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# SCOTTISH BIRDS



THE JOURNAL OF THE  
SCOTTISH ORNITHOLOGISTS' CLUB

Volume 10 No. 1

Spring 1978



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by DONALD WATSON

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# SCOTTISH NEWS

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## Editorial

**Scottish Bird Reports again** Since the 1976 report has already lost its topical interest, and to avoid jeopardising the publication schedules of *Scottish Birds* by publishing it in this issue, it has been decided to combine the reports for both 1976 and 1977 in one issue to appear in (we hope) the autumn number in September. We have four compilers to write the 1977 report, Alan Brown, Roy Dennis, Ron Forrester and Angus Hogg, who should now be hard at work on the local recorders' summaries. It is too early yet to report on their progress but with their willing hands, backed up by the recorders and their emergency assistants, we can be reasonably confident that the delays of previous years can be avoided.

**Index** Club members who wish to obtain the index to volume 9 should complete the form enclosed with this issue and return it with their remittance. The index should be available in a few weeks. Library subscribers will receive their copies with the next issue.

## BRITISH BIRDS

Enclosed with this copy of the journal is a leaflet offering a year's subscription to *British Birds* for £6. This special offer, made only to members of the SOC and other bird clubs in Britain, is a reduction of £2 on the normal price. This is the journal for any birdwatchers who want to keep in touch with what is going on in Britain. If you have not seen *British Birds* for a year or two you may be surprised at the changes. The new editor, Tim Sharrock, has introduced many new features that make the journal more interesting and lively without losing its scientific standing. The special offer goes a long way towards overcoming the main reason you may not already subscribe—the cost of doing so—and I commend it to you. The leaflet may be used to take out a new subscription or to renew an existing one.

ANDREW T. MACMILLAN, *President.*

## A moonwatch study of nocturnal migration over central Scotland

C. J. HENTY

### Introduction

Invisibility, like beauty, is in the eye and mind of the beholder. Though birds high in the night sky are usually invisible to the human observer there are stratagems that can be used to detect them besides listening for calls. Ornithologists have long known that under some weather conditions birds appear at lighthouse beams or bright windows (Coward 1912, Rintoul and Baxter 1935, Moreau and Moreau 1942) and recently vertical spotlights have illuminated migration without disturbing it (Gauthreaux 1969). The most productive technique uses the invisible electro-magnetic radiation of radar and this work has been ably summarised by Eastwood (1967). However radar is not suitable for amateur use since access may be difficult or the apparatus in the wrong place, while to buy and maintain a personal radar station is rather expensive.

All these techniques rely on the fact that birds reflect radiation but they also absorb and interrupt it and appear as silhouettes against a light source. The moon is a source conveniently placed above flying migrants, though it does suffer from the drawbacks of small size, shifting position and availability that is both phasic and erratic. Moonwatching for migrants has had a successful tradition in America for almost 100 years (Nisbet 1962) and recently has been used with great success in recording the direction of migration around the Mediterranean (Bateson and Nisbet 1961; Nisbet, Evans and Feeny 1961; Wallraff and Kiepenheuer 1963). In north-western Europe cloud often prevents any observations over a whole moon cycle but a few determined pioneers have been successful in early autumn (Tunmore 1956, London NHS 1964, Simms pers. comm.).

For several autumns I have been impressed by the massive immigration of Redwings and Fieldfares into central Scotland and it seemed clear that much of their movement was at night. Since no radar studies had covered the Central Region I tried moonwatching to see if night migration could be detected and its direction determined.

### Methods

This study was mainly carried out at Alva (Clackmannanshire) for simple convenience, but supplementary watches were made around Stirling throughout the autumn migration

at Airthrey and Lecropt, and also once in August at Gartmorn Dam. The problem is seeing birds that are visible for a very short time and usually at a great distance. I have used x20 binoculars mounted on a medium weight tripod with a tilt and pan head. The American tradition is to use a similar power telescope whilst observations have been made successfully with x10 and x13 binoculars (Tunmore; Nisbet *et al*; loc. cit.).

When one starts moonwatching there can be problems in distinguishing birds from non-birds. The latter range from bats and insects through leaves, thistledown and cloud fragments to genuine illusions such as the floaters in the eye. Any possible target that disappears without leaving the moon's disc as soon as attention is directed to it is very dubious. After seeing a couple of unequivocal birds there is little problem in rejecting uncertain records or identifying physical or psychological clutter that are not honest birds. The standard practice is that two observers should alternate but I have found solitary observation is quite satisfactory provided that allowance is made for time spent in making notes or occasional rests. Concentration is helped by the obvious creature comforts but practice in meditation might be an advantage besides a persevering (or insensitive) temperament.

The time and probable identity of each record is noted and the direction of movement assessed by imagining the moon as a clockface with 12.00 uppermost and then recording the entry and exit points in terms of hours and half hours. If the moon is between threequarters and half full I find that useful observations can be made by drawing a diagram of the moon's shape and marking the track of a target on it. The compass direction of the moon and its angle of elevation should be measured every 20 minutes—it is possible to calculate these data from information in almanacs but the process is tedious, especially for elevation, as several friends know to their cost.

The processing of the original observations has to take into account the moon's compass direction, its elevation (since there is a distortion if it is not directly overhead) and the fact that most tracks do not go straight through the moon's centre. The whole procedure has been made quick and easy by Nisbet (1959) who produced tables that cover all possibilities. Working from geometrical first principles is not difficult but it takes time and it is easy to make mistakes. I can provide information on both methods for anyone with moonwatch data or I might be able to help process it. The result of these transformations is a list of individual directions expressed in degrees and for comprehensibility I have converted my data into the equivalent compass directions (SW, WSW, etc.) by grouping the angles into the appropriate  $22\frac{1}{2}$  degree categories.

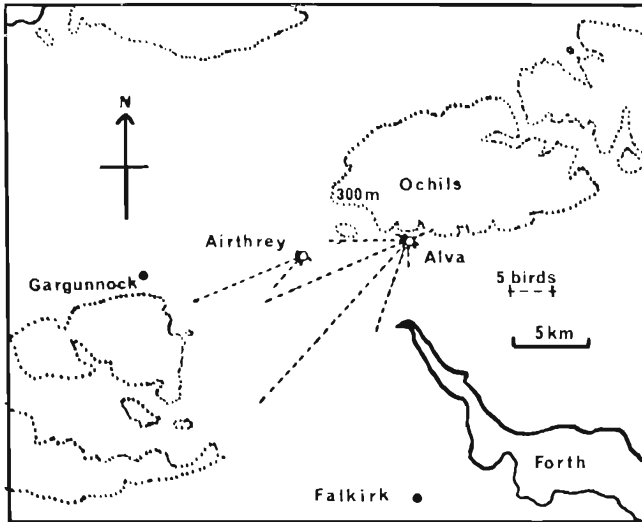
For a given migration flight the number of birds recorded will depend mainly on the detection range, the angle of the elevation of the moon and whether the apparent direction of movement is from side to side or up and down over the moon's disc. In comparing different places, nights or times of night the basic observations are conventionally converted from birds seen per hour to estimated birds crossing a one mile front per hour. This has the advantage of making the figures more impressive by a factor commonly ranging between x40 and x200 but the conversion depends on assuming a standard detectability and height distribution of migrants and at least the second assumption is very dubious since the height of migrants is known to vary with species, season, time of night and weather (Eastwood, loc. cit.). Thus I endorse Nisbet's reservations and go further in asserting that the numerical standardization of rates of movement lacks any reliable basis; consequently I have not employed it. Birds that fly so as to be seen moving up or down the moon's disc will be under-represented so the distortion effect could in principle affect the comparison of the numbers seen moving in different directions. However, provided the observations are taken over a range of the positions that the moon takes in the sky the biases will largely cancel out.

On rare occasions birds can be seen against moonlit clouds or thin mist around the moon and a direct guess can be made of their heading. Since the opportunity of making such records varies so much I have not used them here. An attempt was also made to replicate Gauthreaux's spotlight technique but the results so far have not been encouraging.

### **October and November migration**

Observations in the late autumn gave the most satisfactory results and refer to 25 nights in 1975 (11), 1976 (11) and 1977 (3). A most striking feature is that most birds are seen on only a few nights: although the average number of passerine-type birds per hour is just over 3.5, on almost two thirds of the nights there were less than two birds per hour. It soon became obvious that if no birds were seen in 20 minutes it was certain that no large passage was occurring and I only persevered for more than an hour if there were over five birds per hour. Often observations were curtailed due to cloud. Of 128 reliable records most occurred on three nights—16th October 1975 (20/hr, light E wind), 17th October 1975 (20/hr, calm) and 30th October 1976 (14/hr, light N or NW). On 4th October 1976 I made 16 observations but only at a moderate rate (6/hr, light W). Even allowing for the shorter observation periods on poor nights the three best nights accounted for

almost threequarters of the records. Most nights of weak passage were with winds between W and SW, with the notable exceptions of 17th, 19th, 20th and 21st November 1975 (N winds) and of 18-19th October 1975 when the local conditions were similar to those of the excellent preceding nights.



Directions of nocturnal flight in late autumn in relation to surrounding high ground.

The map analyzes the direction of tracks recorded on the four best nights and accounts for 105 out of the 128 late autumn records. The remaining 23 records are scattered over 10 nights and do not justify the considerable labour of an accurate analysis; a crude analysis shows that they too are concentrated between W and S. Most tracks head WSW (33%) and SW (32%); the rest are mainly W or SSW with a few scattered round to the NW or ENE. Near Braco, 14 km (8.7 miles) N of my observation points, R. E. Thomas saw a party of five birds on 17th October 1975, crossing the moon and heading approximately WSW. All these observations are consistent with the radar study of Wilcock (1965) who worked in Aberdeenshire in 1962.

Most observations were made at Alva, close under the S scarp of the Ochils and, if the tracks represent a consistent direction of flight, the map shows that birds with a direction S of WSW must have overflowed the 650 m (2,133 ft) high main ridge though there is little evidence that they do so during the day, except E of Glendevon where the hills are lower (pers. obs.). Moonwatching at Airthrey, 8 km W of Alva and without

Table. Orientation of tracks according to place and wind.

Date	Place	Wind	NW	WNW	W	WSW	SW	SSW	S	SSE	SE	ESE	E	ENE
16 Oct 1975	Airthrey	Light E	—	1	1	15	5	1	—	—	—	1	—	—
16 Oct 1975	Alva	Light E	—	1	2	6	2	—	—	—	—	—	—	2
17 Oct 1975	Alva	Calm	—	—	5	8	19	5	3	—	—	—	—	1
4 Oct 1976	Alva	Light W	—	1	3	4	5	3	—	—	—	—	—	—
30 Oct 1976	Alva	Light NW	1	—	—	2	2	5	—	—	1	—	—	—
Totals			1	3	11	35	33	14	3	0	1	1	0	3

any very high ground to the N, indicates that nocturnal migration is similar in intensity and direction to that at Alva and, once more, the map indicates that many birds seem to have come over the Ochils. If the observed track directions are persistent in the onward direction then many birds will cross the Gargunnock Hills. Thus the presence of moderately high hills with much ground above 500 m (1,640 ft) has no apparent effect on nocturnal migration, at least under fairly clear conditions.

The table suggests that the main direction of flight with E winds is WSW, with calm conditions SW and with N winds SSW. This implies either that birds with different preferred directions tend to choose an appropriate following wind or that they are to some extent drifted laterally by a cross wind. Wilcock (op. cit.) found that for birds over the sea there were occasions when lateral drift occurred but in a recent review Emlen (1975) concluded that there is still no general agreement on this point. At least my result of 4th October 1976 shows that overland migrants do not simply fly downwind.

Most birds were seen within five hours of sunset and this was particularly well demonstrated on 16th October 1975 (sunset 17.15) when movement was persistent from the start of observations at 21.10 until 22.30 but very slight between 22.30 and 23.00. Wilcock (op. cit.) recorded dusk departures overland from NE Scotland in a generally SW direction. The last stages of my moonwatch migrations would coincide roughly with arrival from the most distant source areas, 200 km (124 miles) NE, since Eastwood notes that most nocturnal migrants start flying within about an hour after sunset and their airspeed in late autumn is c. 56 km (35 miles) per hour. Wilcock found that migration from over the sea did not reach the coast until the early morning and several direct observations suggested that such flocks landed a few miles inland.

Birds within about 600 m (650 yds) will flash across the moon in less than a second and be as unidentifiable as those at a great distance. Birds at intermediate distances may be seen for just long enough to get some impression of their jizz and these usually resembled medium sized passerines such as thrushes. According to Dennis (1976, also Current Notes in the same issue) large arrivals of Redwings were noted on the E coast of Scotland several days before each of the main movements reported here and they were usually accompanied by Fieldfares, Blackbirds and Song Thrushes. Redwings were numerous around Stirling on all these occasions and so were Fieldfares except for 4th October 1976; the other species tend to go unnoticed inland. Wilcock found in 1962 that in comparable movements the radar echoes were those characteristic of

thrush sized birds and that visual records were partially correlated with the radar evidence and mainly consisted of Redwings, Fieldfares and Blackbirds.

