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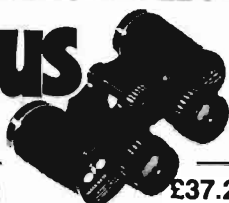
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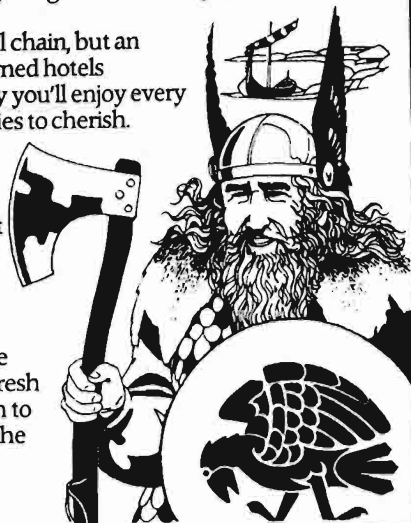
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SCOTTISH BIRDS

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Edited by D. J. Bates

Special Notices

Photographic competition

This year *Scottish Birds* is starting an annual photographic competition. Black-and-white prints will be preferred, although colour transparencies will also be considered. Photographs must be of wild birds in Scotland taken in the two years prior to the closing date. Photographers may submit as many entries as they like. Bookshop credits of £10 and £5 will be awarded as first and second prizes. Prints will be kept for possible future use in *SB* unless an SAE is enclosed for their return. The judging panel will include the editor, a member of the editorial committee and a well known photographer who will change each year to allow him or her to compete. This year Donald Smith has kindly agreed to join the panel. Entries must be received by 31st August. The winners will be announced and a selection of prints will be shown at the conference and published in the winter number of *SB*.

Survey of the breeding waders of Scottish agricultural land

In many parts of Scotland mechanical ditch diggers and piles of plastic pipes are becoming a depressingly regular indicator of good wader fields. Drainage, reclamation and afforestation schemes are increasingly threatening the important populations of waders breeding on Scottish agricultural land. It is vital that we find out now, before it is too late, just what effects these schemes may have on our wader populations. We may well be in the dangerous situation where we lose these birds, yet we will have no idea how much we have lost.

To help defend what is left and to fill the gaps in our knowledge the SOC, BTO, RSPB, Wader Study Group and NCC are co-operating in a survey of the breeding waders of Scottish

agricultural land, to be run concurrently with the similar English survey, *The Birds of the Wet Meadows*. The Scottish survey will have four objectives.

- (1) To establish a baseline for continuing monitoring, against which the effects of agricultural change may be assessed.
- (2) To provide estimates of the abundance and distribution of inland breeding wader populations.
- (3) To investigate the habitat requirements of our breeding waders.
- (4) To pinpoint areas worthy of conservation.

In 1981 we carried out a pilot study to work out the techniques to be used in the main survey which begins in 1982. Volunteer observers from all over Scotland took part in the pilot study and their labours have led us to the point where we can lay down a set of recommendations. The main species involved will be Oystercatcher, Lapwing, Redshank, Curlew and Snipe, and, while the amount of work involved in censusing each site will obviously depend on local conditions, many sites could be censused during a single carefully timed visit. It will be possible to look at many areas from public roads but, where possible, thorough coverage by foot would be ideal (with landowners' permission). Visits should be made between April and June with the best time being May. Participants will be provided with a full set of recommendations and record cards.

To be most effective we should concentrate on areas at lower altitudes most likely to be subject to agricultural change. Thus pasture, hay meadows, bogs, rough grazing, cereal fields and ploughed land should all be considered suitable study areas, though observers who wish to work other habitats (e.g. machair) are also welcome to send in their results. We hope that areas of proven worth are covered (e.g. east coast straths) but many areas (e.g. west coast glens) are still unknown quantities and may prove particularly rewarding.

As well as being of great value, counting breeding waders is a very enjoyable way of spending your free time and provides tremendous opportunities for finding other birds, such as the pair of Hen Harriers or Red-legged Partridges in my study area. It would have made counting easier if the harriers hadn't insisted on picking off my Lapwings! If you live in Scotland or are coming up for a holiday at the correct time and would like to take part please contact me: Hector Galbraith, 96 Neilston Road, Paisley, PA26 6EL.

Seabird movements around western Islay

K. VERRALL and W. R. P. BOURNE

(Plate 2)

While it has long been known that many seabirds can sometimes be seen moving along the east coast of Scotland, where they tend to fly north, there has been less information from the west. Keith Verrall has now found as a result of nearly five years of observation that similar numbers can often be seen there from western Islay, where they tend to fly south. Many of the birds appear to be flying back out to sea after they were drifted inshore by west winds.

Many seabirds can sometimes be seen passing projecting headlands such as Cape Wrath and the Butt of Lewis in NW Scotland (Bourne & Harris 1979), and more recently they have been seen from the NW Irish headlands as well (Watson 1980). There is less information for the intervening area, where in summer a marine front forms offshore between the well mixed coastal water moving N from the Irish Sea and the stratified oceanic water out in the Atlantic, and which is associated with a raised marine productivity likely to attract seabirds (Simpson *et al.* 1979; plate 2, which also shows the most important sites mentioned in the text). During the period May 1973 to December 1977 KV therefore looked for seabird movements around Islay, which projects SW at the S end of the Inner Hebrides to within 40km of Ireland.

The sites examined include Ardnave Point, Saligo Bay, the Mull of Oa, Claggain Bay and Ruaval lighthouse. By far the largest numbers of birds were seen at Rubha na Faing, the most westerly point just N of the Rhinns of Islay lighthouse. Birds moving S down the W coast of Scotland appear to come to a focus here comparable to that at Rattray Head on the E coast (Elkins & Williams 1972, Wallace & Bourne 1981). During the five years, observations were made for 404 hours on 154 days, and a total of some 34 species of seabird and three species of diver, with small numbers of a variety of waterfowl, waders and landbird migrants, were seen. Details of some of the rarities have already been reported elsewhere, and it is now proposed to bring the bulk of the seabird records together (appendix) and consider the season and weather conditions when the birds were seen.

The rocky headland of Rubha na Faing overlooks a group of stacks about 12m high, Frenchman's Rocks, which lie 500m

offshore and extend another 500m SW. A strong current, which may reach eight knots on a falling tide, runs between the rocks and the shore, and up to 200 Gannets, 300 Kittiwakes and 80 terns may feed in the area. Large numbers of seabirds pass by, about 90% flying S at all seasons (appendix). The

Table 1. Movements of most numerous species at different seasons

Rate given as average per hour to nearest whole number unless it is less than a half, when the number of birds is given in parentheses.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days		3	6	10	13	20	14	16	18	29	14	7	4
Hours		7½	13	25	34	63	35½	42	49	75½	36	16	7½
Fulmar	N	4	6	13	7	5	3	2	7	5	(4)	2	6
	S	67	34	26	20	20	32	43	53	101	3	22	29
Manx Shearwater	N	—	—	—	1	4	3	1	1	—	—	—	—
	S	(1)	—	(2)	2	37	59	71	59	42	1	(2)	—
Gannet	N	—	1	4	9	10	9	9	8	1	1	—	—
	S	22	31	19	29	60	94	127	119	81	31	12	1
Kittiwake	N	—	—	2	7	13	14	4	4	1	14	2	2
	S	25	57	10	17	40	35	42	18	94	736	169	11
Auks	N	—	—	2	6	28	32	8	—	1	34	1	1
	S	67	30	6	12	80	100	54	2	72	756	187	49

movements are largest between April and October, start about one to two hours after sunrise, and last for about three hours. The commonest species are Gannet and Fulmar, which usually pass between the shore and the rocks, and Manx Shearwater, Kittiwake and auks, which keep further out to sea (table 1).

