Cap Gris Nez to Sussex at this time of year.

The series of wader counts started in 1964 in Chichester and Pagham Harbours were continued. As in previous years counts were made monthly with two in June. The roosts counted were the same as in 1965 (*Sussex Bird Report*, 1965, page 53).

Our figures are again unfortunately incomplete with no count in Pagham Harbour in January and the February figures from Chichester Harbour coming only from Pilsey Island and Manhood End. Difficulties also continue to be experienced with tides as silting is occurring in both harbours and it is becoming clear that unless counts are made on dates with a 17 foot tide, or higher, islands now remain in the estuaries on which some birds can roost and these are often impossible to count.

The figures for the early months cannot be compared with early 1965 as in neither year are they complete, but in January an influx of Curlew and Bar-tailed Godwit and a large drop in Lapwing numbers occurred, which were probably associated with the cold spell. One Spotted Redshank and 2 Little Stints were also wintering.

Spring departures of Lapwing, Turnstones and Bar-tailed Godwits were revealed by the March count and of Grey Plover and Snipe by the April count. Curlew movements and Redshank departures continued over both months, and Dunlin movements to early June, although none summered. The spring passage peak of Ringed Plover occurred in late May and most Sanderling passage was in April.

The count on the 19th of June revealed rather larger numbers of summering Oystercatchers, Grey Plover and Curlew than in 1965 and single Spotted Redshank and Greenshank also summered.

With no count in late June return passage was not recorded before July. The autumn figures for Lapwing, Golden Plover, Curlew, Spotted Redshank, Whimbrel, Common Sandpiper, Ruff and particularly Redshank were lower than in 1965. The low numbers of Lapwing, Curlew and Redshank are especially interesting in view of their large numbers in 1965. Ringed Plover, Grey Plover, Turnstone, Bar-tailed Godwit, Greenshank, Knot, Dunlin and Sanderling were all more numerous, and the peak counts of 1,300 Bar-tailed Godwits in Chichester Harbour in September and 520 Knot there in October are both county records. Knot in particular have been notably scarce in these counts in previous years.

The pattern of autumn movements revealed by the counts was very similar to 1965, with peak numbers of most species occurring in the same periods, but peak numbers of Curlew were earlier, in July, and those for Lapwing (Nov.), Black-tailed Godwit (Oct.), Redshank (Sept./Oct.), Dunlin (Nov.) and Sanderling (Oct.) were later. Wader passage clearly continued to at least the end of November.

Rarer species in the counts were a Kentish Plover on Aug. 20th and an Avocet on Dec. 11th but no Curlew Sandpipers were recorded. The full counts are listed in Table 1.