Call notes were amazingly rare during my observations—Redwing twice and Skylark once, the latter questionably in flight. Thus on fairly clear nights birds must fly too high and/or call too rarely to be heard by a ground observer. Hence the rate of calling over inland sites may give a very distorted picture of the weather conditions that are optimal for nocturnal migration. Observations by Browne (1953) in Ireland and by myself in Galloway suggest that on the coast thrushes may be heard frequently even on clear nights.

I conclude from the observations in this section that the nocturnal migration over central Scotland in October and November is primarily the onward passage of Scandinavian thrushes towards Ireland.

### **Migration in early autumn**

I made similar observations for the departure of warblers, chats and flycatchers. In the three years 1975-7 I watched for 25½ hours on 26 nights, five in July, 12 in August and nine in September. Only two small birds were seen, both on 4th September 1976, one flying E over Alva and one SE over the carse at Lecropt. This is surprising since Evans (1966) recorded on radar much early autumn migration over Northumberland, especially with light W winds such as occurred during some of my fruitless watches. Moreover Wilcock had similar radar evidence for Aberdeenshire. Tunmore (1956) detected the warbler movement with x10 binoculars over Cambridge and since small migrants are abundant during the day in my observation area (Bryant 1974, G. Shaw in litt., pers. obs.) I can find no coherent explanation of my negative results for moonwatching.

### **Migration in spring**

Spring moonwatches were made in 1976-7, two nights in March and six nights in April totalling six hours. Small birds were seen on 12th April 1976 and 30th April 1977. Both nights were almost calm and of the eight records six were to the NW, one NE and one SW. The predominant directions strongly suggest that I was observing the return of breeding birds rather than the departure of winter visitors.

### **Other species**

A Swift was seen over Alva at 00.05 on 25th July 1975 moving rather slowly N and not exceptionally high. Nocturnal ascents are of course well documented in this species. House



Martins are also suspected of nocturnal flights but although there is a colony around my main observation point the moonwatching has never revealed even the suspicion of a hirundine. Lapwings are the commonest large species seen at night and presumably are usually local birds since they are typically fairly close. However a party of five heading SW on 16th October 1975 were relatively high, as was a singleton flying WSW on 4th October 1976. Ducks show a similar pattern with most quite close but once, on 12th August 1976, a party of four flew WSW at a great height over the carse N of Stirling. Possible identifications include owl sp. and gull/curlew and I have strong suspicions that pigeons may move around at night at no great height.

### Conclusion

These records seem to form the first moonwatch evidence on late autumn movement anywhere in Britain and also the first record of small birds in spring. The whole technique has been ignored in Britain to a curious degree—thus Tunmore's observations pre-date the radar discovery of the SSE orientation of warblers, though I have not seen this acknowledged anywhere. It is worth pondering that simple observations anytime in the last century could have shown the night activity of Swifts without a requirement for radar or radar directed aeroplanes.

Finally it still strikes me as remarkable that given the intense effort expended in bird observatories over the last 20 years in logging birds and speculating on their origin I can find no mention in the reports of observatories of even an attempt to watch the moon for straightforward evidence. Indeed the temptation to mangle Browning is irresistible:

*That's the wise ornithologist, he never makes a critical  
observation.*

*For he fears he never could recapture  
That first, fine, careless, speculative rapture.*

Moonwatching is often frustrating but when successful gives the most extraordinary thrill due to the dramatically sudden and brief appearance of a bird against an alien backdrop and the sense of a direct revelation of hidden phenomena. I hope that other observers will be stimulated to discover what is happening in the night sky over their homes; maybe, however, something like a government health warning should be issued: moonwatching can become addictive and may injure your health and social life. There is still no need to be put off, the same warning might be applied to many aspects of birding.

## Acknowledgments

I am particularly grateful to Mr E. Simms for sending me the London reference and other notes. Several colleagues in the Psychology Department, University of Stirling, were enticed from their rightful responsibilities to tackle my problems of solid trigonometry, in particular R. N. Campbell needed little pressure to produce calculations of the moon's apparent path.

## Summary

Practical techniques are described for observing birds against the face of the moon. Observations near Stirling in October and November 1975-7 showed several movements oriented between WSW and SSW which correlate roughly with the migration of Scandinavian thrushes. The four main passages occurred on nights with light winds and only in the early part of the night. In early autumn sustained observation unaccountably failed to detect the departure of warblers and chats. A few observations are described for sparrow and for non-passerines.

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## Isle of May Bird Observatory and Field Station report for 1977<sup>†</sup>

*Prepared for the Observatory Committee  
by J. M. S. ARNOTT, Honorary Secretary*

(Plate 1)

The Observatory was manned from 20th March to 11th June, with the exception of 9-11th and 17-28th April, and then intermittently until the autumn coverage from 6-26th August, and 3rd September to 28th October. A few records for other dates were received from some observers. During the year 146 species were observed, two more than in 1976, and again the total included one new bird for the island, this time a Short-toed Lark.\* Other rarities included Hen Harrier, Osprey, Hoopoe, Blue Tit, Thrush Nightingale,\* Icterine Warbler, Greenish Warbler\* (plate 1a), Yellow-browed Warbler, Red-breasted Flycatcher, Richard's Pipit,\* Yellow-breasted Bunting,\* and Little Bunting.\*

Numbers of most migrants were well down compared with 1976, and this was reflected in the ringing total of 3,857, of which 1,689 were Puffins. But unusually high numbers were recorded of Bluethroats and Red-backed Shrikes (plate 1b), Lapwings bred for the second successive year, and Ringed Plovers attempted to breed.

### Spring migration

Westerly gales marked the last ten days of March, but there was a steady flow of migrants up to the end of the month including thrushes, Skylarks, Wheatears (25 on the 27th) Robins and Meadow Pipits (150 on the 25th). Strong winds from the west and north continued at the start of April and there was only a trickle of passage for the first fortnight, including a Lapland Bunting on the 11th. After the gap in observer cover, by 29th April the warbler and hirundine migration was getting under way with small numbers of Willow Warblers, Whitethroats and Chiffchaffs, and with 20 Swallows and single House Martin and Sand Martin on the 30th. There was a small trickle of migration through the first fortnight of May in mainly northerly and westerly winds, but on 15th May in a light easterly with good visibility the numbers increased and included ten Willow Warblers and ones or twos of Grasshopper

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<sup>†</sup>Reports since 1958 published annually in *Scottish Birds*.

\*Denotes record is subject to acceptance.

Warbler, Blackcap, Garden Warbler, Whitethroat and Chiffchaff. There were also a Wryneck, 40 Wheatears, four Whinchats and a Redstart.

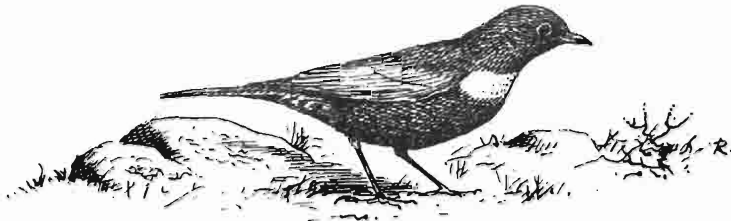
A feature of the spring migration was the unusually large passage of Bluethroats and Red-backed Shrikes. The first Bluethroat arrived on 15th May, followed by another on the 16th, two more on the 17th, one each on the 20th, 21st and 24th and two on the 26th. There were three birds present on the 22nd and 26th and altogether there were at least nine birds. The first three Red-backed Shrikes arrived on 16th May in a light northeasterly wind, together with the second Bluethroat, and amongst others a Quail, six Whinchats, a Yellow Wagtail and nine Tree Sparrows. In the easterly winds which persisted for the rest of May four more Red-backed Shrikes came in on the 20th, two on 25th and at least six on the 26th. There were three present on 9th June, making the spring total at least 18.

On 26th May, a day of moderate east wind and morning drizzle, in addition to the Bluethroats and Red-backed Shrikes there was a fair-sized fall including two Turtle Doves, 20 Wheatears, 25 Whinchats, 40 Sedge Warblers, eight Garden Warblers, 100 Whitethroats, four Lesser Whitethroats, 60 Spotted Flycatchers, a Corn Bunting and the island's first record of a Short-toed Lark.\*

### Autumn migration

After a trickle of Willow Warblers in the first half of August the autumn migration picked up on the 14th, again in easterly wind and rain, with single Garden, Wood, and Greenish\* Warblers, and two Whitethroats, and on the 15th with 14 Pied Flycatchers, a Spotted Flycatcher, three Garden Warblers and a returning Red-backed Shrike (five altogether in autumn). The wind continued easterly until the 26th with a small daily passage including Barred Warblers on the 21st and 22nd, and a Thrush Nightingale\* on the 22nd.

Following the break in observations from 26th August to 3rd September the wind remained westerly with little migration until 17th September, when the first Fieldfares and Redwings and a Brambling arrived in a northeasterly wind together with small numbers of warblers and chats, a Merlin, a Little Bunting\* and a Yellow-breasted Bunting.\* The northeasterly wind continued until the 24th, when it veered to southeast for three days, and during this fortnight passage increased with daily totals of up to ten Fieldfares, 200 Song Thrushes, 150 Redwings, five Ring Ouzels, 50 Blackbirds, ten Whinchats, 25 Redstarts, 30 Blackcaps, eight Garden Warblers, 200 Meadow Pipits, and also a Bluethroat on the 18th, single



RING OUZEL by R. A. Richardson

Yellow-browed Warblers on the 19th and 22nd and two on the 20th, a Red-breasted Flycatcher on the 19th and two on the 25th, single Lapland Buntings on the 21st and 24th, a Richard's Pipit\* on the 23rd, a Hoopoe on the 25th, a Glaucous Gull on the 27th and a Wryneck on the 28th.

There was little movement in the first five days of October with westerlies, though another Red-breasted Flycatcher came in on the 2nd. Periods of five or six days of easterly wind began on the 6th and the 15th, and each of these was marked by a large increase in migrants; on the 6th 200 Redwings, increasing to 500 on the 7th with 150 Robins, 75 Blackcaps, 250 Goldcrests and a Great Grey Shrike. Another Little Bunting\* occurred on the 9th. On the 15th arrivals included 600 Song Thrushes, 1,000 Redwings, 200 Blackbirds, and 25 Bramblings increasing to 90 on the 16th together with two Shore Larks. Migration diminished in the westerlies from the 22nd to the end of the month with the exception of the 26th when there was an influx of Scandinavian thrushes in the face of a moderate southwest wind. Many of these 1,500 Redwings, 150 Fieldfares, 30 Song Thrushes and 100 Blackbirds landed on the island in an exhausted condition, but others carried on west to the mainland in the good visibility.

#### Passage dates of some migrants

- Great Skua 16 Sep-19 Oct, 4 on 18 Sep.  
 Arctic Skua Singles 8th, 9 May; 24 Jul-22 Oct, 18 on 4 Sep.  
 Wryneck 3-20 May, 2 on 8 May; 20 Aug-1 Oct.  
 Swallow 30 Apr-31 May, 12 on 11 May; 1 Aug-20 Oct, 300 on 7 Sep.  
 House Martin 5 Apr-21 Jun, 6 on 13 May; 4 Sep-21 Oct.  
 Sand Martin 30 Apr-20 May; 4 Sep-10 Oct (latest recorded date).  
 Fieldfare To 10 May; 4 during summer; 17 Sep on, 300 on 27 Oct.  
 Song Thrush To 9 May, 20 on 25 Mar; 17 Sep on, 600 on 15 Oct.  
 Redwing To 3 May, 20 on 25 Mar; 3 during summer; 17 Sep on, 1,500 on 26 Oct.  
 Blackbird To 14 Apr, 30 on 25 Mar; 24 Sep on, 200 on 15 Oct.  
 Wheatear To 11 Jun, 30 on 25 May; 3 Jul-17 Oct, 30 on 7 Sep.  
 Whinchat 30 Apr-11 Jun, 25 on 26 May; 2 Aug-10 Oct, 10 on 25 Sep.  
 Redstart 29 Apr-29 May, 4 on 3 May; 13 Aug-21 Oct, 25 on 25 Sep, 7 Oct.  
 Robin To 16 Apr, 20 on 26 Apr; 23 Aug on, 150 on 7-8 Oct.