Divers The Great Northern is by far the commonest diver, occurring in all months except July and August, when it is still present elsewhere around the island. No less than 219 divers seen flying N in flocks of up to 14 in three hours on 4th May 1975 were thought to be largely this species, the only one of which many birds travelled N. Red-throated Divers, which breed locally, were also seen throughout the year. Most Black-throated Divers occurred in September, and they were only seen from then to May. Half the Great Northern Divers, a third of the Black-throats, but only a quarter of the Red-throats, were in summer plumage.

Fulmar Hundreds of pairs now breed along the W coast of Islay, though there are still none in the E. The nearest colony is about 3km away on Lossit Point, and is hardly sufficient to explain the number seen at sea, where it was the fourth commonest species, and most must come from a distance. A maximum of 400 per hour occurred with SW winds of force six or more and rain, fog or drizzle when the breeding birds are dispersing in early September. The minimum occurred later in the month and October when they are moulting at sea, and the return movement reached 90 birds per hour in late January. Five dark morphs were seen between 29th June and 13th September.

Shearwaters The Manx Shearwater was the fifth commonest species, and most must come 150km from the great colony in the mountains of Rhum. They first appeared in late April with a spring maximum in early June. During the summer they were most numerous with S-SW winds, but during the autumn passage, with a maximum of 475 per hour in early August, large numbers also occurred with NW winds, as already reported at Erris Head by Phillips & Lee (1966). The last two were seen on 21st November, with one in a S gale on 6th January 1974. Sooty Shearwaters occurred with them from 11th August to 23rd September, with one going N in a SE gale on 17th October 1976. The largest movement involved 159 birds in flocks of up to 31 with a S4 wind, rain and fog on 8th September 1975. Four other large shearwaters were seen, including a Cory's which flew N on 19th August 1973, and one Little Shearwater, which flew S on 30th June 1974.

Petrels Although Storm Petrels are known to breed in force further N in the Hebrides and off the W coast of Ireland, with a few in the northern approaches to the Irish Sea, they have

not been found breeding locally yet, and they were only seen in some years. Then up to 25 occurred in a day between 21st July and 17th September and one went N in a SW gale on 24th January 1974. Leach's Petrels were only seen four times, with SW winds between 8th September and 10th October, though numbers were wrecked in the area in October 1891 (Evans 1892).

Gannet Although most presumably come over 100km around the Mull of Kintyre from Ailsa Craig, or possibly 300km from St Kilda, it was still the third commonest species at sea. The birds flew steadily S at an average rate of 40-80 per hour in all kinds of weather, largely regardless of the direction of the wind, though as usual the maximum of 300 per hour occurred with a SW wind. There was a sharp peak when the birds return to their colonies in the second half of February, followed by a decline in March, then a steady increase to the maximum in early August, followed by a steep decline to the minimum in December.

Shag Breeds locally in moderate numbers, and up to 200 rest on the headland with parties of 20-30 feeding at sea throughout the year. Up to 30 per hour flew S in August and September, with occasional Cormorants, which only breed in small numbers.

Wildfowl and waders A variety of species was recorded occasionally, and only the more marine ones have been listed. It is difficult to say how many of the Eiders, which are also resident in the area, were on migration. The Surf Scoters and Red-necked Phalarope occurred in May, and the Grey Phalaropes in September. Grey Phalaropes were also wrecked with the Leach's Petrels on 13th October 1891.

Skuas and Larus gulls Jura and Islay form the headquarters for the many large gulls and few Arctic Skuas breeding in western Argyll. The gulls disperse overland in all directions and do not concentrate at Rubha na Faing. Arctic and occasional Great and Pomarine Skuas pass by in summer, and two Long-tailed Skuas flew S on 27th September 1977. The smaller skuas have never reached the numbers reported recently on spring migration at Balranald on the west coast of the Outer Hebrides (Davenport 1979), though they have also been wrecked in the area after autumn gales in the past. One sub-adult Little Gull spent the summer of 1976 at a local Black-headed Gullery, and another was joined by a Ross's Gull when feeding with Kittiwakes offshore on 15th August in that year. A subadult Sabine's Gull was in a large southward movement after a SW gale on 24th July 1977.

Kittiwake Breeds in small numbers along the W coast of Islay but the majority of the many birds passing by at sea

in summer must come with the other commoner species from elsewhere, especially the large seabird colonies 50km away on Rathlin and on Colonsay. This is also the commonest species in the great southward movements which occur with W-SW and occasionally SE winds from mid September to mid November, with a maximum of 3,650 per hour on the morning of 16th October 1976, when 60% were immature. There is a smaller peak of activity when the birds return in February.

Terns Arctic Terns breed nearby and are the commonest species. They are sometimes seen moving S in May, and most have left by mid August, with the last identified on the 29th. A few Common Terns are seen with them, and provide the extreme dates, 4th May and 26th September. Other species are only recognized at long intervals.

Auks Nearly 90% of the 55,000 auks seen were too far out to sea for identification, but among those that could be identified 83% were Guillemots, 15% were Razorbills, and only 1.3% were Puffins. A few hundred pairs of the first two species breed in western Islay but most must come from elsewhere. Puffins were also seen ashore at Port Carraig Sgairn near Sanaigmore to the N in 1969 during surveys for Operation Seafarer, but have only been seen flying by with food since then. Surprisingly few auks were seen in the early spring, but there were more in May and June, when about a quarter flew N. There were fewer in July, and virtually none when the larger species are moulting in August. Large numbers occurred again in the big southward seabird passages in October and November, with a maximum of 6,600 birds per hour on 16th October 1976, and similar movements occurred again with the onset of cold weather in January, with the addition of a few Little Auks. Black Guillemots, which are resident in the area, were sometimes seen coasting N in spring, with a peak in April and May, and S at other seasons.

Discussion

Western Islay clearly ranks amongst the most important stations in Britain for both the number and variety of seabirds passing, though it seems likely that with further investigation other sites further NW should prove equally rewarding. The variation in the rate of passage and the direction of movement in different months is shown in table 1. In summer many of these birds must be making feeding excursions from the breeding colonies, and it is notable that among the commoner species the Kittiwakes and auks must often have come at least 50km from the nearest large colonies on Rathlin and Colonsay, the Gannets over 100km from Ailsa Craig and the Manx Shearwaters over 150km from Rhum, and that this may not be the full extent of their journey. It is more difficult to

determine which birds are likely to be on migration, notably because most of them fly S even in the spring, but it may be noted that even these anomalous movements occur when migration might be expected.

It seems likely that topographical considerations may explain this predominance of southbound movements, since Rubha na Faing is the most southwesterly point that must be passed by birds travelling S down the W coast of Scotland if they avoid the narrow sounds infested with gulls and (formerly) birds of prey between the islands and the mainland, and it lies moreover at the end of over 100km of coast leading SW from the Firth of Lorne. Thus, for example, while the large gulls regularly commute straight across the islands, southbound Gannets and Kittiwakes were seen to turn back from the narrow Sound of Islay on the E side of that island and presumably went round by the open W coast.

Further S the passage gives way to confused movements in the approaches to the Irish Sea, and while some birds appear to continue S past Wales (Gibbs 1970) and Cornwall (Hartley 1945, Phillips 1966), others fly W past Malin Head to the Atlantic (Watson 1980). In contrast to this, birds moving N on either side of Ireland encounter leading-lines likely to lead them away from Islay so that they are more likely to accumulate and become wrecked during gales in the inlets on either side.

The weather clearly also has an important influence on the development of the movements. The direction of the wind with which the largest movements occurred is shown in table 2, and it is possible to explain them as follows. In fine weather the feeding birds and passing migrants disperse at sea, notably over the frontal region offshore, and are not seen from the coast. With the approach of a low pressure system from the W they then start to drift first N and then E as the wind rises and veers from S to W with the passage of the fronts,

Table 2. Wind direction with which the largest movements occurred

	Birds per hour	N	NE	E	SE	S	SW	W	NW	Calm
Fulmar	100+	2	—	1	2	4	9	2	—	1
Manx Shearwater	100+	—	1	—	—	4	5	—	2	1
Gannet	100+	2	3	3	4	10	9	2	4	1
Kittiwake	100+	1	—	3	4	1	10	6	2	—
	500+	—	—	—	1	—	1	2	—	—
Auks	100+	4	3	—	4	3	10	7	—	2
	500+	—	—	—	1	—	5	—	—	—
Total	500+	—	2	—	3	4	12	3	1	—
	1000+	—	—	—	1	—	3	2	—	—

until they accumulate offshore somewhere to the N, perhaps especially in the Firth of Lorne, and start to head back along the coast in the way recently detected with radar in the North Sea (Bourne 1982).