TABLE 1: MONTHLY WADER COUNT

TOTALS IN WEST SUSSEX IN 1966

Species	23 Jan.	20 Feb.	20 Mar.	17 Apr.	22 May	5 June	19 June	17 July	20 Aug.	18 Sept.	16 Oct.	13 Nov.	11 Dec.
	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.	Chi. Pag.
Oystercatcher ..	1280	900	630	60	500	30	450	55	220	65			
Lapwing ..	50	240	35	95	0	70	0	20	0	30	0		
Ringed Plover ..	90	50	30	55	30	100	35	240	60	20	25		
Kentish Plover ..	0	0	0	0	0	0	0	0	0	0	0		
Grey Plover ..	150	255	105	235	50	10	35	17	60	0	20		
Golden Plover ..	18	0	0	6	0	0	0	0	0	0	0		
Turnstone ..	60	60	130	45	50	65	30	80	10	8	3		
Snipe ..	25	20	0	70	1	15	0	9	0	6	0		
Jack Snipe..	6	0	0	1	0	0	0	0	0	0	0		
Curlew ..	1540	200	170	445	450	610	150	65	65	90	10		
Whimbrel ..	0	0	0	0	0	4	10	4	16	10	10		
Black-tailed Godwit	110	315	0	70	100	150	125	30	0	15	0		
Bar-tailed Godwit	1055	520	45	19	0	45	25	22	20	5	30		
Green Sandpiper ..	0	1	0	0	0	0	0	0	0	0	0		
Wood Sandpiper ..	0	0	0	0	0	0	0	0	0	0	0		
Common Sandpiper	0	0	0	0	0	0	0	0	0	4	0		
Redshank ..	1265	500	20	345	50	205	20	30	0	60	0		
Spotted Redshank	1	0	1	1	0	0	0	0	0	2	0		
Greenshank ..	0	0	0	1	0	0	0	0	0	1	0		
Knot ..	15	8	15	0	0	1	0	15	5	0	15		
Purple Sandpiper..	0	0	0	0	0	0	0	0	0	0	0		
Little Stint..	2	0	0	1	0	0	0	0	0	0	0		
Dunlin ..	11210	12560	2500	900	2000	2190	650	640	545	245	30		
Sanderling..	1	55	0	135	0	155	4	30	0	8	10		
Ruff ..	3	2	0	1	0	1	0	0	0	0	0		
Avocet ..	0	0	0	0	0	0	0	0	0	0	0		
Golden Plover ..	315	50	260	50	440	95	940	205	1035	210	1295	230	705
Lapwing ..	235	0	3	0	50	30	130	0	275	0	400	80	310
Ringed Plover ..	0	10	10	25	310	15	280	75	185	175	30	100	5
Kentish Plover ..	0	0	0	0	1	0	0	0	0	0	0	0	0
Grey Plover ..	0	30	2	25	430	120	1030	100	748	70	675	75	355
Golden Plover ..	0	0	0	0	0	0	45	1	80	2	350	0	400
Turnstone ..	0	0	5	3	90	1	80	120	55	165	50	140	30
Snipe ..	0	0	0	0	10	0	15	1	15	1	25	4	40
Jack Snipe..	0	0	0	0	0	0	0	0	0	0	0	0	6
Curlew ..	115	85	840	450	725	265	710	470	730	350	655	250	530
Whimbrel ..	1	0	15	60	75	35	4	0	0	0	0	0	0
Black-tailed Godwit	0	0	30	0	100	0	430	0	845	0	285	1	0
Bar-tailed Godwit	2	10	90	15	525	0	1300	40	285	40	455	25	520
Green Sandpiper ..	1	0	0	0	3	1	7	0	4	1	0	0	0
Wood Sandpiper ..	0	0	0	0	0	0	0	0	1	0	0	0	0
Common Sandpiper	0	0	7	10	7	5	0	1	0	0	0	0	0
Redshank ..	75	0	465	100	555	70	900	165	805	250	1155	210	615
Spotted Redshank	1	0	0	0	2	0	50	1	5	0	6	0	1
Greenshank ..	2	0	15	1	50	6	110	1	25	0	6	0	1
Knot ..	0	0	20	1	10	0	45	15	520	24	310	0	45
Purple Sandpiper..	0	0	0	0	0	0	0	0	0	0	0	1	0
Little Stint..	0	0	0	0	0	1	1	1	2	0	0	0	0
Dunlin ..	0	0	600	470	1385	60+	2190	370	9205	1030	12365	2115	7955
Sanderling..	0	0	40	4	70	0	220	1	265	10	70	0	80
Ruff ..	0	0	0	0	4	0	7	0	4	0	0	0	0
Avocet ..	0	0	0	0	0	0	0	0	0	0	0	0	1

NOTE: A dash indicates area not covered.

Chi—Chichester Harbour.

Pag—Pagham Harbour.

Sussex Coastline Winter Count, 1966

The December count again included roosts along the whole coastline. These were the same as in 1965 (*Sussex Bird Report*, 1965, page 54), with the addition of the Midrips, but no count was done at Shoreham. The full results are given in Table 2.

Problems have also arisen with this count. Away from the main harbours it has been found that high tide is not necessarily the best time to count. Higher numbers can often be found feeding at low tide than can be found at roosts, which are subject to disturbance and are less stable than those in the estuaries. The figures must, therefore, be regarded as incomplete, particularly in the Goring/Worthing area where c.20 Grey Plover, c.300 Dunlin and c.100 Sanderling were known to be present but were not found on the count.

The numbers of waders recorded were somewhat lower than in 1965, with only Ringed Plover and Knot being more numerous. Lapwing, Curlew and Redshank were markedly fewer and no Black-tailed Godwits were seen at all, which is distinctly unusual. Numbers of Oystercatchers, Grey Plover, Turnstone, Bar-tailed Godwit, Purple Sandpiper and Sanderling were about the same.