**Sedge Warbler** 4 May-30 Jun, 40 on 26 May; singles 16th, 23 Jul, 25 Sep.  
**Blackcap** 3-28 May; 24 Sep on, 75 on 7-8 Oct.  
**Garden Warbler** 15 May-12 Jun, 8 on 26 May; 13-26 Aug and 17 Sep-19 Oct, 8 on 3 days.  
**Whitethroat** 29 Apr-12 Jun, 100 on 26 May; 14 Aug-4 Oct.  
**Willow Warbler** 29 Apr-29 May, 25 on 11 May; 2 Aug-14 Oct, 20 on 20-26 Aug.  
**Chiffchaff** 30 Apr-15 May; 24 Sep-10 Oct, 15 on 7 Oct.  
**Spotted Flycatcher** 20 May-20 Jun, 60 on 26 May; 15 Aug-9 Oct, 3 on 25 Sep.  
**Pied Flycatcher** 3-15 May; 11 Aug-8 Oct, 14 on 15 Aug.

### Unusual occurrences

**Manx Shearwater** One 21 Mar—earliest recorded.  
**Teal** 10 on 3 Oct—highest recorded number.  
**Scaup** One 16 Oct—13th record.  
**Tufted Duck** 8 on 18 Sep, one 19 Sep—10-11th records.  
**Red-breasted Merganser** 16 on 8 Oct—highest recorded number.  
**Shelduck** 16 on 9 May—highest recorded number.  
**Barnacle Goose** 30 on 4 Oct—16th record and highest recorded number.  
**Whooper Swan** 4 on 14 Oct—15th record.  
**Hen Harrier** One 10 Oct—7th record.  
**Osprey** 2 on 10 May—15th record, 1st since 1971.  
**Quail** Singles 1st, 16 May, 12 Jun—12-14th records.  
**Water Rail** One 12 Apr—5th spring record.  
**Dotterel** One 25 Sep—9th autumn record.  
**Pomarine Skua** One 8 Sep—12th record.  
**Sandwich Tern** One 26 Oct—latest recorded date.  
**Barn Owl** One 19 Oct—5th record.  
**Hoopoe** One 25-28 Sep—10th record.  
**Short-toed Lark\*** One 26 May—1st record.  
**Sand Martin** 9 on 10 Oct—latest recorded date.  
**Blue Tit** One 26 Sep—9th record.  
**Thrush Nightingale\*** One 22 Aug—3rd record.  
**Bluethroat** 9 during 15-27 May—high number.  
**Icterine Warbler** One 25 June—1st June record.  
**Blackcap** 75 on 7-8 Oct—high number.  
**Whitethroat** 100 on 26 May—high number.  
**Greenish Warbler\*** One 14-16 Aug—3rd record.  
**Yellow-browed Warbler** One 19th, 3 on 20th, one 22-28 Sep.  
**Spotted Flycatcher** 60 on 26 May—highest recorded number.  
**Red-breasted Flycatcher** One 19th, 2 on 25 Sep, one 2 Oct.  
**Richard's Pipit\*** One 23 Sep—4th record.  
**Meadow Pipit** 800 on 7 Sep—high number.  
**Great Grey Shrike** One 7 Oct.  
**Red-backed Shrike** 18+ during 16 May-11 Jun; 5 in autumn.  
**Corn Bunting** One 26 May—11th record.  
**Yellow-breasted Bunting\*** One 17 Sep—11th record.  
**Little Bunting\*** Singles 17-18 Sep, 9 Oct—14-15th records.  
**Lapland Bunting** Singles 19-24 Sep, 2nd and 16 Oct.

### Breeding population (all numbers refer to pairs)

The populations of Herring Gulls and Lesser Black-backed Gulls were held at about 2,500 and 250 respectively after another small-scale cull carried out by the Nature Conservancy Council staff. Unfortunately no counts were made this year of

Razorbills or Guillemots, but counts made by Hector Galbraith in June of other breeding seabirds were: Shags 816 (365 in 1976, 676 in 1975, 979 in 1974), Fulmars 62 (57 in 1976, 72 in 1975, 91 in 1974) and Kittiwakes about 3,000 as normal. The Puffin colony continued in the region of 3,000.

Further information has come to light about the breeding of Lapwings in 1976 which now corrects the report for that year. There were three nests with eggs, apparently with two males and three females, and at least one young bird was fledged. This was therefore the first record of successful breeding. In 1977 there were six nests with eggs, and two chicks but no fledged young were reported. A new breeding species for the island was Ringed Plover, a pair of which had a nest with two eggs. These were lost after the normal incubation period. Other reported breeding species were: Eider (c.100), Oystercatcher (c.15), Swallow (one), Rock Pipit (only 6-8, compared with 40-50 in recent years) and Pied Wagtail (two).

### Ringing

During the year 3,857 birds of 66 species were ringed; well down on the 5,396 for 1976 in spite of a record total in 1977 for Puffins of 1,689. Other comparatively high figures were 126 Song Thrushes (third highest, but well down on last year's 328), 77 Redwings (fourth highest), nine Bluethroats (highest), 109 Blackcaps (second highest; 211 in 1976), 70 Whitethroats (highest since 1970 but still only about half the total of most years in the 1950s), 15 Pied Wagtails (highest since 1955) and 17 Red-backed Shrikes (highest). Among those seldom ringed were an Icterine Warbler (overall total 39), a Greenish Warbler\* (three), four Yellow-browed Warblers (36), a Red-breasted Flycatcher (43) and a Little Bunting\* (three).

### Recoveries

During the year 145 recoveries of 13 species were reported, somewhat less than in recent years as a result of the smaller cull and previously reduced gull population. In 1976 there were 141 recoveries of Herring Gull alone; this year there were 33. These followed the normal east coast distribution from Fife to Lincolnshire, but included one in Lanarkshire and one in Cheshire. Shag recoveries numbered 74, ranging down the east coast from the Moray Firth to, unusually, as far as Sussex and Hampshire, and with one from the Netherlands. Puffin recoveries increased to eleven with the current large-scale ringing programme; they were all in May to August and from Fife to Yorkshire. Among the passerines Song Thrushes

yielded the biggest return with six recoveries, five from abroad and including two shot, and one "taken". This is a selection of detailed recoveries (with the age-code following the species name) :

	Ringed	Recovered	
<b>Shag</b> (1)	29.07.76	04.01.77	Groede, Zeeland, Netherlands.
<b>Lesser Black-backed Gull</b> (2)	23.07.75	c30.06.77	Stéha, Tétouan, Morocco.
<b>Lesser Black-backed Gull</b> (2)	25.06.75	23.07.77	Bodymoor Heath, Kingsbury, War-wicks.
<b>Kittiwake</b> (2)	05.07.72	22.08.77	Den Helder, Noord Holland, Netherlands.
<b>Song Thrush</b> (3)	27.10.76	20.12.76	Kukuërri, Azcoitia, Guipuzcoa, Spain (shot).
<b>Song Thrush</b> (2)	29.09.76	31.12.76	near Lisbon, Portugal ("taken").
<b>Song Thrush</b> (2)	30.09.76	12.01.77	El Arahal, Marchena, Seville, Spain
<b>Song Thrush</b> (3)	14.10.76	23.01.77	Mogro, Santander, Spain (shot).
<b>Song Thrush</b> (4)	02.04.76	20.04.77	Oudwoude, Friesland, Netherlands.
<b>Dunnock</b> (3)	06.10.76	11.03.77	Northney, Hayling I., Hants.
<b>Meadow Pipit</b> (4)	19.05.76	16.12.76	Villaverde del Rio, Seville, Spain.
<b>Starling</b> (3)	04.08.74	30.05.77	Stretton, Burton-on-Trent, Staffs.
<b>Starling</b> (2)	11.10.75	15.05.77	Ulstein, More og Romsdal, Norway.
<b>Chaffinch</b> (2)	29.09.76	23.05.77	Ovre, Surnadal, More og Romsdal, Norway.

At the time of writing no details were available of birds controlled on the island and ringed elsewhere.

## Research

Several projects were continued during the year :

**Gulls** Breeding success among Herring and Lesser Black-backed Gulls, recruitment associated with the culls and analysis of ringed birds (Neil Duncan, Durham University).

**Puffins** Status and breeding biology (Dr M. P. Harris, Institute of Terrestrial Ecology).

**Behaviour** Studies of Rabbits *oryctolagus cuniculus* and Herring Gulls (Dr R. Prescott and others, St Andrews University).

**Marine fauna** Survey and monitoring programme (Dr J. L. S. Cobb, St Andrews University).

**N.C.C. Warden** The Nature Conservancy Council again employed a part-time reserve warden during the summer months to supervise the activities of day-visitors.

The best wishes of the Committee are extended to Mr George Robertson, MBE, Principal Lightkeeper, on his retirement, and their grateful thanks to all the Lightkeepers for their kind help, to Mr Jim Smith for running the boat service so efficiently, to Mrs Rosemary Cowper for dealing with the bookings, and to



all the observers who helped with repairs, completion of schedules, and in many other ways.

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## **Birdwatching on Loch Lomondside**

JOHN MITCHELL

(Plate 2)

*This is the first in a series of articles describing the birdwatching attractions of various parts of Scotland. John Mitchell is on the Nature Conservancy Council staff in the Loch Lomond area.*

In a recent ornithological account of Loch Lomondside the author remarks that visitors to the area may be forgiven for initially concluding the local bird life is more or less confined to a few gulls and the occasional Hooded Crow foraging for scraps. Even after eleven years of residence beside the bonnie banks I sometimes still experience the same despairing feeling of birdlessness about the place, especially during poor weather or after tramping for hours across seemingly desolate moorland without stirring up more than the odd pipit. Yet for variety of species during the course of a year, Loch Lomondside must be considered amongst the best of the inland birdwatching spots in Scotland. It is certainly the most accessible, being less than 45 minutes by car from the very centre of Glasgow.

On approaching by the A809, one cannot fail to be impressed by the panorama of diverse bird habitat as seen from the Queen's View on the southern edge of the Loch Lomond basin. The region can be divided into two major zones, both geographically and in terms of land use. The northern Highland zone is essentially mountainous in character with several Ptarmigan inhabited peaks over 3,000 feet, the steep slopes being given over to sheep farming and extensive forestry operations (plate 2a). In contrast, the improved lower ground of the more gently rolling southern zone is characterised by a patchwork of enclosed fields interspersed with numerous small woods and plantations. Loch Lomond itself has the largest surface area (27.45 square miles) of fresh water in Britain, with a complex network of inflowing rivers and burns draining some 270 square miles of the surrounding country. Shaped like an elongated triangle nearly 23 miles long, this

glacially formed lake is studded with wooded islands in the relatively shallow southern half. With such a wide range of bird habitat available, it is perhaps not surprising that Loch Lomondside's bird list currently stands at about 220 species recorded on one or more occasions.

One morning in May 1954 the late Professor M. F. M. Meiklejohn set out to tick-up 100 species in a day while walking from Gartocharn, near the southern end of the loch, to the Lake of Menteith in the adjoining Forth valley. Unfortunately, heavy rain brought this ambitious venture to a watery end just outside Drymen, and MFMM was forced to retire reluctantly(?) to the nearest hostelry. Nevertheless, this doyen among birdwatchers had by then recorded no less than 74 species in just a few short miles—a far cry from the paucity of layby species seen by carbound visitors to the area. One of the reasons the Professor had totted-up such an impressive score was that he had unerringly bog-trotted down to the bird-rich marshes and wet woods flanking the River Endrick where it enters the southeast corner of the loch. The potential of the Endrick Mouth area was first brought to the Victorian ornithological circle's attention by a gentleman named George H. Leith. Of several rarities he shot for his private collection at Ross Priory the most notable was a Bonaparte's Gull in April 1850, a record that was to stand as the only known Scottish occurrence of this New World species for well over a century. The Endrick Mouth can lay claim to one other first for Scotland—a Caspian Tern in August 1968. To date, 32 species of wader alone have been recorded in this corner of Loch Lomond, including a Long-billed Dowitcher and two Pectoral Sandpipers of probable North American origin. But conditions have to be just right for attracting the passage waders, namely a low loch level exposing the invertebrate-rich sand and mud around the perimeter of the Endrick Bank at the time of spring and autumn migration (plate 2b). This ideal situation does not occur every year, but in July-August 1977 the partially exposed sand bar at the mouth of the river produced amongst other things small numbers of Ruffs, Greenshanks, Black-tailed Godwits, Knots, Sanderlings, Turnstones and a single co-operative Temminck's Stint that hung around for at least three weeks. During the winter months this same general area can be holding at peak up to 3,000 wildfowl, mainly Mallard, Teal, Wigeon and Greylag Geese, with the additional bonus of small numbers of diving duck and a 100+ flock of Greenland White-fronted Geese. Almost all of the birdworthy ground at the Endrick Mouth falls within the Loch Lomond National Nature Reserve administered by the Nature Conservancy Council, so that intending visitors should first contact the Reserve Warden (Drymen 428).