Some particularly large passages, which could be regarded as either migration or weather movements, occurred with such conditions in the mornings in the late autumn, notably on 28th September 1975, 6th October 1974, 23rd October 1977, and especially in October 1976. In this last month the largest recorded movement, briefly reaching a rate of 10,200 birds per hour, first passed S with the onset of W winds following the clearance of a trough on the morning of the 16th. These birds then probably encountered a SE gale associated with the arrival of another depression in the Irish Sea overnight, because the following morning there was a smaller but more prolonged return movement N at a rate of 500 birds per hour with S winds. Subsequently there were further southward movements at the rate of 4,200 birds per hour on the morning of the 24th and 2,500 birds per hour on the morning of the 31st. Similar to and from movements appear to continue on a diminishing scale throughout the winter until an improvement in the weather permits a permanent return to the breeding colonies.

The different character of the spring migration is illustrated by the sudden startling appearance of over 200 divers, apparently many of them Great Northern, which were presumably migrating inconspicuously up the coast overhead, when a spell of fine anticyclonic weather was interrupted by the passage of a weak front which led to the development of a local barrier of overcast skies and fog on 4th May 1975. The number that appeared reinforces the suggestion by Cramp & Simmons (1977) that in addition to the small population of Iceland we must also receive many winter visitors from Greenland and perhaps also North America.

Acknowledgment

KV is particularly indebted to Mr & Mrs Merrall for permission to carry out seawatches on their land.

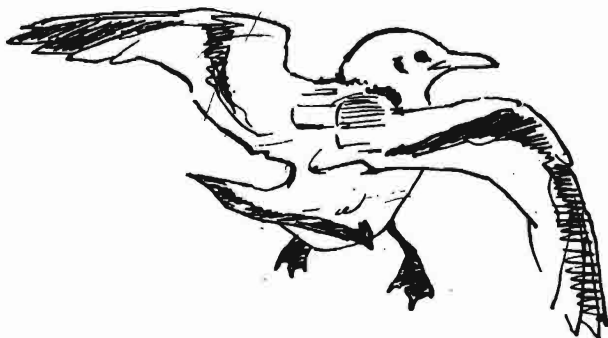
Summary

Large numbers of seabirds can frequently be seen passing S down the W coast of Islay throughout the year, but especially in the late autumn, while northbound movements are less conspicuous, even in the spring. The commonest species are Kittiwakes, auks (mainly Guillemots), Gannets, Fulmars and Manx Shearwaters, in that order, with smaller numbers of many others, some of them rare. The largest movements reach the order of 10,000 birds per hour and tend to occur in the mornings with W winds following the clearance of a depression to the E. They may be due to a combination of feeding excursions from the breed-

ing colonies in summer (some of which may extend for scores and hundreds of kilometres), winter weather movements, migration, and attempts by birds feeding in the vicinity of the offshore front to return out to sea when drifted inshore by the wind. The local topography may be responsible for the greater concentration of southbound birds. The number of Great Northern Divers indicates that many must originate further west than Iceland.

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KITTIWAKE John Busby

Appendix. Seabirds passing SW Islay 1973-7

	Total	% going south		Total	% going south
Red-throated Diver	72	85	Great Skua	34	85
Black-throated Diver	27	74	Little Gull	4	100
Great Northern Diver	102	52	Sabine's Gull	1	100
Diver sp.	487	46	Black-headed Gull	169	65
Fulmar	19,953	91	Common Gull	295	96
Cory's Shearwater	1	—	Lesser		
Large shearwater sp.	3	—	Black-backed Gull	420	90
Sooty Shearwater	496	99	Herring Gull	1,265	87
Manx Shearwater	13,224	97	Iceland Gull	2	100
Little Shearwater	1	100	Glaucous Gull	6	100
Storm Petrel	58	97	Great		
Leach's Petrel	4	100	Black-backed Gull	375	92
Gannet	30,650	92	Ross's Gull	1	100
Cormorant	29	100	Kittiwake	46,743	95
Shag	1,797	82	Sandwich Tern	1	—
Scaup	17	—	Roseate Tern	2	100
Eider	587	62	Common Tern	61	70
Long-tailed Duck	3	33	Arctic Tern	278	84
Common Scoter	71	79	Commic tern	1,314	81
Surf Scoter	5	100	Guillemot	2,883	97
Red-breasted Merganser	59	76	Razorbill	780	95
Red-necked Phalarope	1	—	Black Guillemot	1,034	82
Grey Phalarope	4	100	Little Auk	5	66
Pomarine Skua	8	62	Puffin	47	77
Arctic Skua	42	71	Auk sp.	50,514	90
Long-tailed Skua	2	100			
Small skua sp.	5	40	Total	173,938	91

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The breeding seasons of British Puffins

M. P. HARRIS

(Plates 1 and 3)

Although the first and last dates for passerines summering in Britain have been recorded in many years and places, there are relatively few such detailed records for seabirds breeding in Britain. This paper documents the available information for Puffins.

Material

The best series of data come from colonies where there are regularly manned bird observatories, that is Skokholm in

South Wales, Fair Isle, and Isle of May (although here human observers often arrive in the spring after the first Puffins). Information on these colonies has been gleaned from observatory reports, daily logs and wardens. Data from St Kilda come from Nature Conservancy Council files and personal records, and those from colonies in Kincardineshire and Aberdeenshire are from my own notebooks.

The usual dates at the start of the season are the first sighting on the sea under the colony and the first record (often of quite large groups) on land. The bulk of the birds usually return within a week or so of this second date. At the end of the season there is a variable cycle of colony attendance with periods of a day or two with many birds being present alternating with a few days when Puffins are infrequently seen. The true end of the season (corresponding to the first landings in the spring) is when the adults fail to turn up when expected and, for obvious reasons, this rarely gets recorded. After this only the few late breeders remain and virtually all end-of-season records refer to the last adults seen ashore, flying over land or carrying fish towards a colony. However, on St Kilda the last records refer to juveniles caught at lights at the Army camp on Hirta, and these are directly comparable with the last adult dates. A summary of dates by decade is shown in the table. Data on breeding seasons and departure of birds from colonies come from my own detailed population studies.

Return to the colonies

The mean dates when Puffins were first seen on the sea and ashore on Skokholm between 1928 and 1979 were 25th March (range 14th March-3rd April) and 5th April (range 22nd March-13th April). There has been little change in dates during the last 50 years. The mean number of days between birds seen on the sea and ashore in 22 years was 9.3 days (S.E. 1.1). Birds at southern Irish colonies may arrive in early March but do not land until mid or late March (Rutledge 1966).

In most recent years the return to the water under the colonies on St Kilda has been 12-17th April but birds were ashore on the 1st and 4th in different years. Mackenzie (1905), who lived there from 1829 to 1843, stated that Puffins normally returned (ashore?) about 5th April although they were seen at sea not far away in March. On Sule Skerry (Orkney) the return and landing dates for 15 years between 1896 and 1939 were in the periods 7-15th April and 15-22nd April (Robinson 1933, 1939).