Once again no Common Sandpipers were wintering but 6 Jack Snipe were seen and single Spotted Redshank and Greenshank.

TABLE 2
SUSSEX COASTLINE COUNT ON 11TH DECEMBER, 1966

Species	Chichester Harbour	Pagham Harbour	Climping	Goring/Worthing	Newhaven/Cuckmere	Bulverlythe	Pett Level	Rye Harbour/Midrips	Approx. totals
Oystercatcher	705	145	120	1	0	0	0	250	1220
Lapwing	310	140	0	0	410	0	500	600	1970
Ringed Plover	5	85	1	40	10	0	0	0	150
Grey Plover	355	65	0	0	0	0	0	0	420
Golden Plover	400	20	0	0	0	0	0	20	440
Turnstone	30	65	8	0	0	85	0	0	190
Snipe	40	0	0	0	70	0	20	0	130
Jack Snipe	6	0	0	0	0	0	0	0	6
Curlew	530	150	0	0	35	0	0	0	715
Bar-tailed Godwit	320	35	0	0	0	0	0	0	555
Green Sandpiper	0	0	0	0	0	0	0	1	1
Redshank	615	65	0	3	60	0	0	0	745
Spotted Redshank	1	0	0	0	0	0	0	0	1
Greenshank	1	0	0	0	0	0	0	0	1
Knot	45	0	0	0	0	0	0	0	45
Purple Sandpiper	0	0	2	0	14	3	0	0	19
Dunlin	7955	3000	1	4	92	0	0	0	11050
Sanderling	80	0	375	1	0	1	0	0	455
Avocet	1	0	0	0	0	0	0	0	1

NOTE: A count was also done at Rottingdean but only one Oystercatcher was present. "P" indicates that the species was known to be wintering in the area but a count was not possible.

The counts are continuing in 1967, when Dr. M. Hollings has most kindly agreed to take over the organisation from the Recorder.

Finally we wish to thank the following observers for their hard work in these counts, we are most grateful for their efforts.

P. Clement, R. E. Goddard, T. Hale, H. J. Harrison, M. J. Helps, J. A. Hicks, Dr. M. Hollings, H. P. Kay-Robinson, A. R. Kitson, B. A. E. Marr, B. Metcalfe, Miss V. Newton, R. F. Porter, R. J. Sandison, M. Shrubbs, K. Verrall, E. T. Welland, Miss W. P. White, R. Williamson, I. R. Willis.

THE SPREAD OF THE COLLARED DOVE IN SUSSEX

By
RICHARD PORTER

The Collared Dove *Streptopelia decaocto*, which began a remarkable colonisation of the British Isles as recently as 1955, is now a familiar, though still rather local breeding bird in several parts of Sussex, particularly along the coastal zone. Details of its spread in Britain and Ireland up until the end of 1964 have been well documented by Hudson (*Brit. B.*, April, 1965, pp. 105-139).

This paper, which is aimed at bringing up to date the status and spread of this species in Sussex, is based on all records received up to 31st December, 1966. Information has been taken from the *Sussex Bird Reports*, 1958-1965, from unpublished records in the Society files and from records received as a result of a special request for information in 1966.