PLATE 1. Unusual migrants on the Isle of May, August 1977 (pp. 11-17).  
(a) Greenish Warbler; note prominent wing bar and supercilium, dark legs and small bill. Compare with Arctic Warbler (9: plate 18b). (b) Juvenile Red-backed Shrike.  
*Photographs by Keith Brockie.*

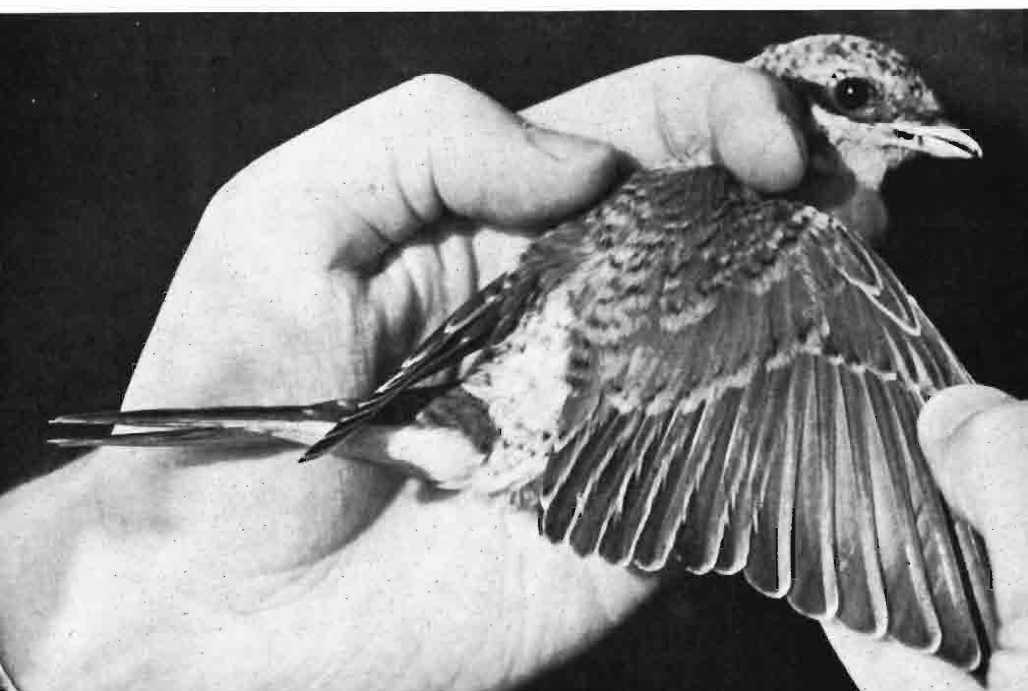




PLATE 2. Loch Lomondside (pp. 17-21). (a) Mixed broad-leaved and conifer woodlands at Sallochy, near Rowardennan; Een Lomond in background. (b) Exposed sand and mud at the Endrick Bank.

*Photographs by John Mitchell.*



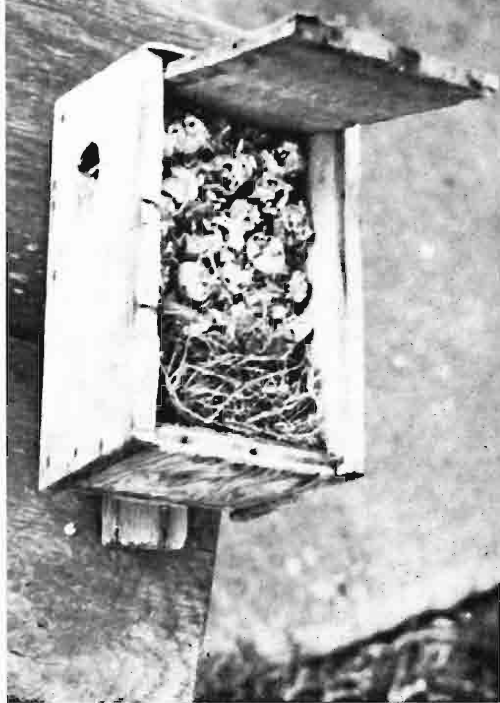


PLATE 3. (a) Grey Phalarope spinning, Hule Moss, Berwickshire, 24th October 1976 (p. 22). *Photograph by R. H. Hogg.* (b) Nestbox used by Wrens then filled with hollyhock seeds by Starlings (p. 25). *Photograph by Hamish M. Brown.* (c) Red-flanked Bluetail, Isle of May, 14th October 1975 (p. 23). Apart from its distinctive coloration (shown well in the first Scottish example, *Scottish Naturalist* 1948: plate 1) it is similar to other chats.

*Photograph by I. V. Balfour-Paul.*



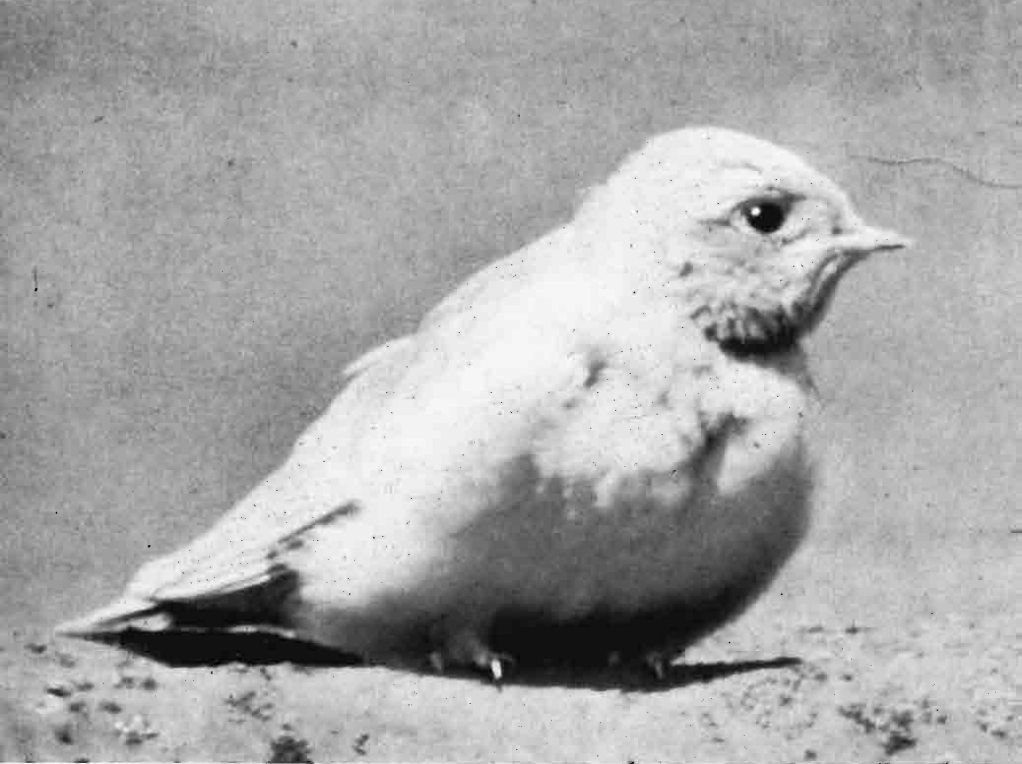


PLATE 4. Leucistic Swallows (p. 22). (a) The colour transparency reveals faint tints of normal coloration on this apparently white fledgling. (b) Family group of normal and leucistic Swallows. *Photographs by J. F. Young.*



As exciting (or equally as frustrating on occasions) as the Endrick Mouth can be for waders and wildfowl, it is the woodland birds that are the principal attraction for much of the Loch Lomondside area. Loch Lomondside can boast the most extensive stands of oak-dominant woodland remaining in Scotland today, plus some equally interesting large conifer plantations in all stages of development. Turning to the deciduous woodlands first, the millions of looper caterpillars that infest the oak foliage each spring support one of the densest populations of small insectivorous birds yet recorded in Britain. A visit to any broadleaved wood on Loch Lomondside should prove profitable, but there is probably nowhere easier to see and hear the summer migrants than Inchcailloch, a large island just off Balmaha. However, make sure your excursion is before the end of May, after which time leaf flush will impede binocular vision into the crowns of the trees. Willow Warblers, Wood Warblers and Tree Pipits are amongst the species well represented on Inchcailloch. The late Kenneth Williamson commented that the exceptionally high density of Garden Warblers on the island equalled that of similar habitat in France, so that it would appear the old alliance between the two countries is reflected even in their birdlife. Inchcailloch also forms part of the Loch Lomond NNR, and although there are no access restrictions on casual visiting, organized groups must first obtain permission from the NCC's Regional Office at Balloch Castle (Alexandria 58511). Arrangements for ferrying across to the island should be made directly with the boatyard at Balmaha (Balmaha 214).

A good alternative to Inchcailloch is the Forestry Commission owned portion of the Craigroston Woodlands in the Highland zone. Readily accessible on foot by a forestry road, these deciduous woodlands within the Queen Elizabeth Forest Park runs northwards for several miles from the Rowardennan car park. Again, the same high numbers of woodland species can be seen and heard from late April to early June, but compared with the lowland woods there is a far better chance at Craigrostan of picking up a male Pied Flycatcher singing above its chosen hillside burn.

The conifer plantations around Loch Lomond are far more variable in bird content, usually depending on the age and density of the trees. For Hen Harrier, Kestrel and Short-eared Owl it must be the recently planted ground, where the cessation of sheep grazing has resulted in a rank growth of tall grasses, ideal for a population explosion of Short-tailed Voles. At the other end of the timber production cycle is the Drymen section of Garadhban Forest, planted by the FC in the mid 1930s. Ten years ago this was a dark forbidding place, almost devoid of any bird interest. However, it's an ill wind . . . as the

old saying goes, and birdwatching prospects increased enormously following the great gale of 15th January 1968 which completely flattened large chunks of the forest. Since then many of the windblown trees have been cleared and the ground replanted, the resultant uneven aged forest cover currently attracting all the usual conifer species from Whinchats to Goldcrests. It was near the car park in Garadhban Forest during the early months of 1977 that I was able to chalk up the first breeding record of Common Crossbill for Loch Lomondside, a personal satisfaction not really deserved after all the unkind things I have said in the past about saturation planting of Sitka Spruce and other conifers. Even if the Crossbill fails to permanently establish itself as a breeding species in the area, the more mature plantations such as Garadhban still offer the chance of seeing displaying Siskins and the occasional Capercaillie crashing its way through the branches of the trees. Although the FC welcomes visitors to the woodlands in its charge, always remember these are working forests—watch out for possible warning signs indicating that operations such as spraying or timber extraction are in progress.

Reading back through this brief sketch of some of the goodies the Loch Lomond area has to offer the birdwatcher, it occurred to me that I was directing would-be visitors down all-too-well-trodden paths. Yet it is unlikely that more than one quarter of Loch Lomondside is looked over ornithologically in any one year. So my plea to the experienced birdwatcher is to seek out the neglected corners away from the beaten track. Straddling both sides of the Highland divide, the Loch Lomond area is an ornithological frontier where bird populations ebb and flow in response to climatic and land use changes. Already since the completion of the British Trust for Ornithology's Atlas project in 1972 several breeding species have been added or reinstated to Loch Lomondside's avifauna, including Red- and Black-throated Divers, Greenshank, Arctic Tern and probably Redwing. Ospreys are now a permanent feature of the loch during the summer months, and the chance of them nesting for the first time since the last nesting pair was destroyed in the mid 1820s would appear a distinct possibility. In the interests of Scottish ornithology it is essential such trends be adequately monitored in the future. The visiting birdwatcher prepared to get out and about in the less frequented parts of Loch Lomondside has a positive contribution to make towards this rewarding task.

### **Further reading**

The most comprehensive introduction to Loch Lomondside is *A Natural History of Loch Lomond* (ed. R. Tippet, 1974,



University of Glasgow Press). The ornithological section (with appended checklist) is written by W. K. Richmond. Another useful booklet covering both Loch Lomond and the Trossachs is the Forestry Commission guide *Queen Elizabeth Forest Park* (2nd ed. 1973, HMSO) which contains a chapter on birds by C. E. Palmar. Study of the BTO's *Atlas of Breeding Birds in Britain and Ireland* (ed. J. T. R. Sharrock, 1976, T. & A. D. Poyser) is particularly recommended, for it shows more clearly the distribution of the area's nesting species than any other publication. In the last few years great strides have been made in documenting bird communities on Loch Lomondside, mainly through field surveys contracted by the NCC. The results of most of these surveys have been published, and for the ornithologist interested in bird population studies the bibliographical details are given below.

SHAW, G. 1975. The breeding birds of Crom Mhìn, Loch Lomond. *Scottish Birds* 8: 356-363.