Williamson (1965) recorded that Puffins gathered offshore at Fair Isle in late March and came to land towards the end of the first week or during the second week of April. More

Table. Mean dates when Puffins first and last seen at British colonies

	First on sea	First ashore	Last ashore
Skokholm			
1920s	27 March (2)	5 April (2)	19 August (2)
1930s	27 March (4)	5 April (4)	21 August (4)
1940s	25 March (3)	8 April (3)	22 August (3)
1950s	27 March (8)	3 April (8)	18 August (8)
1960s	20 March (9)	22 March (1)	20 August (10)
1970s	27 March (9)	8 April (5)	21 August (9)
St Kilda			
1950s	1 April (1)	1 April (1)	mid Sept (1)
1960s	14 April (2)	21 April (2)	2 Sept (2)
1970s	15 April (4)	18 April (1)	31 August (8)
Fair Isle			
1960s	1 April (4)	4 April (7)	22 August (7)
1970s	26 March (10)	1 April (10)	27 August (8)
Isle of May			
1960s	—	2 April (4)	15 August (4)
1970s	—	13 March (10)	25 August (10)
Kincardineshire and Aberdeenshire			
1970s	21 February (6)	21 February (6)	—

Notes The number of years on which means are based are given in brackets. The dates for return to the Isle of May are probably too late (see text).

recent records for Fair Isle suggest a slightly earlier start to the season with the mean dates for birds first seen on the sea being 27th March (range 14th March-3rd April) and ashore 2nd April (26th March-10th April). The mean interval between being seen on the sea and ashore in 14 years was 4.3 days (S.E. 1.6).

Puffins return much earlier in the year to North Sea colonies, having been seen ashore or flying in front of the cliff colonies in Kincardineshire and Aberdeenshire between 14th and 24th February each year 1974-80 and on the sea there 25th February 1981. Observers are seldom present that early on the Isle of May but small numbers of Puffins have been seen on land as early as 19th February and large numbers are ashore most years by mid March. Other early records on the sea near colonies have been 6th January at Dunnet Head in Caithness (D. Stark pers. comm.) and 9th February at Bampton in Yorkshire (per C. S. Lloyd), and quite a number had returned to the Farne Islands (Northumberland) by 21st February 1952 (Watt 1953).

End of season

Most Puffins leave British colonies in the first third of August although a few birds with very late chicks continue to feed them for several weeks after the main exodus. The mean

last date on Skokholm was 20th August (range 11-28th August) and on Fair Isle 25th August (17-29th August), although Williamson (1965) gave a late date of 2nd September for the latter colony. Although the annual median dates for fledging on St Kilda in 1973-80 were between 29th July and 21st August (Harris 1982), juveniles were still fledging in early September in three years. Juveniles have also been caught in three other Septembers and adults were present on 2nd September in another year.

The majority of last dates on the Isle of May were between 10th and 26th August but single birds were seen ashore and carrying fish to the island on 1st September 1976 and 11th September 1979. 1979 was a late season on the Farne Islands too, where an adult was seen flying over land on 21st September (Hawkey & Hickling 1980).

Adults have also been seen at other colonies in September, e.g. at Sule Skerry on the 11th and the Flannans (Outer Hebrides) in mid month (Tomison 1904, Clarke 1912). Eagle Clarke (1912) recorded Puffins as being numerous on the sea around Boreray (St Kilda) on 8th October 1910 and 12th October 1911, but it is not clear whether these were birds attending the massive colony there.

On the Isle of May adults remain at the colony for several weeks after finishing breeding, the length of time spent being negatively correlated with the date when the bird lost its egg or fledged its chick (fig.). This results in a marked synchronization of birds leaving the colonies. In 1979 the mean dates when individually marked successful and unsuccessful breeders were last seen were 7th August (a mean of 19 days after their young had fledged, $n=52$) and 8th August ($n=4$), not significantly later than birds which failed to breed either because they had no burrow (5th August, $n=95$) or because the female did not lay (5th August, $n=12$). This synchrony is enhanced by two-, three- and four-year old immatures leaving at the same time. The few adults left carry on feeding, and normally successfully rear, their late young. At western colonies adults appear to leave soon after their young have fledged.

Discussion

In the 1970s Puffins returned to the colonies in east Scotland three to four weeks earlier than to the colonies elsewhere, although both the sea and the air are colder in spring in east Scotland than in the west. This early return appears to be a recent phenomenon, as all the old accounts (e.g. Witherby *et al.* 1941, Watt 1951) give the normal time of return as late March and April. Razorbills and Guillemots now return to the

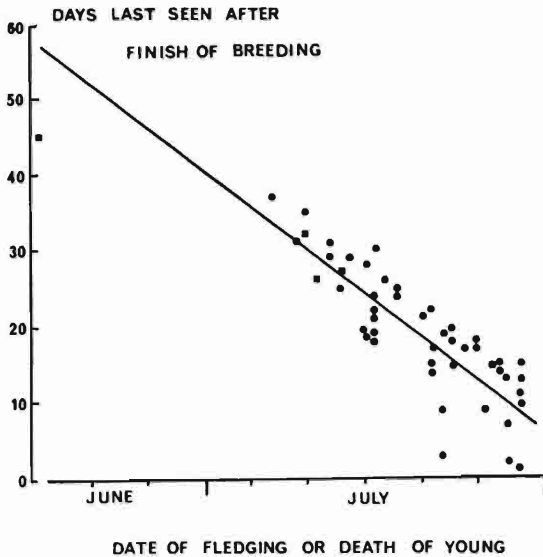


Fig. Relationship between the time spent at the colony in 1979 by Isle of May Puffins after completion of breeding and the date their young died (squares) or fledged (circles). The correlation is highly significant ($r = -0.87$, $P < 0.001$).

colonies earlier in the winter than they used to (Taylor & Reid 1981); presumably there is some common cause. A change in the food supply would seem a likely, if speculative, reason.

It is unlikely that Puffins can come back much earlier in the year, for instance with Razorbills and Guillemots which now return to the east coast colonies in October. Unlike Razorbills and Guillemots, which have the main moult of the year after the breeding season, Puffins moult before the breeding season and are flightless in late winter (Harris & Yule 1977). Puffins at St Kilda are often still growing their primaries when they return to the colonies in late April whereas those on the Isle of May may have completed the growth of these feathers before mid March. I have no data on the timing of moult of Welsh or Shetland Puffins. There is severe competition for nest sites in most Puffin colonies and many birds are prevented from breeding by their inability to get a site. Late returning birds have little chance of obtaining a burrow, so there is a distinct advantage in coming back early.

The few data on the laying period of Puffins show that east coast birds not only return earlier but lay earlier than birds present on the west coast. On the Isle of May eggs were laid

at the very end of March 1973 and 1975 as chicks were present in the first week of May, and the incubation period is 39-43 days (personal measurements). The first eggs in six other seasons were laid between 4th and 10th April. In 1975 a young one on the Farne Islands hatched about 10th May, so the egg must have been laid about 1st April.

Puffins on Skokholm commence laying in the last week of April with a peak in the first half of May. On St Kilda the species does not usually lay before the end of April and most not until the first or second week of May (Harris 1980). However, in 1980 a few young hatched on 1st June from eggs laid about 22nd April. In 1974-7 the annual mean date of hatching in a series of study burrows on St Kilda was nine, 17 and ten days later than in similar burrows on the Isle of May. The biological basis for this difference is not understood.

The departure of the bulk of, and the very last, adult Puffins at the end of the breeding season is fairly synchronized throughout Britain. Consequently, adult Puffins are present on the Isle of May for 3-4 weeks longer each year than at most other colonies. The reason why the Isle of May birds remain for so long after their young fledge whereas west coast birds do not is unclear. It may be associated with Puffins breeding in east Britain being resident in the North Sea, and hence under no great pressure to migrate, whereas Puffins from elsewhere in Britain are migratory, wintering south to Africa, east to the Mediterranean and west to Newfoundland (Mead 1974). The populations that do not migrate may be able to moult earlier in the year and so return to the colonies earlier in the spring.

Acknowledgments

I. Robertson, S. Warman and J. Arnott kindly extracted data from observatory records; many observers contributed records either directly to me or via these logs; D. Jenkins criticized the manuscript.