Account of the spread

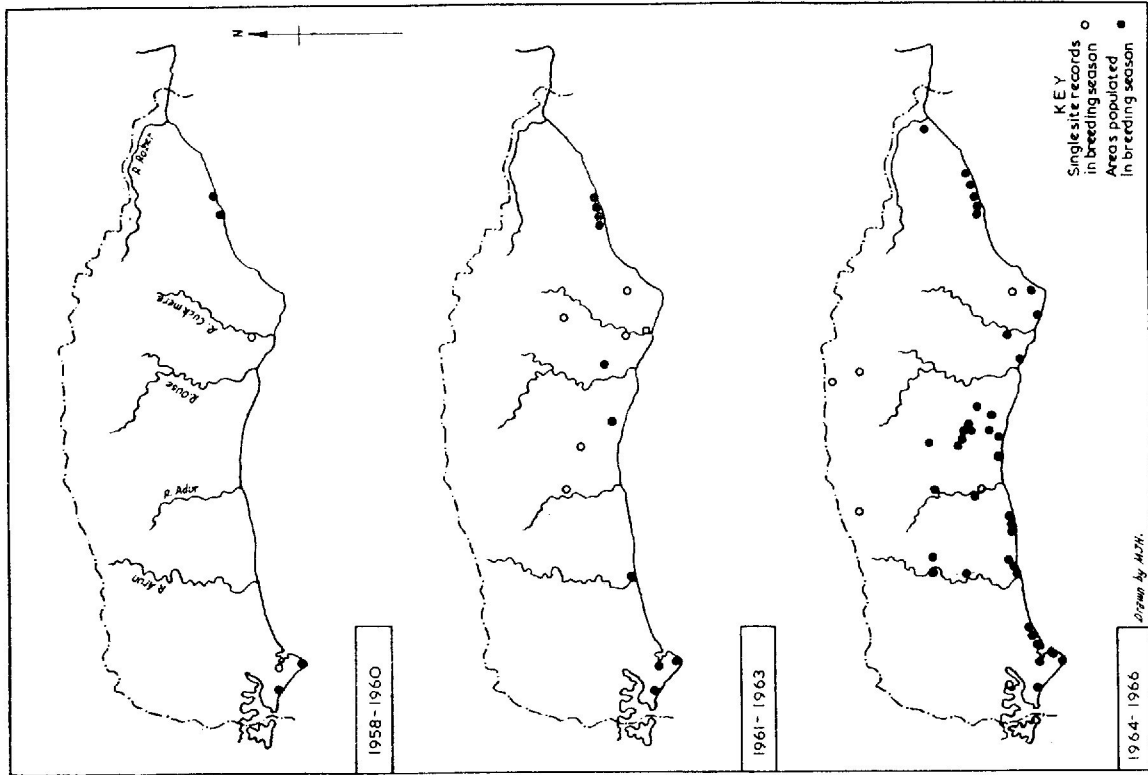
In 1958, three years after its initial colonisation of Norfolk, the Collared Dove arrived in Sussex. In that year birds were present at the Witterings and it seems likely that breeding took place, though this was not proved.

Birds were again present at the Witterings site in the breeding season of 1959, but it was not until 1960 that the species made a real push to establish itself as a breeding bird in the county.

In 1960, when birds were still present at the Witterings, a pair bred at Selsey raising two young whilst, in the east of the county, some 10-12 birds were reported breeding at St. Leonards, and nearby six birds were recorded visiting a farm on the outskirts of Bexhill during the summer. Single birds were seen at Sidlesham in July and Alfriston in February, March and April.

In 1961, pairs were proved breeding at two localities both in the east of the county. At Little Common near Bexhill 14 birds were present but only 1-2 pairs bred. Nearby a pair bred at St. Leonards. Reports during the breeding season were received from five other localities, these being Cooden, Stonecross, Sidlesham, the Witterings and Selsey. At the last locality where the species bred in 1960 there was, despite searching, no proof of breeding. In September one was seen at Beachy Head.

FIGURE 1: BREEDING SEASON DISTRIBUTION OF THE COLLARED DOVE IN SUSSEX



By 1962 the species was becoming well established in the Cooden, Little Common, Bexhill, St. Leonards area where birds were present in at least five sites throughout the year in flocks of up to 40. Reports indicate that only three pairs definitely bred, though doubtless the true number was much higher. Birds were again present in the Selsey, Sidlesham, and Wittering area where breeding almost certainly took place. A further stride in its distribution was the colonisation of Littlehampton where up to 30 birds were present during the breeding season. The only other breeding season records came from Moulsecoomb near Brighton where three birds were present in May, and Exceat where one bird was seen in April. Records at the end of the year were from Seaford (2), Beachy Head (3) and Hooe where numbers reached a peak of 30 in early December.

In 1963 the real start of the spread to inland areas began with breeding season records from Henfield, Ringmer, Alfriston, Hassocks and Lion's Green. Breeding again occurred at the Little Common-Bexhill area and at Littlehampton, though here numbers were reported as lower than in 1962. At Selsey 3-4 pairs bred in the village. The only information on post breeding season flocks was 10 at Beachy Head during the autumn and up to 20 at Sidlesham in November. This was the first year that such numbers were recorded from these two areas and doubtless indicate breeding success from neighbouring localities.