SHAW, G. 1976. The breeding bird community of the hillside oakwoods of Loch Lomondside. *The Western Naturalist* 5: 41-52.

SHAW, G. 1977. The breeding bird community in a Scottish Yew plantation. *Scottish Forestry* 31: 74-82.

WILLIAMSON, K. IDLE, E. T., & MITCHELL, J. 1973. Bird communities of the mainland section of Loch Lomond National Nature Reserve. *The Western Naturalist* 2: 15-28.

WILLIAMSON, K. 1974. Oak wood breeding bird communities in the Loch Lomond National Nature Reserve. *Quarterly Journal of Forestry* 68: 9-28.



COMMON CROSSBILL by John Busby.

## Short Notes

### Ruddy Duck in Shetland

A male Ruddy Duck was on the Loch of Belmont, Unst, Shetland, on 16th May 1974. It swam low in the water, diving regularly, close to three Red-breasted Mergansers and was probably about the size of a female Long-tailed Duck.

**Description** Crown and nape black, setting off pure white cheeks, a conspicuous pattern. The upperparts visible above choppy surface looked rich coppery brown, possibly the flanks also. Underparts not seen well but probably whitish, seen only as it dived. Black pointed tail, cocked up when alarmed, showing off conspicuous white area on vent. It was not seen flying but once raised itself and shook its short dark wings rapidly. Blue-grey swollen bill, sloping from forehead.

It was not present on 21st May when the loch was revisited.

GRAHAM BUNDY

[This is the first Scottish record since the species was admitted to the British and Irish list with a self-maintaining feral population. Breeding little further north than the English midlands, it is curious that this bird occurred about as far north as possible in this country. A drake at Carsebreck, Perthshire, in June 1954 was presumably an early escape from the Wildfowl Trust at Slimbridge. For a full account of its British status see Hudson (1976, *British Birds* 69: 132-143).—Ed.]

#### Reaction of Grey Phalarope to Sparrowhawk

On 25th October 1976 I watched a Grey Phalarope feeding actively at Hule Moss, Berwickshire, for over two hours. Throughout this period it swam back and forwards along the length of the lochan and dipped its head from side to side to pick up food from the surface. On only two occasions did the phalarope cease feeding and each of these lasted only a few seconds. It suddenly froze and then flattened out by pressing its body down into the water and stretching its neck along the surface as a female Sparrowhawk flew over. As soon as the Sparrowhawk had flown a further 30 m the phalarope recommenced feeding as before. These actions were repeated about an hour later when the Sparrowhawk again flew over. Soon after, the phalarope flew away strongly to the southwest.

I have been unable to find any reference in the literature to this behaviour by phalaropes but it is obviously used to avoid detection by raptors passing overhead and is probably quite normal.

ALAN BROWN

[This bird was discovered on 24th October by R. H. Hogg (plate 3a). A rare migrant in Scotland, inland records must be exceptional. The direction of its flight would have brought it overland to the Solway.—Ed.]

#### Leucistic Swallows

On 9th July 1975 a brood of four Swallows fledged at Beuchan Farm, Keir, Thornhill, Dumfriesshire, three of which were

almost white and the other normal (plate 4). The leucistic birds were very pale grey instead of blue-black, pale pink instead of rufous, pale yellow on the beak and legs, but with normal dark eyes. I managed to ring two of the white ones. They had a very disturbed time on the wing around the steading, being frequently mobbed by other Swallows. During their early days flying they rested together and were fed by their parents, staying near the farm for two weeks, and then were seen on a neighbouring farm for a few days. On 28th July a ringed white one was in a farm building some three miles (4.8 km) away, near a Swallow nest where it was attacked by the parent occupiers and was caught in a distressed condition. It was released at Beuchan. Nothing more was seen of them afterwards.

Immediately this mixed brood was safely flying, another nest was built four feet (1.2 m) away from the original nest and a normal brood was raised—it was assumed by the same parents.

JAMES F. YOUNG

[Leucism a form of albinism where the normal coloration is diluted but not quite absent. Sage (1963, *British Birds* 56: 409-416) found that social breeders appeared to be more prone to albinism, due to inbreeding, and that the Swallow was the fourth most frequently reported species.—Ed.]

### Red-flanked Bluetail on the Isle of May

On the Isle of May on 14th October 1975 during easterly winds, I. V. Balfour-Paul, J. H. B. Munro and I saw a bird about the size of a Robin at the opening in a stone wall. It stood rather upright and showed a very noticeable large dark eye in a large head and often flicked its tail up and down like a Robin or a flycatcher. The upper surface of the tail was slate blue and the flanks were orangish-red—a Red-flanked Bluetail. We coaxed it gradually until it was boxed in the Low Trap.

**Description** Head and mantle warm olivaceous green; rump and upper surface of tail when closed slate blue, outermost tail feathers grey, remainder with grey inner webs and slate blue outer webs. Pale cream orbital ring; throat white with orange tinge; flanks warm light orange; belly white; under tail-coverts white with orange tinge. Primaries and secondaries grey; outer webs fawny brown; edge of inner webs whitish. Bill black, distal portion inside upper mandible slate grey; legs dark horn brown; eye black.

Wing formula and measurements were taken; weight 12 gm, age diagnosed as immature (plate 3c). It remained until the following day.

G. L. SANDEMAN

[Breeding range mainly Siberia but is expanding into Finland; winters in southeast Asia. This was the sixth British and third Scottish record; the date is typical. A year later another was seen at nearby Fife Ness on 28th October 1976.—Ed.]

### Olivaceous Warbler on the Isle of May

On 24th September 1967, as we were leaving the Low Light on the Isle of May, WMM, ADKR, D. A. I. Baty, J. J. Dunbar and C. F. H. Bruce saw a warbler skulking in a patch of nettles. Although it was very difficult to see in the field (a super-skulker) its general appearance was of a small, pale grey warbler with a flattish head. The darker primaries contrasted well with the pale underparts and the grey upperparts. The alarm note was a harsh *Tuc, tuc*. We erected a mist net and caught the bird.

**Description** Head, nape, mantle, back and scapulars uniform grey with a tinge of olive brown; rump and upper tail-coverts similar but considerably browner. Slight, pale stripe from bill to above lores; lores slightly more olive than head. Underparts white from chin to under tail-coverts, flanks with olive tinges. Tail slightly rounded, dark brown (as wings) with very narrow pale edges; outer web of outermost tail feather pale. Remiges and all wing coverts basically fairly dark brown; primaries with narrow pale edges; secondaries with broader pale edges; tertials with even broader edges which gradually blended into the darker centres; with the wing closed, the secondaries and tertials looked much paler than the primaries; bastard wing, and primary, greater and median coverts with narrow greyish edges; lesser coverts with very broad olive edges. Upper mandible dark reddish brown with very dark brown between nostrils and also toward tip, which was pale, almost flesh coloured; lower mandible flesh coloured; gape yellow with orange tinge. Tarsus medium grey with brown tinge; pale soles of feet. Iris brown.

Full measurements and wing formula were taken; weight 9.0 gm. It was photographed and released about 11.00 BST. In the afternoon there was almost continuous rain, heavy at times, and when retrapped about 17.30 the bird was wet, but far from saturated, and weighed 10.0 gm. It was retrapped twice on the 25th and weighed 8.0 gm at 10.30 and 9.5 gm at 17.45 (all weights  $\pm \frac{1}{2}$  gm).

There was also a Great Grey Shrike on the island and about 11.00 on the 26th it was found eating the warbler on a pile of rusty wire. The decapitated body was recovered and, as there was some confusion as to its identification, DAIB took it to the Royal Scottish Museum where, with the help of the staff, he compared it with skins and concluded it was an Olivaceous Warbler.

W. M. MORRISON, ANDREW D. K. RAMSAY.

[This is the only Scottish record. The body is pickled and the skin is preserved flat (reg. No. 1968.73) and is ascribed

to the race *elaeica* which breeds in southeast Europe and southwest Asia. There are ten records of the species in the British Isles, seven of them from the south coast of England. There is one other record of *elaeica*, and one of *opaca* from the west Mediterranean. All occurrences were between mid August and early October, 1951-68, with a peak in late September, and there were two other records in 1967. Much of the delay in the appearance of this note occurred when the record was requested by another journal and subsequently lost.—Ed.]

### Starlings filling nestbox with hollyhock seeds

In 1973 Wrens successfully used a tit nestbox in our garden in Kinghorn, Fife. In 1974 there were more Wrens about but the box was not used. Investigation soon revealed why—it had been packed full of hollyhock seeds. I then recalled having watched Starlings that winter busy popping these in. There were over 250 in the box on top of the old nest material (plate 3b). Why did the Starlings do this?

Food storing seems ruled out for three reasons: it is not done by Starlings; it was pointless storing in a place too small to retrieve and even those that could be reached by poking a head in the hole were left; they were largely spent seed cases by then and of no food value.

The nestbox is in a corner between the house and garage. Both walls are smothered in hollyhocks which help hide the box and even the resident Starlings nesting under the guttering, these sites being about 10 ft (3 m) apart. Fruit trees immediately in front are a favourite Starling chatter point and a small group is always about.

My theory is that the Starlings (intelligent birds) resented the Wrens nesting nearby and simply took steps to prevent this by filling their hole, the hollyhocks providing a good, handy packing.

HAMISH M. BROWN

## Obituary

RICHARD ALAN RICHARDSON

Richard's death at the early age of 55 on 9th October 1977 was a release from an illness that dogged him for several months. He left no close relatives but many friends. Although born a Londoner, after serving in southeast Asia during the war he chose to live in Norfolk. Here to birders his name became almost synonymous with the name of Cley—his adopted

home for the last 28 years of his life and the site of the bird observatory he established and ran for several years.

First and foremost Richard was an exceptional field ornithologist whose experience was recognized by his appointment for several years to the Rarities Committee. His keen perception contributed much to his self-taught artistic achievements which were justly renowned. He illustrated Richard Fitter's *Pocket Guide to British Birds* and its companion volume on their nests and eggs. Much of his work was however for private commission and for these, as for his lively vignettes so freely given, he relied on memory, rarely making sketches in the field. This power of recall must have been fully tested when he contributed a number of plates to Salim Ali's *Handbook of the Birds of India and Pakistan*—he had not been in Asia since the war.

His association with Shetland has been particularly long-standing and he came to look upon Fair Isle as his second home, making very many trips to the island after his first in 1948. Since 1965 his visits have been more than annual and in 1973 he became a member of the Bird Observatory Executive Committee. Invariably, on his visits to the Isle, he was accompanied by a group of mainly young, keen ornithologists fired by his enthusiasm. This was his greatest contribution—he was a modest teacher and introduced very many young folk to the way of life that gave him so much pleasure. In memory of one such young person Richard established in 1967 the John Harrison Memorial Fund which has already assisted many young ornithologists with their expenses at the Observatory. He always showed a genuine interest and concern for his fellow men and it was typical of his nature that having given a series of edited tapes for use by the children at the Fair Isle school, on learning that they did not have a tape recorder he gave them his own.

R. A. BROAD.

## Reviews

**Handbook of the Birds of Europe, the Middle East and North Africa : the Birds of the Western Palearctic, Volume 1 : Ostrich to Ducks.** Edited by Stanley Cramp and K. E. L. Simmons. Oxford University Press, 1977. Pp. 722; 108 plates (full and half page), 104 in colour; many maps and text figures; 26 x 21 cm. £25.00.

Description of this book is almost superfluous. Nearly everyone who reads this review will already have a copy or be saving up for one. Eagerly awaited for over a decade, it is undoubtedly the greatest bird book of our time, an even greater monument than Witherby's *Handbook of British Birds* of 40 years ago, which it entirely supersedes. Covering all the species of a far wider area, it brings together a vast quantity of

data hitherto scattered throughout a prolific literature—a formidable achievement of compilation and editing.

The area covered—from the southern Sahara to the high Arctic and east to the Urals—makes zoogeographic sense, but the regrettable omission of peripheral regions of the western Palearctic—Greenland, and especially Arabia, Iran and Afghanistan—leaves a gap that readers cannot easily fill by reference to other works. The series will cover over 740 species, about 600 of them breeding, and this volume contains 122, of which 93 are breeding.

Before each species chapter the characteristics of the order, family and, where necessary, subfamily and (for Anatidae) tribe, are given. The accounts for all breeding species are divided into sections headed Field Characters, Habitat, Distribution, Population, Movements, Food, Social Pattern and Behaviour, Voice, Breeding, Plumages, Bare Parts (not the "soft parts", i.e. hard parts, of Witherby!), Moults, Measurements, Weights, Structure, and Geographical Variation. The sections on Population, Social Pattern and Behaviour, and Breeding are omitted for non-breeding regular migrants, and for vagrants the Food section also. All these species are illustrated by colour paintings showing every normal plumage, including flight patterns where necessary and the unfledged young of the breeding species. There are photographs of eggs and down, the latter essential for the identification of Anatidae nests. Other species, mainly old or doubtful or ship-borne records and non-viable escapes, are mentioned briefly.