Summary

Puffins are seen on the sea near most British colonies in late March or early April, and come to land a few days later. However, the first birds return to east Scottish colonies in late February and many are back by early March; this early return appears to be a recent phenomenon. These populations also lay earlier than those in the west. Most Puffins leave colonies by mid August. Puffins from St Kilda moult later in the winter than those from the Isle of May which may explain why they return and lay later.

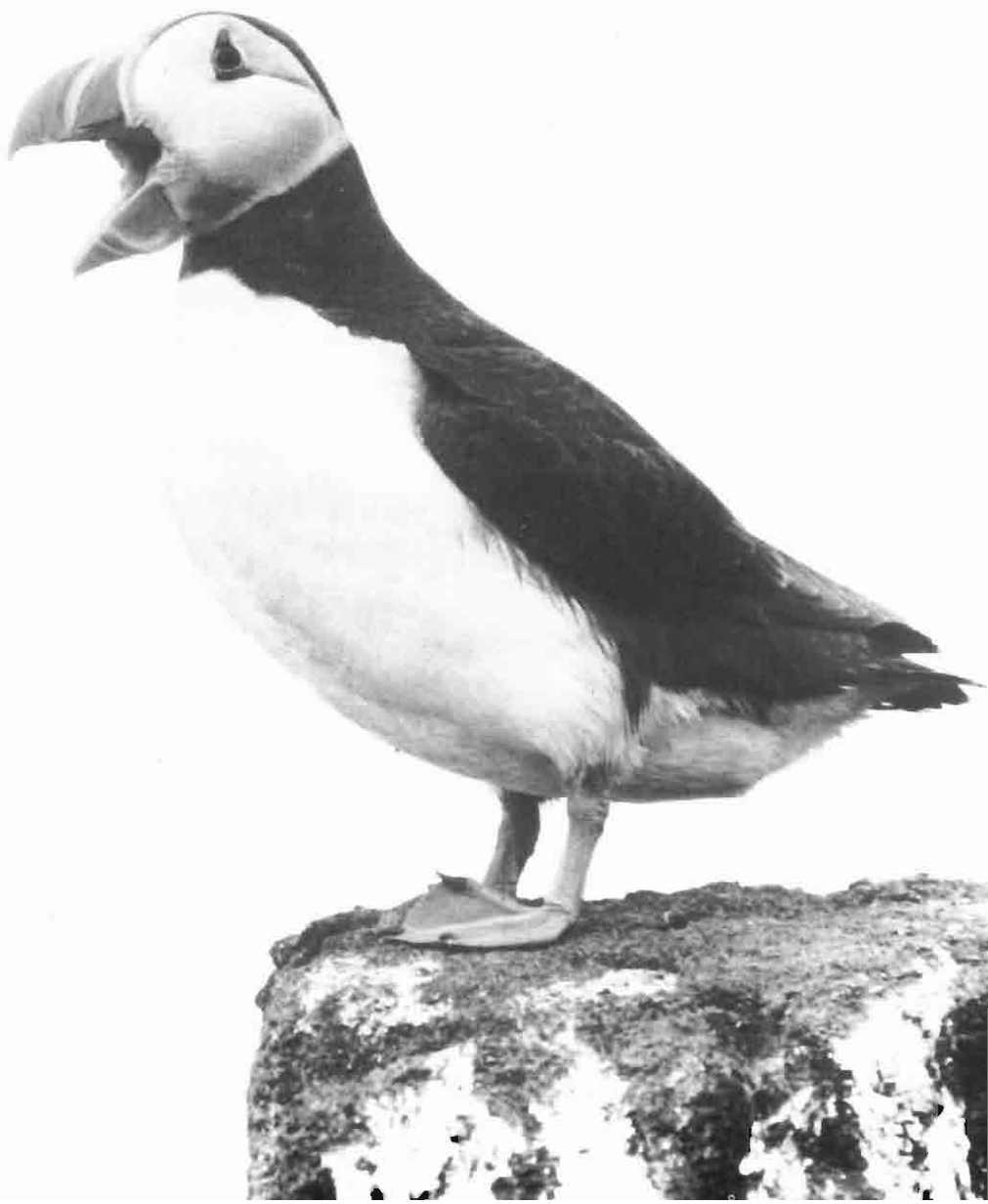
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PLATES 1 and 3. Puffins. In recent years at least, the breeding season of Puffins has begun earlier in the east of Scotland than elsewhere (see p. 11).

PLATE 1. Puffin yawning, Isle of May.

B. Zonfrillo





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PLATE 2. Infra-red satellite photograph of Scotland at 15.18 GMT on 17 May 1980, to show surface water temperatures and sites for seawatching (see p. 3). This was an unusually clear period, and there is only a little cloud where a front is moving away SE. Note how the sea becomes cooler, and therefore paler, where the surface water is mixed with cold bottom water by tidal currents offshore; this also leads to the growth of plankton attractive to small fish, and therefore bird concentrations. Note also how fronts develop between this well mixed coastal water and the warm surface layer of the stratified water out in the Atlantic off the W coast, including Islay, and how the mixing becomes more prominent where Atlantic water flows past the Northern Isles and down the E coast into the North Sea. The high marine productivity of this coastal current provides the basis for the development of major seabird colonies. (1) Rattray Head, (2) Cape Wrath, (3) Butt of Lewis, (4) Balranald, (5) NW Skye, (6) Rhum (colony), (7) Colonsay (colony), (8) Islay, (9) Rathlin (colony), (10) Malin Head, (11) Erris Head, (12) Ailsa Craig (colony), (13) Moelfre or Point Linas.



PLATE 3. Puffins on the Isle of May.

B. Zonfrillo



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Birdwatching on the Clyde islands

J. A. GIBSON

(Concluded from 11: 164)

Whereas Arran is often called the Highlands in miniature, the Island of Bute, the other really large Clyde island, has often been likened to one gigantic farm. It is certainly extensively cultivated, so please take care when walking. The Bute Estate also has a tradition of allowing naturalists unrestricted access virtually everywhere, so please don't abuse this privilege, particularly during the Pheasant shooting season.

During the past 25 years one of the most marked changes on Bute has been the vast increase in the numbers of Eiders, which now nest at all suitable places around the shore. Winter rafts can number up to 500 birds. Another marked change is that of the Greylag Goose, which now arrives in thousands every winter. Many of the fields on Bute are quite small, and geese can easily be seen in hundreds from the roadside, or without even leaving your car. Nesting Buzzards are now common, and recently the Peregrine, Hen Harrier and Short-eared Owl have returned to nest. A few pairs of Ravens also nest, particularly in the north.

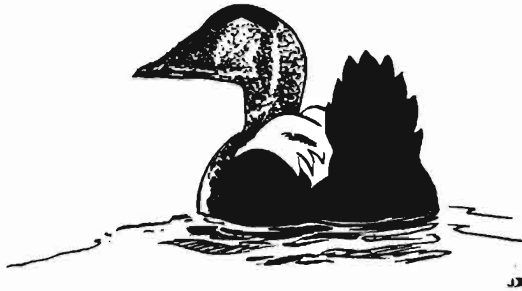
On Bute there are many freshwater lochs, with nesting ducks in summer and large flocks of wildfowl in winter. The main lochs are Lochs Fad, Ascog, Dhu, Greenan and Quien, where Common Sandpipers, Teal, Mallard, Tufted Ducks, and occasional Shovelers nest. At the Plan loch in the south, an easy walk, is one of the few remaining colonies of Black-headed Gulls; the Water Rail also nests at Plan. Shelducks nest at many places around the shore, but the formerly common Red-breasted Mergansers are now much reduced. All the common garden birds occur in some profusion. Kingfishers are nesting again, at Straad. Herons are seen all round the shore, but few now nest. Curlews, Lapwings, Woodcock, Snipe and Redshanks all nest commonly. The justly famous bays in the south and west—Kilchattan, Scalpsie, St Ninian's, Ettrick, and several smaller ones—are well worth a visit, with excellent mudflats and a good many less common waders on passage. Oystercatchers and Ringed Plovers nest all round the shore, and there are still a few Common Terns.