In 1964, the only established colony where attempts were made to count breeding pairs was Selsey where the number of pairs had increased from 3-4 in 1963 to 15-20. It is particularly important to note that in some areas where the Collared Dove had bred in the past, there was no information in 1964. This was no doubt due to a more casual attitude towards the recording of the species, rather than birds being absent from the area. Only three new areas were noted—Ferring (2-3 pairs) and Aldwick Bay, both on the coast, and inland at Steyning where a pair probably bred. Autumn and winter flocks again continued to increase in size, the largest being c.80 at Beachy Head on October 10th. This number strongly suggests that the species was breeding in the Eastbourne area, though there was no proof of this. New areas where the species was recorded outside of the breeding season were Chichester (2), Fairlight Beacon (1), Seaford (1) and Rustington (6).

In 1965 there was an increase in the number of new localities. For the first time birds bred or were present during the breeding season at the coastal towns of Bognor (1 pair), Felpham (several pairs), Seaford (2-3 birds) and Eastbourne (at least 5 pairs). At Eastbourne however, breeding pairs were probably higher, in view of the autumn numbers at Beachy Head. Inland, new breeding season records came from Amberley, Bramber, Ditchling, Plumpton, East Grinstead and the Patcham area of Brighton where at least 15 pairs bred. There was only one count of an established colony, this being at Selsey where again 15-20 pairs bred. In the autumn and winter, flocks of more than 10 birds were recorded at Climping (c.20), Steyning (c.12), Seaford Golf course (c.30) and Beachy Head (c.100). These are doubtless good indications of the breeding population from neighbouring areas.

In 1966, due no doubt to requests for information, there was a considerable increase in the number of records. The species was recorded breeding or present during the breeding season at 13 new localities, bringing the total number of towns or villages in which the dove has been recorded at this time of year to 50.

As well as a further spread along the coast to include Bosham, Church Norton, Portslade, Burling Gap, Hastings and Cadborough, the species occurred

in the breeding season at seven new inland sites, these being Pulborough, Horsham, Burgess Hill, West Chiltington, Westmeston, Streat and Ashdown Forest. Counts at established colonies showed a definite increase. In particular the Cooden-Little Common colony where c.300 birds were present in the breeding season. At Selsey a small increase was noted with 22-26 pairs present. No counts were made of the Littlehampton and neighbouring colonies but the species was recorded breeding along almost the whole of the coastal stretch between Aldwick and Worthing.

Winter flocks were again large, the most notable being 150 at the Witterings, 90 at Patcham, 30 at Ditchling, 40 at Steyning, 130 at Beachy Head, c.250 at St. Leonards and 300 in the Little Common-Cooden area. New sites to which the species spread outside the breeding season were Shoreham, Rottingdean, Winchelsea, Lewes, Iford, Stump Bottom and Lymminster.

The distribution maps (Fig. 1) show the status in Sussex at the end of each of the three year periods 1958-60, 1961-63, and 1964-66. This form of presentation has been adopted as in some years (notably 1963, '64 and '65) information is lacking for important localities so that a year by year picture would prove rather misleading. Table 1 lists all the localities in which the species has been recorded since 1958, with the year it was first recorded and the status in 1966. If no information is available for 1966 then the status has been given for the last year in which it was recorded or in which a census was made.

The increase and size of the Sussex population

In the initial years of the spread in Sussex (1958-1962), probably the majority of Collared Doves seen were recorded. However, records for the years 1963 to 1965, although by no means lacking, contain rather scanty information on the established colonies, where obviously the species was becoming too numerous to attract detailed attention. By contrast, in 1966 after an appeal for information, many more records were received and it is possible to estimate the minimal numbers in the county.