Even more so than in Witherby, the species chapters are brimming with information. Each paragraph is skilfully marshalled in a strict sequence and very little can have been overlooked, but we are not overburdened with minute detail as in the *Handbook of North American Birds*. The scope of each section is carefully outlined in the Introduction and the text is generously punctuated with references, for which there is a lengthy bibliography. Under Field Characters, perhaps confusion between Red-necked and Slavonian Grebes in non-breeding plumage should have been discussed, as should the problems of hybrids, particularly between *Aythya* species, King Eider x Eider (both only briefly referred to) and Greylag x Canada Geese which can resemble blue Snow Geese. Mention of abnormal coloration, not all that rare in some species, would also have been useful.

Habitats are carefully described in precise terms, for which there is a comprehensive glossary. Changing distribution trends are noted, and all regular species have excellent two-colour maps showing breeding and wintering ranges: a local one in some detail and another for world distribution. A welcome innovation is the Population section giving national estimates and trends and individual survival figures. Unfortunately the Swedish Great Crested Grebe census is misquoted by a factor of ten. The sections on migratory Movements and Food are also fuller than was possible in Witherby.

For many species the most detailed section is Social Pattern and Behaviour, which includes flocking, territories, pair-bonds, roosting, antagonistic and courtship displays, family groups, and much more. In many cases postures are nicely illustrated in the text by Robert Gillmor. Voice is described both phonetically and visually by sonagrams and melograms. Although this visual approach is described and illustrated at length in the Introduction I must confess that most of it remains firmly beyond my comprehension. The Breeding section gives egg weights and breeding success as well as the usual data. Plumages and related topics are as descriptive as in Witherby, with more information under Molt and a section on Weights. An annual cycle diagram clearly displays migration, breeding and moult periods.

The colour plates are generally good, most figures being big and bold, and the depiction of the full range of plumages is highly commendable. Gillmor's storks and ibises and Scott's swans and geese show these artists at their technical best. However, Barruel seems a little unsure with the divers and grebes, which are rather stiff; the shearwater plates are crowded, leaving the nestlings tiny and indistinct; and although Cusa's ducks are easy on the eye, the fine feather patterning has been barely attempted and remains obscure.

Finally, a few words of censure to the publishers. The title is too long and unwieldy; it should have been just *The Birds of the Western Palearctic* as originally planned and as the editors still recommend for citation in scientific references. Its meaning is surely already familiar to prospective buyers, if not to the publishers. More important, for a work of such outstanding merit, the quality of production is disappointing. The paper of both text and plates is too thin and creases easily. Indeed, the thinness of the plates resembles mail order catalogue paper and some are already creased in the binding. The margin around the text is small, and quite absent around many plates, with figures dangerously poised on the edges. The binding, too, seems weak and would surely split if dropped. With no margin for trimming, rebinding would be impossible. Since publication was delayed after the price was announced (the book did not reach the shops until 1978, although the date on the title page is 1977) the publishers have evidently economized. If so, they have misjudged. This is the book of a lifetime and should have been made to last accordingly, even if this necessitated raising the price. It would still have given unbeatable value for money.

D. J. BATES

**The Birdwatchers' Second Quiz and Puzzle Book.** Written and published by J. T. R. Sharrock, Bedford, 1976. Numerous figures and drawings by Robert Gillmor. 20½ x 14½ cm. £1.00

That Tim Sharrock has produced another brilliant set of brain teasers speaks for itself. It is a further collection for addicts, preferably those who are both ornithologists and puzzlers. The format is the same: there are 65 problems of all types and fortunately answers are provided.

**Scottish Birds.** By A. B. Lees. St Ives (Cornwall), James Pike, 1976. Pp. 40; 6 plates; drawings; map. 20 x 12½ cm. 30p.

One wonders why this booklet had to be published so far from home. A brief summary of the author's credentials would have been interesting. However, he has done his homework, though it is not clear whether this was the result of many solo sorties or with the help of collaborators. The map shows the principal ornithological sites mentioned. The text is divided into geographical areas and the information on the best birdwatching spots is accurate but the plates are inferior. The directions should prove useful to both tourists and resident birdwatchers.

**A Guide to the Birds of the Coast.** By C. A. Gibson-Hill, revised by Bruce and Robert Campbell and Robin Prytherch. London, Constable, 1976. Pp. 288; 25 plates; numerous drawings and maps. 18 x 12 cm. £3.50.

This book covers maritime rather than marine species. At first sight some seem out of place, as it includes game birds, rails, owls and diurnal birds of prey, but I look upon them as a bonus.

A comparison with the 1949 edition is obviously called for. Although taken under difficulties, Gibson-Hill's plates are still better than many we have had to put up with elsewhere. Only a few of his original drawings have been retained. Those now omitted have been replaced by a generous



quantity drawn by Robin Prytherch, who also produced the maps. Both are helpful but they have their faults. In the map on p. 281 we are left to guess that the hatching indicates overlapping (or hybridization?) of the Hooded and Carrion Crows. Worse still, the dark inking of the coastline appears to indicate that every species in the book occurs at the northern tip of the Rhinns of Galloway near Stranraer, this being an identical fault in other seabird distribution maps I have seen elsewhere.

Despite these criticisms this is undoubtedly a helpful handbook for coastal and sea watchers. The sections entitled 'Bird-watching on the coast' and 'Specialised sea-watching' are valuable and the drawings are useful for identification. I found the arrival and departure dates particularly beneficial as these are often omitted from similar volumes. For textual content alone I shall expect to use this revised edition with profit and I confidently recommend it to all interested in coastal birds whether, in the author's words, "as a serious interest or a pleasant holiday activity".

**Animals in Danger.** Translated from Italian by Irene R. Anderson. London, Warne, 1976. Pp. 61, colour illustrations throughout. 30½ x 24 cm. £2.50

Although the book has a juvenile bias, adults will find its lavish illustrations and readable text thought provoking and informative.

**Concern for the Countryside.** By John Rignall. London, Warne, 1976. 5 colour posters. 75 x 50 cm. 50p each; 70p in plastic tube.

Whilst these delightful posters of hedgerow, motorway, town, woodland and freshwater wildlife will serve as aids to identification, they are primarily educational. A conservation message is apparent but the wording is far too small as too much is crammed in.

R. MACALPINE RAMAGE

**Current literature.** Recent material of Scottish interest includes :

*Birds of Gladhouse Reservoir (and other Moorfoot reservoirs).* R. W. J. Smith, 1977. (Unpublished report in SOC library).

Adult mortality and fidelity to mate and nest-site in a group of marked Fulmars. M. A. Macdonald, 1977. *Bird Study* 24: 165-8. (Study at Sands of Forvie, Aberdeenshire.)

1976 *Canna Report.* R. L. Swann, A. D. K. Ramsay. (Unpublished seabird data in SOC library).

*Shetland Bird Report 1976.* Comp. B. Marshall, P. K. Kinnear, 1977. £1.10. (Available at SOC Bird Bookshop.)

Haematozoa of British Birds. 1. Blood parasites of birds from Dumfries and Lincolnshire. M. A. Peirce and C. J. Mead, 1976. *Bulletin of the British Ornithologists' Club* 96: 128-132.

Bird life in the Wood of Cree, Galloway. K. Williamson, 1976. *Quart. J. Forestry* 70: 206-215.

The defaecating behaviour of Herring Gulls. D. G. Sobey, 1977. *Ibis* 119: 515-520. (Coprology at Collieston, Aberdeenshire.)

*North-East Scotland Bird Report 1976.* Ed. A. G. Knox, 1977. (Includes papers on winter weights of Robins, flocking of Chaffinches and Bramblings; 75p plus postage from SOC Bookshop or Aberdeen University Bird Club.)

Local variations in the proportion of adult males in flocks of Goldeneye wintering in the Firth of Forth. L. H. Campbell, 1977. *Wildfowl* 28: 77-80.

Goldeneye feeding close to sewer outfalls in winter. L. H. Campbell & H. Milne, 1977. *Wildfowl* 28: 81-85. (Study in Aberdeenshire.)

The breeding bird community in a Scottish Yew plantation. G. Shaw,

1977. *Scottish Forestry* 31: 74-82. (Census of Inchlonaig, Loch Lomond.)
- Borders Biological Records Centre Bulletin* 1977. (Includes items on birds of Alemoor reservoir, 1976 bird records for Roxburgh, Peebles and Selkirk, Swallow distribution, and birds in Kingsmeadows, Peebles. No address).
- A Study of the Birds of Colinton Dell*. M. J. Gardiner, 1977. Price £1.00 from M. Porteous, Young Ornithologists' Club, Edinburgh Group.
- Peregrine in N.E. Scotland, 1977 Newsletter*. D. Weir, 1977. (Unpublished report in SOC library).
- Tidal rhythm in a seabird. P. J. B. Slater, 1976. *Nature* 264 : 636-8. (Study of Guillemots in Orkney).
- Oystercatcher up-ending. R. Coomber, 1977. *British Birds* 70: 340. (Mull record).
- The secrets of the Slavonian Grebe. J. Lister-Kaye, 1977. *Birds* 6(8): 46-48. (Observations in Highlands).
- Eiders up-ending. A. A. K. Whitehouse, 1977. *British Birds* 70: 391. (Note from Iona).
- Golden Eagle repeatedly catching sticks in flight. R. Coomber, 1977. *British Birds* 70: 391-2. (Note from Mull).
- Apparent predation of Robin eggs by Blue Tit. G. Shaw, 1977. *British Birds* 70: 394. (Note from Stirlingshire, not Lothian as stated).
- Predation and anti-predator behaviour in a mixed colony of terns *Sterna* sp. and Black-headed Gulls *Larus ridibundus* with special reference to the Sandwich Tern *Sterna sandvicensis*. E. Fuchs 1977. *Ornis Scandinavica* 8: 17-32. (Study at Sands of Forvie, Aberdeenshire).
- The pre-laying exodus of the Fulmar *Fulmarus glacialis* (L.). M. A. Macdonald 1977. *Ornis Scandinavica* 8: 33-37. (Study at Sands of Forvie, Aberdeenshire).
- Fidelity to the natal colony by breeding Herring Gulls. W. N. M. Duncan and P. Monaghan, 1977. *Ringing and Migration* 1: 166-172. (Study of Isle of May birds).
- The post-nuptial moult of a migratory population of Pied Wagtails. H. Galbraith, 1977. *Ringing and Migration* 1: 184-6. (Dunbartonshire study.)
- Bird notes from the Tay area 1949-1956. G. B. Corbet, 1977. (Unpublished typescript in SOC library.)
- The Scottish Crossbill: *Loxia scotica*. K. H. Voous, 1978. *British Birds* 71: 3-10.
- Golden Eagle persistently attacking red deer calf. C. J. Northeast, 1978. *British Birds* 71: 36-37. (Record from Highland region.)
- Peregrine taking Meadow Pipit in upward strike from front. K. Verrall, 1978. *British Birds* 71: 37-38. (Record from Islay.)
- Feeding association between Redshank and injured Oystercatcher. Alan S. Holmes, 1978. *British Birds* 71: 38-39. ((Record from Fife.)
- Ivory Gull bathing and settling on water. S. Laybourne, 1978. *British Birds* 71: 39. (Record from Caithness).
- Breeding success of Red-throated Divers. C. J. Booth, 1978. *British Birds* 71: 44. (Comment on Shetland and Orkney data.)
- Avian prey of large raptors on Canna. R. L. Swann, A. D. K. Ramsay, 1978. *British Birds* 71: 46.
- Edinburgh Ringing Group: Five: 1977*. (Contents include The birds of Gullane Bay; Fifty years of birding by G. L. Sandeman; Timing of breeding, moult and migration of Redpolls; Ring Ouzels; Stonechats; warbler ecology. 50p post free from S. R. D. da Prato, 38 Caerlaverock Grove, Tranent, East Lothian.)
- Duddingston Loch: its birdlife in winter. L. Vick, 1978. *Scottish Wildlife* 14: 13-15.
- Spectacular autumn migration at St Abb's Head. G. Evans, 1978. *Scottish Wildlife* 14: 16-18.