On Bute the distances are small, the hills are not high, and good roads give easy access to most places. The island is ideal for a birdwatching holiday at any time, and particularly if one is no longer quite so fit for places like Ailsa. The town of Rothesay is a popular holiday resort, particularly at the height of summer, but even then the rest of Bute is always surprisingly quiet, and the outlying villages, where holiday accommodation can easily be found, seem to be quiet all the year round. The old-established Buteshire Natural History Society runs the Bute Museum in Rothesay, where visiting naturalists are made welcome and given every assistance; several helpful nature trail guides are available.

Inchmarnock is one of the great gull colonies of the west of Scotland. Some 2,500 pairs of Herring and Lesser Black-backed Gulls still nest, mainly at the west and south, and there are about 20 pairs of Great Black-backs. Eiders nest everywhere; indeed near the southwest tip of the island breeding densities are so great that it is genuinely difficult to walk round the shore without constantly flushing Eiders from their nests. Unattended nests receive prompt attention from the gulls, so it is better not to visit this part of the island at all until July, when most Eiders have their young on the water. Shelducks and Mallards are also common, and there are still a few Mergansers. Buzzard and Raven nest intermittently on the small cliffs. There are a few pairs of Fulmars, and the Black Guillemot now nests on the small sea cliff at the west. Arctic Terns are now only infrequent nesters and the once large colonies appear to have completely gone. Oystercatchers and Ringed Plovers are everywhere. Moorhens nest at the

small freshwater lochans, which usually have some Black-headed Gulls, and even the Dabchick and Shoveler have nested here in the past. The island also boasts a resident pair of Barn Owls.

A visit to Inchmarnock can be a wonderful day. The island is fairly compact and the density of nesting birds can be quite thrilling, like Ailsa Craig in miniature. If one keeps to the shoreline, walking is easiest. The distance round the island, however, is at least four miles, so on a day trip go south and then up the west side. At the northwest the going becomes rough and difficult, so here cut across the centre of the island to the east. Access is from Straad on the west side of Bute by private arrangement, but do bear in mind that Inchmarnock is also a farm, so permission should be sought and the usual courtesies observed.



EIDER *John Busby*

The Burnt Islands in the Kyles of Bute and Eilean Dearg (One-Tree Island) in Loch Riddon are usually approached from Bute. Within recent years, however, all these islands have been much disturbed by oil-related developments, and nowadays the bird population consists almost entirely of a large colony of Herring Gulls and some nesting Eiders. A pair of Mute Swans nests fairly regularly, and possibly surprisingly there is still the occasional pair of Common Sandpipers. The former colonies of Common and Arctic Terns, Common and Black-headed Gulls, and the other nesting ducks, however, have all gone.

The island of Great Cumbrae is probably best known for its popular holiday resort of Millport, which does make the island busy during the spring and summer months. The road is flat all round the island, and the popular thing to do is to hire bicycles. The justly famous Marine Biology Station at Keppel, with its most interesting museum, is certainly well worth a visit and visitors are always made welcome, although, if possible, it is helpful to ask in advance.

Seabirds, gulls, ducks, waders and Herons are commonly

seen all round the shore and a few ducks, mainly Eiders and Mallards, nest, particularly at the north end. The Oystercatcher and Ringed Plover are also common, and Moorhens, a few Sandpipers and the occasional Dabchick nest at the lochans. The small passerines are much the same as on the neighbouring mainland. A pair of Ravens nests fairly regularly near the north. Nesting Kestrels are surprisingly common. No birds now nest on the Eileans, in Millport Bay, where the first Roseate Terns known to science were discovered in 1812.

Probably the most notable feature on the Little Cumbrae is the miniature sea cliff on the west, where both Shags and Cormorants have nested for many years; auks roost but do not nest. On Little Cumbrae there is usually one nesting pair of Ravens. Recently there has also been a pair of cliff nesting Buzzards and the Sparrowhawk has returned. A possibly surprising feature is the number of Red Grouse on the hill, and there are also flocks of Woodcock and Snow Buntings in winter. There are substantial colonies of the large predatory gulls, and usually two small colonies of Common Gulls; Black-headed Gulls, and Common or Arctic Terns, are now intermittent nesters. There are large numbers of nesting ducks, with nowadays Eiders the most common, but also Mallard, Shelducks, some Red-breasted Mergansers, and occasional Teal. The Black Guillemot has been known to nest on the Little Cumbrae for well over 50 years. Oystercatchers, Ringed Plovers and Rock Pipits are common and there are numerous small passerines.

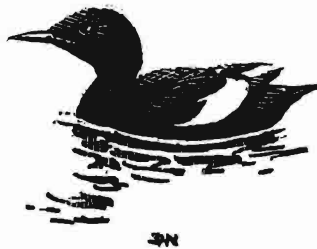
All told, the Little Cumbrae makes a simply splendid day's outing and is now visited regularly by many natural history organizations. The Little Cumbrae is privately owned, with the owner's house on the east and the lighthouse on the west side. Access is from Fairlie or Millport and visitors are usually made welcome, but please do seek permission first of all.

Of the Ayrshire islands, Lady Isle is a reserve of the Scottish Society for the Protection of Wild Birds and Horse Island a reserve of the RSPB. Access is from Troon for Lady Isle and Ardrossan for Horse Island; permits are required for each island, but at present, to avoid disturbance, no permits are being issued.

The Roseate Tern was rediscovered as a Clyde species on Lady Isle in the late 1930s and was also found on Horse Island in the early 1950s, which was largely the reason for setting up each island as a reserve. At one time or another all the regular British nesting terns, Common, Arctic, Sandwich, Roseate and Little, have nested on these Ayrshire islands, but the formerly extensive colonies of Sandwich and Roseates have all gone, as also have the once enormous colonies of

Black-headed Gulls. There are now extensive colonies of the three large predatory gulls. Many Eiders and Mallards nest on both islands, plus a few Shelducks and Mergansers. Oystercatchers are common. An interesting feature is the possibly surprising colony of Moorhens on Horse Island, which has been well known since the turn of the century. At least one pair of Moorhens also nests on Lady Isle, two and a half miles offshore.

Nearly all the islands in lower Loch Fyne, including the justly famous Sgat Islands, have now been virtually destroyed for nesting birds by the oil-related developments at Portavadie. Much further up Loch Fyne, however, the islands off Minard are still interesting, with colonies of nesting gulls, terns and ducks in some quantity. For nearly half a century Black Guillemots have been regularly seen off these islands, but to the best of my knowledge nesting has never been proved. Access from Minard is fairly easy by private arrangement.



BLACK GUILLEMOT
Donald Watson

The islands of Sanda, Sheep Island and Glunimore lie off the southeast tip of the Kintyre peninsula. These islands have long been noted for their seabird colonies and there are now known to be nesting Manx Shearwaters and Storm Petrels in some quantity, the only Clyde site as far as I know. In addition, the Sanda group now has the largest Clyde breeding colonies of Puffins, Black Guillemots and Shags, although numbers can vary a great deal. There are also small colonies of Guillemots, Razorbills, Kittiwakes and Fulmars, and a large predatory gull colony, with some 30 pairs of Great Black-backs and 2,000 pairs of Herring and Lesser Black-backs. Also usually present is a nesting pair of Ravens. For well over 50 years the Sanda group has been famous for its large colony of Eiders, and on the top of the rock stack of Glunimore Eiders and Great Black-backed Gulls nest in close proximity, and apparently quite amicably.

Sanda is farmed and again, although visitors are made most welcome, please ask permission. There is a manned lighthouse

on Sanda and access for visitors is from Southend, usually with the lighthouse boatman. The main transport is to Sanda, and additional arrangements have to be made for transport to Sheep Island and Glunimore, which have the main seabird colonies.