Table 2 shows for each of the years, 1958-66, (a) The number of areas in which the dove was recorded both in the breeding season and winter months and (b) The estimated number in the county at the end of the year. For (b) I have based the calculations on the method adopted by Hudson (1965) for determining the total population of Britain and Ireland. Full details of this method can be found in *Brit. B.* but briefly it is as follows. Where figures have been given for a feeding concentration at a locality, the peak number has been taken as being the total for the locality. Where the population has been given in terms of breeding pairs, then four young per pair has been allowed in the estimates. Where the number of breeding pairs has not been specified then this has been taken to be three pairs. Where no information is available for an established colony for one year then the figure for the previous year has been used and where there is a gap of several years, the annual increase has been assumed at a standard

TABLE 2: NUMBER OF LOCALITIES AND ESTIMATED TOTAL POPULATION AT THE END OF EACH YEAR, 1958-1966

	1958	1959	1960	1961	1962	1963	1964	1965	1966
Number of localities at which recorded	1	1	6	8	12	13	16	22	51
Estimated total population	2-4	2-4	28	41	163	240	464	736	1402

TABLE 1: COLLARED DOVE LOCALITIES SETTING OUT THE YEAR FIRST RECORDED AND 1966 STATUS

Locality	Year first recorded	Status in 1966 (References are to numbers of birds unless otherwise stated)
Aldwick Bay	64	6 pairs present
Afriston	60	Present but no details
Amberley	65	Not recorded (3 in 1965)
Ashdown Forest	66	One in July
Beachy Head	62	Up to 130 recorded in autumn
Bexhill		
Little Common	60	At least 300 in both summer and winter
Cooden		
Birling Gap	66	Up to 2 in April and May
Bognor	65	Present but no details (one pair in 1965)
Bosham	66	One in April
Bramber	65	Not recorded (one in 1965)
Brighton and Hove	65	One in May, 3 in July
Moulsecomb	62	Present but no details of numbers
Patcham	65	Bred, c.90 present in winter
Burgess Hill	66	One pair
Cadborough	66	2 in breeding season
Climping	65	Not recorded (20 in 1965)
Chichester G.P.	64	5 in August
Church Norton	66	2 pairs
Ditchling	65	Bred, 30 in December
Eastbourne	61	Bred. No details of numbers (c.30 in 1965)
East Grinstead	65	One in June
East Preston	66	One pair
Exceat	62	Only recorded in 1962
Elmer Sands	64	Present but no details of numbers
Fairlight Beacon	64	Only recorded in 1964
Felpham	65	Not recorded (several pairs bred in 1965)
Ferring	64	Bred. No details of numbers
Goring	66	Bred. No details of numbers
Hassocks	63	Several pairs
Hastings	66	Bred. No details of numbers
Henfield	62	No information since 1964 when 24 present
Hooe	62	Only recorded in 1962 when 30 present in winter
Horsham	66	One present in May
Iford	66	One in autumn
Keymer	66	One pair at least
Lion's Green (Nr. Horam)	63	Only recorded in 1963
Littlehampton	62	Bred in 1966 (last details of numbers are 30 in 1962)
Lewes	66	One in autumn
Lymminster	66	One in autumn
Plumpton	65	None recorded (6 in 1965)
Portslade	66	2 in breeding season
Pulborough	66	One pair
Ringmer	63	None recorded (one pair in 1963)
Rottingdean	66	One in autumn
Rustington	64	Bred but no details of numbers
St. Leonards	60	C.250 present in winter
Seaford	62	Bred but no details of numbers (30 in 1965)
Selsey	60	22-26 pairs bred
Steyning	66	One in September
Storeham	66	Bred, but no details of numbers
Sidlesham	60	Bred, c.37 at end of breeding season
Steyning	64	None recorded (one in 1965)
Stone Cross	61	One pair
Streat	66	2 in autumn
Stump Bottom (Nr. Findon)	66	10 in winter
Winchelsea	66	One pair
Westmeston	66	One pair
West Chiltington	66	150 in autumn
Witterings (The)	58	Bred but no details of numbers
Worthing	64	

rate and allowed accordingly. As stated earlier, records were rather scanty for the years 1963-1965, so the information for these years, based to some extent on information for previous years, should be treated with caution. Even so it is interesting to note how well the projected numbers for years in which there were no records from certain localities fit in with the overall pattern of increase which, as can be seen from Table 2, is generally a doubling of the population each year.

Movements in Sussex

As Hudson ('65) shows, the spread and colonisation occurs principally in the spring with the largest number of records being in May followed by either April or June. Records of actual immigration in Sussex support this, and are listed below.

May 16th, 1964 1 flew in from South at Selsey Bill (0550) hrs. G.M.T.
 May 15th, 1965 7 flew in from South at Belle Tout, Beachy Head (0530) hrs. G.M.T.
 May 29th, 1965 3 flew North over Selsey Bill (0415) hrs. G.M.T.
 3 flew in from South there (0440) hrs. G.M.T.