## Letter

### Effects of poisoning on Raven and raptor populations

During 1977 I censused breeding Ravens in much of Speyside and nearby for the first time since 1964-8 and used essentially the same methods as then. The results for 22 breeding territories in the table indicate a spectacular recent decline in both numbers and performance. The widespread use of modern

**Table. Numbers and breeding performance in 22 Spey and Findhorn Raven territories in 1964-8 and 1977**

	1964-8 average	1977
No. of pairs found April-June	16-17	5
No. of pairs which fledged some young	10-11	1-2

poisons on meat baits in this area began in 1969 and their impact on a Buzzard breeding population area was quantified (Picozzi and Weir 1976). Since 1969 dead Ravens, moved or concealed by man or lying near whole or part carcasses of lagomorphs, have been found in eight of the above 22 Raven territories. Dead Golden Eagles were found in similar circumstances, once at the same carcass as a dead Raven; this and some other Golden Eagles were found to have been poisoned by Mevinphos ('Phosdrin').

Concern about the present poisoning of raptors is widespread and is expressed in Dennis *et al* (1977) where, however, the Buzzard data (above) are seriously misquoted. These Buzzard data and the Raven data in the table are the only quantitative information on the impact of poisoning on raptor populations and it should not be assumed that poisoning is worse on Speyside than elsewhere; it has not been studied elsewhere. The need to determine the actual effects of poisoning on raptor populations is evident, and no aspect of it is more pressing than to undertake a national Golden Eagle survey.

D. N. WEIR

### References

- DENNIS, R., BIBBY, C., CADBURY, J. and PARLOW, J. 1977. Their life in our hands. *Birds* 6(9): 20-23.
- PICOZZI, N. and WEIR, D. 1976. Dispersal and causes of death of Buzzards. *Brit. Birds* 69: 193-201.

## Notices

**1978 Great Crested Grebe survey** Another breeding census is urgently required to assess the damage caused by the recent oiling incident. Please contact local recorders for details of this official inquiry.

**1978 Corncrake Inquiry** The only national survey of the Corncrake in Britain was as long ago as 1938 and 1939. The population decline has subsequently continued. Even so, the Hebrides and Ireland must represent strongholds for this species in northwest Europe. The fact that the Irish Wildbird Conservancy has decided to survey Corncrakes in Ireland in 1978 has prompted the BTO and SOC to support an inquiry covering the UK. The organizer for Britain will be Dr James Cadbury, 93 Barton Road, Cambridge, CB3 9LL.

The main objective is to assess the numbers and distribution but it is also desirable that information on the habitat now frequented by the species is obtained. In the Outer Hebrides the survey may have to be limited to sample areas but in other regions of Scotland where Corncrakes are still regular or even locally frequent, such as Wigtownshire, Ayrshire, Stirlingshire, Islay, Tiree, Coll, Canna, Skye, Caithness and the northern isles of Orkney, it is hoped that complete cover of suitable lowland areas can be achieved. The organizer would be pleased to be in touch with anyone who is prepared to census Corncrakes in the Hebrides. In other areas, where densities are low, all records should be sent to the local recorder or inquiry organizer. The survey will be based largely on natural geographical features such as islands, stretches of coast and river valleys, though results for different 10 km squares should be recorded separately.

Corncrakes may be censused from mid May until the hay is cut (about mid July in western Scotland). To ensure that most males present are calling, the census should be carried out between dusk and dawn. Mapping of calling birds is recommended where Corncrakes are frequent. Instructions and record cards will be available from the organizer or local recorders.

**Richard Richardson Appeal** Friends of the late Richard Richardson have organized an appeal for the erection of a memorial at Cley which, it is hoped, will take the form of a public sea-watching hide. Donations, which will not be acknowledged unless requested, should be sent to Elizabeth Forster, Honorary Secretary, Richard Richardson Appeal, The Double House, Wiveton, Holt, Norfolk.

**Colour ringing Arctic Skua chicks** Mrs Bridget Furness is working on Arctic Skua colony size regulation and would like information on movements between colonies. As many chicks as possible must be ringed in specific colonies in Orkney and Shetland in July 1978. Anyone interested (colour rings provided) please contact her at Culterty Field Station, Newburgh, Ellon, Aberdeenshire, AB4 0AA (tel. Newburgh 631) before May.

**Island birds** T. M. Reed of Edward Grey Institute of Field Ornithology, Department of Zoology, South Parks Road, Oxford, is studying factors affecting breeding populations and species distributions on coastal and loch islands and would be grateful for unpublished or obscure details of Scottish island breeding birds or vegetation, also of plantation bird populations for comparison.

## Scottish Ornithologists' Club

### SUBSCRIPTIONS

At the 41st Annual General Meeting of the Club, held at the Marine Hotel, North Berwick, on Saturday, 21 January 1978, increases in the subscription rates, recommended by Council and notified as item 9 of the Agenda for the AGM (*Scot. Birds* 9: 392), were approved. The new

rates, which apply to new members who join after 30 June 1978, and are due from existing members on 1 October 1978, are as follows :

Ordinary membership	£5.00
Family membership	£7.50
Junior membership	£2.00

Reduced rates for pensioners : ordinary £3.00 or family £4.50

Life membership: ordinary £100; family £150

Those who do not pay by banker's order will receive the usual subscription reminder notice form in early September with the autumn number of the journal.

**Banker's Orders** All who pay by banker's order will find a letter enclosed with this (spring) number. They are urged to complete the form and send it to the Club Secretary by return. At the time of the last subscription increase it was estimated that the administrative cost to the Club due directly to the late completion of banker's orders was over £100, and this took no account of the time taken and the extra work given to our Membership Secretary. Often a new form was received here too late for the member's Bank to re-programme its computer in time to ensure that the correct payment was made on 1 October !

**Deed of Covenant** Members who have an existing Deed of Covenant are asked to sign a new one at the new subscription rate. The Inland Revenue Office has confirmed that a new Deed can replace an earlier one with the mutual consent of the member and the Club: the extra income is a very considerable help to the Club's finances. If you have not already signed a Deed of Covenant please consider signing one now, and return it to the Club Secretary at the same time as your banker's order.

The letter to those with a banker's order is being sent out several months ahead of the due date for payment, because of the very considerable amount of administrative work involved with a subscription increase. Please help us by completing the forms and returning them to The Secretary, SOC, 21 Regent Terrace, Edinburgh EH7 5BT—to-day ! Thank you.

### SUMMER EXCURSIONS

Details of summer excursions arranged by branches are published on a separate sheet enclosed with this number of the journal.

### INVERNESS BRANCH EXCURSIONS

**Sunday 9 April** GLEN AFFRIC. Leave at 9 am (lunch and tea).

**Saturday 13 May** BIRDSONG IN CAWDOR WOOD. Leave at 7 am (morning only).

Both excursions meet at the Cathedral car park, Inverness. Further details from and names to Mrs J. Morrison, 83 Dochfour Drive, Inverness (tel. 0463 32666). Please send s.a.e. if writing.

### EDINBURGH BRANCH SECRETARY

Please note that the correct address of the Edinburgh Branch Secretary is: Mrs M. Adams, 18 Braehead Loan, Barnton, Edinburgh EH4 6BL.

### RAFFLE - 1977/78

The draw for the raffle took place after the annual dinner on Saturday 21 January 1978. Three of the sixteen prize winners, and also the member who sold the winning ticket, were present, much to delight and pleasure of over 200 members and guests.

In spite of doubling the ticket price to 10p, and giving £25 towards the

first prize, we raised more than last year. The total received from the sale of tickets was £590 (£566 in 1977) from which £63 (£43) was deducted for expenses (£30 for printing; £28 for prizes and £5 for postage) leaving a net profit of £527 (£523). Any member who wishes to receive a list of winning ticket numbers should write to the Club Secretary enclosing an s.a.e.

Twelve of the sixteen prizes were donated by Club members. We would like to take this opportunity to thank them most sincerely for their anonymous generosity (they know whom we are thanking!), and for helping to compile such a good list of prizes. We also thank all those who sold tickets, and who bought them, for their efforts and help in achieving such an excellent result in this winter's raffle.

### NEW LOCAL RECORDERS

Please note that the recorder for Fife is now Keith Brockie, 'Morven', Russell Street, Strathmiglo, Fife. We thank David Oliver for his services since the system began in 1968.

With the recent upsurge of migration records at St Abbs Head and the establishment of a Scottish Wildlife Trust reserve there, the ranger George Evans has kindly offered to become local recorder for Berwickshire. After several years at Bardsey and Gibraltar Point he has ample experience in this field. Records for the county should be sent to him at Ranger's Cottage, Northfield, St Abbs, Eyemouth, Berwickshire. Keith Macgregor continues to record for East Lothian of course.

Please consult the list of recorders elsewhere in this issue for David Lea's new address (Orkney).

## Branch and Group News

**Scottish Ringers' Conference in Edinburgh** Speaking to a well attended gathering in November, Stan da Prato described in a lucid and well illustrated talk Edinburgh Ringing Group's study of scrubland warblers at Cousland, Midlothian. Among data on arrival and departure, weight, moult and annual survival, it turned out that our birds leave in August, long before coastal migration ceases, and that scrub with perennial herbage like willowherb supports many more birds than grazed scrubland. Highland Ringing Group's study of Storm Petrels on the Summer Isles was introduced by Tony Mainwood who discussed intercolony wanderings and population estimates from retraps. Some results of wildfowl ringing in Scotland were given by Malcolm Ogilvie (Wildfowl Trust). Migration and mortality of Solway Black-headed Gulls were revealed by Edmund Fellowes (North Solway Ringing Group) who wondered whether this project was now exhausted. Like David Oliver's (Tay Ringing Group) Cormorants, direction and distance of recoveries varied from colony to colony. According to David Oliver, the identification of young scars can present problems to the ringer (and the Ringing Office). Steve Baillie (Aberdeen Ringing Group) delved into the ups and downs of Robin and Blackbird weights in winter, showing just what you can do with a tame computer. Skilfully bringing the proceedings to a conclusion, Bob Spencer (BTO) urged ringers to both work on their own retrap data and to ring more species with a low recovery rate.

D. J. BATES

**Inverness** The home territory of the Inverness Branch covers a considerable variety of habitats, consisting as it does of high and low level moor, open sea and estuary, cliff and beach, forest and farmland, river and loch. The area receives substantial numbers of over-wintering migrants

and there is also a movement of indigenous species towards the low ground and the coast in winter. It had been thought for some time that it would be of interest to show the winter distribution pattern of birds in the area; and accordingly during January-February a start is being made with some 30 members each checking bird numbers in a 10 kilometre square so that in the first instance the results can be presented to a Branch Members' Night later in the year. The mapping project fits neatly into a gap in the Branch programme of outings, the last of which allowed members to see the large numbers of grey geese present in late November at the Loch of Strathbeg, albeit on an extremely cold day!

J. K. LINDSAY

**SOC Conference at North Berwick** The January 1978 conference at the Marine Hotel was a great success. The high standard of lectures was maintained, even exceeded, food and accommodation were luxurious, the bars stayed open, the hotel staff were most hospitable, and although some people travelled the extra distance to North Berwick with diffidence, everyone enjoyed themselves immensely.

As usual, we got off to an excellent start with the members' slide show ably organized by our talented photographic team from Dumfries. It was full of surprises, from Ian Cumming's lip-smacking series of nesting Lapland Buntings to Bobby Tulloch's amazing pictures of unusual marine mammals—some of them equally tasty.

The serious programme on the special adaptations of island birds was thought provoking and no less enjoyable. The three speakers—Professor George Dunnet, Dr Mike Harris and Dr Martyn Gorman—took us far from home and handled the daunting subject of the ecology and evolution of birds on tropical islands with great skill. Few of us expected such an exotic and unfamiliar theme to be quite so entertaining. No less credit is deserved by those who spoke on their work nearer home—David Lea on wintering seafowl in Scapa Flow, Sarah Wanless on Ailsa Craig Gannets and Bob Furness on the fascinating history of the Bonxie.

All the other ingredients were included—the RSPB progress report, the Ythan estuary TV film, lively after-dinner speeches by Dougal Andrew and Ian Prestt, the exhibitions (including an unscheduled one around the dance floor by Donald Smith in the small hours of Sunday morning)—even the AGM went with a swing. Unfortunately, because of the time of year, many people from the north could not be with us and the weather the following weekend emphasized why. But it was felt that new standards had been set and that, given the right season, our optimum niche had been found.

D. J. BATES

## Current Notes

*These notes include unchecked reports and are not intended as a permanent record, nor will they be indexed. Please send records via local recorders at the end of January, April, July and October.*

A movement at Fair Isle early in November included **Corncrake**, **Great Skua** (on 11th), **4 Ring Ouzels**, **Wheatear** (last record from Wick, Caith, on 6th), **Garden Warbler** and **100 Goldcrests**. A **Firecrest** was found in Glentress (Peeb) on 23 Oct. An influx of **Waxwings** in small numbers reached Shetland, Orkney, Outer Hebrides, Scourie (Suth), Inverness (20-30), Huntly and Braemar (Aber), Blairgowrie (Perth), Angus (20 in Dundee, 16 in Monifieth), East Lothian, Colinton (Arg), Arran, and

Dalry (Kirk). A few **Crossbills** were at Fair Isle and St Abbs (Ber) in November, and 40 in Forest of Deer (Aber) in January.