Dr J. A. Gibson, Foremount House,
Kilbarchan, Renfrewshire, PA10 2EZ

Short Notes

Fulmars trapped on building

On 11th June 1981 the Rev James Simpson, minister of Dornoch Cathedral (Sutherland), informed me that over 20 grey and white birds, as he described them, were trapped in the narrow walk surrounding the cathedral tower c.30m above ground and that most of them were dead. Arriving out on the tower walk I found three live and 21 dead Fulmars, many of which were partially decomposed as, apparently, no person had been out on the tower pathway for at least a week previously. After several lengthy chases round the tower I succeeded in grabbing each of the live birds by a wing tip and throwing them over the metre high parapet, each of which flew away strongly. None of the birds was ringed.

The width of the tower pathway is only 60 cm and on its inner side the spire roof rises steeply upwards so that it would be almost impossible for a Fulmar to become airborne from such a confined space. It appears strange that so many birds should become trapped at the same time, as the cathedral is situated in the centre of Dornoch and is 1km distant from the sea. That the condition of the birds ranged through various stages of decomposition to those still alive and active supports Roy Dennis's suggestion that probably a single Fulmar had become trapped and as a consequence this had attracted the others.

D. MACDONALD

Mistle Thrush carrying mammal

On 14th June 1981 at North Haugh, St Andrews (Fife) I saw an adult Mistle Thrush flying low over the ground carrying a bulky object in its bill. The bird alighted and dropped the object but took off again carrying what I was now able to identify as a small mammal, probably a vole (either Bank *Clethrionomys glareolus* or Field *Microtus agrestis*) from its size (head-body 8-10cm) and shape and short tail. It appeared to be carried by its neck. The thrush

once more alighted, dropped the mammal, which appeared to be dead since it made no movement or sound, and proceeded to roll it and turn it with its bill, much as it would with a large worm. I did not see the thrush peck at the animal, but I had it under observation for scarcely a minute before the bird was disturbed and flew off into an adjacent wood. The thrush was strong enough not only to carry the vole in level flight but also up a short, steep slope (12° in 15m) and to rise over a 1m high fence halfway up the slope.

Simms (1978, *British Thrushes* pp. 105-6) mentions that Blackbirds have carried off shrews, including a fully grown Pygmy Shrew *Sorex minutus*, and adult House Mice *Mus musculus*, but he has no details of Mistle Thrushes taking mammals, although they have killed young Song Thrushes, Blackbirds and Dunnocks to feed their young.

TOM W. DOUGALL

Change of Crow hybrid zone in Kincardineshire

During 1966-8 the two races of the Crow, Carrion Crow *Corvus corone corone* and Hooded Crow *C. c. cornix*, and hybrids between them were present and interbreeding on and near Kerloch Moor (Kincardineshire). The hybrids had a complete range of pigmentation between the extremes (Picozzi 1976). However, in these three years the proportion of black Crows gradually increased (59%, 69%, 72%), as might be expected from the known northward movement of the hybrid zone below 300m in eastern Scotland (Macdonald 1965, Cook 1975).

In March and early April 1981 I again recorded the proportion of black Crows near Kerloch. A total of 28 individuals was seen, comprising 21 birds either singly or in pairs at 13 known breeding sites (Picozzi 1975) and seven in a non-breeding flock which could be assumed by the date of the counts to be local birds. All were black. From these results the black Crow appears to have completely replaced the grey in this area although only 13 years earlier 28% of the Crows in the population were hybrids. In my previous study I could find no obvious explanation for the advance of the black in favour of the grey Crow, but presumably it in some way 'enjoys a slight selective advantage' (Huxley 1963) on the low ground.

Counts over a number of years further north in Scotland where black, grey and hybrid Crows occur would help to document the rate of extension of the black Crow's range. In 1976 I showed how to measure the pigmentation of a sample of Crows to provide an objective index in addition to the figure for the actual proportion of black Crows: black scores 1, dark

hybrid scores 2, pale hybrid scores 3, grey scores 4. From these scores an index of pigmentation is calculated: (number of black x 1 + number of dark hybrid x 2 etc) ÷ total number of birds seen. The indices at Kerloch for 1966, 1967 and 1968 were 1.59, 1.48 and 1.45 (n = 32, 42 and 64 birds).

References

- COOK (A.) 1975. Changes in the Carrion/Hooded Crow hybrid zone and the possible importance of climate. *Bird Study* 22: 165-8.
- HUXLEY (J.) 1963. *Evolution, the Modern Synthesis*. Allen & Unwin, London.
- MACDONALD (D.) 1965. Increase of Carrion Crow in south east Sutherland. *Scot. Birds* 3: 368.
- PICOZZI (N.) 1975. A study of the Carrion/Hooded Crow in north-east Scotland. *Brit. Birds* 68: 409-419.
- PICOZZI (N.) 1978. Hybridization of Carrion and Hooded Crows *Corvus c. corone* and *Corvus c. cornix* in Northeastern Scotland. *Ibis* 118: 254-7.

N. PICOZZI

Reviews

Seabirds: their biology and ecology by Bryan Nelson. Hamlyn, London, 1980; 224 pages; 36 colour, 40 plain photos; 60 drawings (by John Busby) diagrams & maps; 24 x 17 cm; £7.50.

In the recent explosion in the publication of bird books seabirds have remained the poor relation, perhaps because in these days of specialization most seabird enthusiasts concentrate on one group or even a single species. Bryan Nelson is best known for his work on the Sulidae but is well qualified to produce a more general book on seabird biology.

Seabirds: their biology and ecology is arranged in nine sections. The first two, 'Seabirds of the world' and 'The oceans', are brief and introductory in nature. These are followed by 'Food and feeding methods', providing the rationale for the whole book, food being the basic reason why seabirds are at sea, and the primary determinant in all their other behaviour. The core of the book, dealing with breeding biology, is subdivided, not entirely logically, into 'Behaviour', 'Habitats, colonies and strategies' and 'Eggs, clutches and mortality'. There is a great deal of overlap between these sections and I felt a more systematic approach to the whole of breeding might have provided a more logical development without losing the essential comparative nature of the text. As elsewhere in the book, Bryan Nelson could not resist being side tracked; for example, interesting as it is, the discussion of the systematic affinities of hooded gulls is not relevant to breeding behaviour (p. 74). The author's interest in the breeding biology of seabirds is evident throughout these three sections, and in places he changes from his normal prosaic style to an almost lyrical description, as in his account of albatross display and of gannet and shearwater fledging. The final three sections briefly cover 'Movements and distribution', 'Seabird populations' and 'Seabird and man'.

The book is well finished, having an excellent selection of line drawings and black-and-white and colour photographs. The number and quality of the photographs is considerably greater than we have come to expect in a book costing 'only' £7.50. In the text there is a vast store of useful information not available in a single volume elsewhere. Despite the obvious value of such a collection of textual information, diagrams and photos,

the book is marred by a number of inaccurate and inconsistent statements, giving the impression that it has been compiled rather hastily. In particular I found the almost complete lack of textual reference to the diagrams, and inconsistent titling rather confusing. In several areas, especially the breeding sections, the maps and diagrams appear to tell a similar story to that of the text, but there is a frustrating lack of synchronization making it difficult to track down the appropriate diagram. As noted in the first chapter the marine ducks are excluded 'without compelling reasons', which I suspect may be related to the author's own specialization. In many coastal areas seaducks form a small but important component of the marine avifauna, so their exclusion is to be regretted.

We are told in the foreword that this book is 'an attempt to structure an approach to seabirds so that no major aspect of their lives is ignored', rather than a 'compendium of scientific research'. In this aim Bryan Nelson largely succeeds and *Seabirds* will be a useful summary of present understanding of seabird biology, especially breeding biology, but it must be treated with care as a source of specific facts.

D. W. McALLISTER

The Theft of the Countryside by Marion Shoard. Maurice Temple Smith, London, 1980; 272 pages; plain photos; 22 x 14 cm; £9 (hardback), £4.95 (softback).