The present picture and the future

Although the Collared Dove is now well established in the county the numbers are clearly not as high as might be expected in view of the extent of ideal habitat. In 1964 for example, when Hudson estimated the total population in Southern England at 14,545, the numbers in Sussex, based on Hudson's method were only 464! A surprisingly low total especially when the numbers in Kent for that year were nearly 10,000.

By 1966 the dove had been recorded in 61 localities in Sussex and had bred in at least 50. Numbers at the end of that year were estimated at 1,400 and the number of breeding pairs was probably in the order of 250. It had spread to most areas along the coast between Bosham in the West and Cadborough, near Rye in the East and had made an impressionable start to the colonisation of the interior though it is still noticeably absent from the N.W. and N.E. of the county and along the Surrey Border. It surely will not be too long before the whole of Sussex is inhabited by this small and attractive dove and in fact 1967 has already started well with an egg being found at Little Common as early as 13th February!

BEACHY HEAD RINGING STATION, 1966

By

B. E. COOPER and A. QUINN

Several changes occurred in the Committee during the year and these were initiated by the sudden death of D. D. Harber who had been our Chairman since the station first came into being. Indeed, he instigated the formation of the ringing station under the auspices of the Society. At the end of the year R. H. Charlwood was elected Chairman and K. Verrall and B. E. Cooper were co-opted to the Committee, A. R. Kitson having resigned.

As usual the Society organised several outings to the station so that members would have the opportunity to watch birds being ringed and examined at close quarters. Almost all the meetings were very well attended and it was on one of them that the bird of the year, a Desert Wheatear, was discovered by a Society member.

Expenditure during the year included the purchase of additional nets and rings. However, the total of 1,700 birds ringed was well below our expectations. The reasons for this would appear to be twofold; a lack of continuous periods of observation during the autumn and poor numbers of migrants together with adverse weather conditions during the only spell of continuous minging. In all, the Head was manned for a total of thirty days during the spring and fifty during the autumn with a period of continuous watching between the 3rd and 18th September.

The year's ringing totals are set out below:

*Kestrel	3	Whinchat	10	Pied Flycatcher	3
Wren	2	Redstart	25	Duncock	83
Swallow	25	Nightingale	1	Meadow Pipit	1
House Martin	0	Robin	36	Tree Pipit	1
Song Martin	1	Grass Warbler	3	Pied Wagtail	1
Great Tit	18	Red Warbler	13	Starling	10
Blue Tit	31	Sedge Warbler	27	Greenfinch	39
Willow Tit	1	Blackcap	289	Goldfinch	74
Wren	26	Garden Warbler	64	Linnets	17
Mistle Thrush	3	Whitethroat	367	Bullfinch	34
Song Thrush	44	Lesser Whitethroat	96	Chaffinch	3
Redwing	2	Willow Warbler	62	Yellowhammer	1
Ring Ouzel	25	Chiffchaff	194	House Sparrow	4
Blackbird	29	Goldcrest	15	Tree Sparrow	1
Wheatear	3	Firecrest	1		
Stonechat	12	Spotted Flycatcher	18	Total	1706

* Ringed for the first time

Spring arrival of summer visitors followed the usual pattern with the main movements being noted in the second half of April. The Desert Wheatear appeared at the beginning of this period. At sea there were some excellent up-Channel movements of Scoter etc., also several Pomarine Skuas and both Mediterranean and Iceland Gulls.

Numbers of common warblers and chats during the autumn were rather inconsistent resulting in disappointing ringing totals. Nevertheless movements of some species proved exceptional with Ring Ouzels the most outstanding.

The unprecedented total of 200+ were present in early October. Rarities included Melodious Warbler and Tawny Pipit in August, Sooty Shearwater and Bluethroat in September to be followed later by Yellow-browed Warbler and Serin.

A good variety of raptors were again recorded although the extensive watches which were carried out in 1965 could not be maintained at the same level in 1966. Pride of place must go to the three Rough-legged Buzzards which arrived from the SW. on October 29th and hunted for some time in the Whitbread Hollow area. Another was seen at the same place some three weeks later.