High wintering numbers of 20 **Great Northern Divers** were in Sinclairs Bay (Caith), 110 **Slavonian Grebes** in Gosford Bay (E Loth) and 15 **Black-necked Grebes** in L Ryan (Wig). At least 241 **Great Crested Grebes** were oiled in the Forth in February, perhaps a big slice of our breeding population. Blue **Fulmars** were noted at Girdleness (Kinc), Tantallon cliffs (E Loth) and Turnberry (Ayr). A **Manx Shearwater** near Ailsa Craig (Ayr) on 13 Dec was in the wrong hemisphere. A **Blue-winged Teal** was shot in South Uist (O Heb) in October, **Green-winged Teals** *carolinensis* were on L of Mey (Caith) in December and near Stirling in February, a **Ferruginous Duck** wintered at Strathbeg (Aber) as did ♂ **King Eiders** at Hascosay (Shet), L Ryan (Wig) where display to a ♀ Eider was observed, and perhaps again in the Clyde, turning up at Woodhall (Renf) on 9 Nov. **Greylag Goose** numbers were exceptional for Caithness with up to 4,000, 2 **Lesser Whitefronts** near Caerlaverock (Dumf) in February were thought to have arrived via Northumberland, **Snow Geese** wintered at Tibbermore (Perth) and Southernness (Kirk), and blue geese at L Calder (Caith), Rowbank res (Renf) and 2 at Dalton (Dumf). Glasgow airport's **Whooper Swans** reached 180, and wintering **Bewick's Swans** increased to 11 in East Lothian, c.30 at Caerlaverock and 12 at Islesteps (Kirk).

An unexpected tideline corpse was a **Goshawk** at St Andrews (Fife) in December, and a **Gyr Falcon** was seen near Girvan (Ayr) on 31 Jan. A good count of 26 **Jack Snipe** was made at Prestwick (Ayr) on 20 Nov. A **Sabine's Gull** passed Turnberry (Ayr) on the unusual date of 30 Dec, a **Ross's Gull** was at Lerwick (Shet) in November, and a **Sandwich Tern** probably wintered again in the Forth. Apart from "hundreds" of **Little Auks** off Sumburgh (Shet) in November, a few were picked up along the east coast, another on Islay, and one in the back of a council truck in Scalloway (Shet). A **Brunnich's Guillemot** was found dead (the usual condition for this species here) at Sumburgh on 18 Dec. There were reports of **Snowy Owl** at Otterswick (Shet) in December, and Laurieston (Kirk) and Danskine (E Loth) in January. The only **Shore Larks** reported in winter were 2 at Girdleness and Greg Ness (Kinc). **Lapland Buntings** were at Girdleness, Usan (6) and Kinnordy (Angus) and as many as 25 on the Ythan (Aber). It was a good winter too for **Snow Buntings** with up to 500 on Fair Isle in November, 750 in Caithness in Nov-Dec (max 300 L Calder), 200 at Fraserburgh and 140 on the Don (Aber), up to 500 at Musselburgh (Midl), 200 at Danskine, and 240 at New Cumnock (Ayr).

## CORRECTION

**Recent distribution, ecology and breeding of Snow Buntings in Scotland** (9: 147-162). The third paragraph on p. 152 should read: "1970—A. Tew-nion reported two breeding pairs. Between 20th-21st June he watched two white-rumped cocks, one feeding young, and saw a hen building. On 4th July a cock was feeding two flying young. In the same general area in July Milsom and Owen reported few Snow Buntings on the ground. They saw a hen with three fledged young and a white-rumped cock holding territory".



## LOCAL RECORDERS

- Shetland (except Fair Isle)** R. J. Tulloch, Lussetter House, Mid Yell, Shetland.
- Fair Isle** I. S. Robertson, Bird Observatory, Fair Isle, Shetland.
- Orkney** D. Lea, 6 Old Scapa Rd., Kirkwall, Orkney KW15 1BB.
- Outer Hebrides** W. A. J. Cunningham, Aros, 10 Barony Square, Stornoway, Isle of Lewis.
- Caithness** Mrs P. M. Collett, Sandyquoy, East Gills, Scrabster, Caithness. KW14 7UH.
- Sutherland** Dr I. D. Pennie, 5 Badcall, Scourie, Sutherland.
- Ross-shire (except Black Isle), Inverness-shire (mainland more than 18 miles from Inverness)** R. H. Dennis, Landberg, North Kessock, Inverness IV1 1XD.
- Ross-shire (Black Isle only), Inverness-shire (within 18 miles of Inverness)** M. I. Harvey, Clach Bhan, Loaneckheim, Kiltarlity, Inverness-shire.
- Nairnshire, Morayshire, Banffshire** N. Elkins, 10 Oakbank Place, Elgin, Morayshire.
- Aberdeenshire, North Kincardineshire** Dr A. G. Knox, Zoology Department, Aberdeen University, Tillydrone Avenue, Aberdeen, AB9 2TN, and W. Murray, Culterty Field Station, Newburgh, Aberdeenshire, AB4 0AA.
- South Kincardineshire, Angus** N. K. Atkinson, 140 Linefield Road, Panbride, Carnoustie, Angus, DD7 6DT, and G. M. Crighton, 23 Church Street, Brechin, Angus.
- Perthshire** R. L. McMillan, 44 Durley Dene Crescent, Kintillo, Bridge of Earn, Perthshire.
- Kinross-shire** Mrs B. H. Gray, Vane Farm, Kinross.
- Isle of May** J. M. S. Arnott, East Redford House, Redford Road, Edinburgh, EH13 0AS.
- Fife** K. Brockie, 'Morven', Russell Street, Strathmiglo, Fife.
- Clackmannanshire, East Stirlingshire** Dr C. J. Henty, 3 The Broich, Alva, Clackmannanshire.
- West Lothian, Forth islands (except May), Midlothian** R. W. J. Smith, 33 Hunter Terrace, Loanhead, Midlothian.
- East Lothian** K. S. Macgregor, 16 Merchiston Avenue, Edinburgh EH10 4NY.
- Berwickshire** G. Evans, Ranger's Cottage, Northfield, St Abbs, Eyemouth, Berwickshire.
- Peeblesshire, Roxburghshire, Selkirkshire** A. J. Smith, Glenview, Selkirk, TD7 4LX.
- Argyllshire, Inner Hebrides, Skye** M. J. P. Gregory, Duiletter, Kilmory Road, Lochgilphead, Argyllshire, PA31 8NL.
- Dunbartonshire, West Stirlingshire, Renfrewshire** I. P. Gibson, Arcadia, The Glen, Howwood, Renfrewshire.
- Lanarkshire** H. Galbraith, 96 Neilsten Road, Paisley, Renfrewshire.
- Ayrshire, Arran, Bute** R. H. Hogg, Schoolhouse, Crosshill, Maybole, Ayrshire.
- Dumfriesshire** R. T. Smith, Applegarthtown, Lockerbie, Dumfriesshire.
- Kirkcudbrightshire, Wigtownshire** A. D. Watson, Barone, Dalry, Castle Douglas, Kirkcudbrightshire.

Scottish Ornithologists' Club

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Congress: Canberra, 1974 *Frith & Calaby (ed.)* £40.00
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Britain *Royal Society* £3.50
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WRITE FOR OUR BOOKLIST AND TERMS

## NOTICES TO CONTRIBUTORS

### Papers, longer articles and short notes

1. The high cost of production and distribution means that it is of the utmost importance that contributions are concise, interesting and readable to justify their publication. They should be typed on one side of the sheet only, in duplicate, with double spacing and wide margins.

2. Authors are urged to consult recent issues of *Scottish Birds* for style of presentation, in particular of headings, tables and references. Headings should not be in capitals nor underlined. Tables and figures must be designed to fit the page. Tables should be used sparingly and be self explanatory, and, like figure captions, typed on a separate sheet.

3. Short notes, if not typed, must be clearly written and well spaced.

4. English names of species (but not group names) of birds, other animals and plants, except domestic forms, have initial capitals for each word, except after a hyphen. English names and sequence of birds follow *A Species List of British and Irish Birds* (BTO Guide 13, 1971). Scientific names are generally unnecessary for species in this list but they are required (underlined, with no brackets) for subspecies, species not in the BTO *Species List*, and for other animals and plants, except domestic forms, where these receive significant mention.

5. Proofs are sent to all contributors and these should be returned without delay. Authors of papers and longer articles are entitled to 25 free copies of the journal but these must be requested when returning proofs. Extra copies can be supplied at cost.

6. Illustrations of any kind are welcomed, whether alone or to illustrate an article. Drawings and figures should be up to twice the size they will finally appear, in Indian ink, neatly lettered, on good quality paper separate from the text. Photographs, either glossy prints or colour transparencies, should be sharp and clear with good contrast.

### Scottish Bird Report

1. Records should be sent to the appropriate local recorders, a list of whom is published regularly, but in cases of difficulty they can be forwarded by the editor.

2. These records should be on one side of the sheet only, well spaced and in species order, as in previous reports which follow *A Species List of British and Irish Birds* (BTO Guide 13, 1971). The only exception is that Aberdeenshire and north Kincardineshire records should be in place and date order. Observers should consult previous reports for the sort of information required. To avoid duplication of records by the recorders, names of other observers present should be given where appropriate.

3. Notes for the year should be sent promptly, generally in early January, but some recorders prefer more frequent records and regular contributors are asked to consult local recorders about this. Reports of occasional visits to areas outwith the observer's regular territory, such as holiday lists, should usually be sent to recorders as soon as possible. Records of rarities, including species only locally rare, should be sent to recorders without delay. The editor invites short notes on rarities for publication, with any illustrations, up to the third Scottish record or after a long gap since the previous occurrence.

4. The editor will be glad to receive, preferably via the local recorders, records of special interest for publication in *Current Notes*. Please send them at the end of January, April, July and October for publication in the issues following.

5. To save recorders' (often considerable) time and expense, correspondents should enclose a stamped addressed envelope or indicate that no acknowledgment is required.

## THE SCOTTISH ORNITHOLOGISTS' CLUB

**T**HE Scottish Ornithologists' Club was formed in 1936 and membership is open to all interested in Scottish Ornithology. Meetings are held during the winter months in Aberdeen, Ayr, Dumfries, Dundee, Edinburgh, Glasgow, Inverness, New Galloway, St Andrews, Stirling, Thurso and the Wigtown District at which lectures by prominent ornithologists are given and films exhibited. Expeditions are organised in the summer to places of ornithological interest.

The aims of the Club are to (a) encourage the study of Scottish ornithology and to promote an interest in wild birds; (b) co-ordinate the activities of Scottish ornithologists; (c) encourage ornithological work in Scotland; (d) encourage conservation of Scottish birds and protection of threatened and rare species; (e) hold meetings for discussion and to arrange ornithological field meetings, and (f) appoint local recorders and publish material relating to Scottish ornithology, including *Scottish Birds*, the club journal.

There are no entry fees for Membership. From 1 July 1978 the Annual subscription is £5, or £2 in the case of Members under twenty one years of age or Students under 25, who satisfy Council of their status as such at the times at which their subscriptions fall due. The Life subscription is £100. Family Membership is available to married couples and their nominated children under 18 at an Annual subscription of £7.50, or a Life subscription of £150. *Scottish Birds* is issued free to Members but Family Members will receive only one copy between them. Subscriptions are payable on 1st October annually.

*Scottish Birds*, which is published quarterly, includes papers, articles and short notes on all aspects of ornithology in Scotland. The Scottish Bird Report is published in the Journal.

Application for Membership form, copy of the Club Constitution, and other literature are obtainable from the Club Secretary, Major A. D. Peirse-Duncombe, Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh, EH7 5BT (tel. 031-556 6042).

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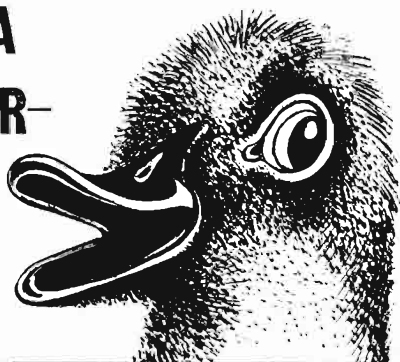
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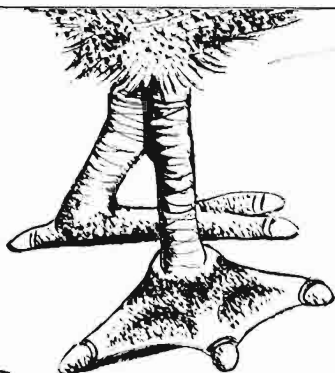
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