This is a book to be taken in small doses, not because it is hard to read but because it makes one so frustrated and angry. It is a detailed review of our agricultural system, its effects on features such as woods, moors and wetlands and the failure of the present system of national parks and SSSIs. Perhaps the most worrying chapter deals with the various subsidies available to farmers. In 1980, the EEC Common Agricultural Policy cost UK consumers £1595 million after deduction of a £710 million rebate, while the EEC as a whole budgeted £6000 million for dealing with agricultural surpluses. It is not always easy to remember that it is this system which is at fault rather than farmers themselves.

Farmers are no longer the guardians of the countryside because they cannot afford to be. The author calls for planning controls over certain types of agricultural activity, a series of regional planning authorities and the establishment of six further lowland national parks. Obviously a system of voluntary co-operation would be preferable provided it worked. The acid test will be the government's voluntary code for the management of SSSIs which is due to be prepared under the new Wildlife and Countryside Act.

This book is about England and Wales, but don't let that put you off; the same is happening up here in different ways. It should be required reading for anyone who wants to go on being able to see birds, but even more importantly it should be read by all politicians and agricultural administrators, even if they don't agree with it.

Farming and Wildlife (New Naturalist 67) by Kenneth Mellanby. Collins, London, 1981; 178 pages; 67 plain photos; 9 drawings, diagrams & maps; 22 x 15 cm; £9.50.

This and the preceding book deal substantially with the same subject, but there the similarity ends. After a general introduction there are chapters on various types of farming and on typical wildlife habitats such as hedges and ponds. There is also a detailed chapter on pesticides and others on diseases and field sports. The final chapter is one of general discussion, but while the author is clear that modern farming is generally harmful to wildlife, no clear answers to this problem are

forthcoming. Mention is made of Silsoe-type farm exercises, but although these are excellent for promoting local co-operation, they cannot deal with the much wider economic issues. Similarly, more reserves are called for, but these also can only have very local impact. There are one or two puzzling statements, such as that the Red Grouse is the only endemic British bird, but the book's biggest disappointment is the failure to get to grips with the overall problems. The author does at least call for changes in the agricultural grant procedure, but does not say what changes. Unlike the preceding book, I cannot see this one making much impact on anyone, be they farmer, conservationist or both.

DAVID MINNS

Keith Brockie's Wildlife Sketchbook Dent, London, 1981; 151 pages; 130 pages of colour illustrations & drawings; colour photographs; map; 26 x 20 cm; £9.50.

This is not the normal wildlife artist's book of finished paintings but a sketchbook and herein lies its attraction. Apart from one or two such as the Eider on its nest the pictures have been drawn in difficult and sometimes hazardous situations. They nevertheless show remarkable attention to detail and the many notes, obviously made by the artist at the time of sketching, add considerable interest. The life size, and in some cases larger, sketches of talons, heads, etc are particularly fine in detail, and I like the artist's decision to include the scale in most of them. Keith Brockie says in his introduction that while some artists prefer to draw almost exclusively from museum specimens this is not his style. His dead Stoat nevertheless shows he can do this superbly well, but the lifelike quality of most of his other drawings is really quite remarkable. The double page colour drawing of a rutting stag is particularly good in this respect. In Keith Brockie we clearly have a new artist of keen perception and considerable talent whose work is destined to enhance the bookshelves and walls of nature lovers for a long time to come.

HARRY GREIG

The books reviewed above are available from the SOC Bird Bookshop. Current literature Articles and reports on the status and distribution of birds in Scotland are listed here. Strictly biological studies such as ecology or behaviour are excluded and so are references from the widely read journals **British Birds**, **Bird Study**, **Ringing and Migration** and **Ibis**. Most items listed and many others are available for reference in the club library and we are grateful to the contributors. The library welcomes copies of work on any ornithological subject.

A Report on the Breeding Success of the Peregrine in the Loch Lomond/Trossachs Area of Scotland in 1980. J. Mitchell 1981. Nature Conservancy Council, South West Region.

Shetland Bird Report 1980. B. Marshall *et al.* (comp.) 1981. Shetland Bird Club. £1.70 + order charge from SOC Bird Bookshop.

The spring migration of Dunlins through Britain in 1979. P. N. Ferns 1981. *Wader Study Group Bulletin* 32: 14-19.

Wader populations of the soft shores of Lewis and Harris, Outer Hebrides in 1979. N. E. Buxton 1981. *Wader Study Group Bulletin* 32: 29-33.

Recent recoveries of waders ringed in Britain and Ireland. N. & J. Clark 1981. *Wader Study Group Bulletin* 32: 36-40.

Ornithological Research on St Kilda 28 July-19 August 1981: Preliminary report. R. W. Furness 1981. Zoology Dept, Glasgow University, G12 8QQ.

Isle of May Nature Reserve: Third Management Plan 1981-1985. Nature Conservancy Council 1981.

- Black-headed Gull Breeding Census 1981 - The Pentland Hills and the Lothians.* A. W. & L. M. Brown 1981.
- Monitoring seabirds in Shetland. M. G. Richardson, G. M. Dunnet & P. K. Kinnear 1981. *Proceedings of the Royal Society of Edinburgh* 80B: 157-179.
- The birds of Barry Buddon. S. B. Ellwood 1981. *The Adjutant* II: 17-23.

Notices

Dead birds wanted Dr D. C. Seel, Institute of Terrestrial Ecology, Penrhos Road, Bangor, Gwynedd, LL57 2LQ (tel. 0248 4001) is investigating (1) toxic chemicals in owls (all species), raptors (all species), certain water birds (Great Crested Grebe, Kingfisher, Grey Heron) and the Cuckoo, and (2) the food of the Cuckoo, and would be pleased to receive any bodies found dead. Each body must be accompanied by the date and place of finding, and, in the case of Cuckoo nestlings, the name of the host species. Postage will be refunded on all bodies sent through the post (bodies should be tightly wrapped in plastic bags). (Please note: if you already send bodies to ITE at Monks Wood or MAFF at Tolworth please continue to do so. Specimens are exchanged between the organizations. Damaged road casualties are worth sending.)

BRISC Twelve Species Survey 1982 Last year BRISC (Biological Recording In Scotland Committee) circulated recording cards and information sheets about a wide-ranging survey within areas of Scotland served by local biological records centres. The aims of the Twelve Species Survey, to be repeated this year, are to draw attention to a selection of animal and plant species with a wide but limited distribution. Most are indicators of particular habitat requirements and the two bird species, Magpie and Green Woodpecker, are easily seen or heard. Further 1981 records will be welcomed from SOC members and local recorders if received promptly and will be mapped for publication in the BRISC newsletter due out by early summer. Further details from W. R. Brackenridge, 7 Ochilview, Ashfield, Dunblane, Perthshire, FK15 0JW, who will be pleased to put interested SOC members in touch with their local records centre. (Please send a large SAE.)

(Notices must reach the editor at least four months before publication.)

The Scottish Ornithologists' Club

SUBSCRIPTIONS

At the 45th annual general meeting of the club, held in the Marine Hotel, North Berwick, on Saturday 31 October 1981, increases in the subscription rates were approved; these had been recommended by council and notified in the AGM agenda posted to all members on 28 August 1981. The new rates, which apply to members who join after 30 June 1982, and are due from existing members on 1 October 1982, are as follows:

Ordinary membership	£7.50
Family membership	£11.00
Junior membership	£3.00

Reduced rates for pensioners: ordinary £4.50 or family £6.50
Life membership: ordinary £150 or family £225

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 order All who pay by banker's order will find a letter enclosed with this journal. You are asked to complete the form and send it to the club secretary by return; it will be recorded on your membership form in this office and we will then forward it to your bank. Your existing order will automatically be cancelled and the new one will not become payable until 1 October 1982. As it always takes some time to process banker's orders (there are about 1400) both here and at the various banks, do please renew it quickly.

Deed of covenant Members with an existing deed of covenant are asked to sign a new one at the new subscription rate. By mutual consent between a member and the club, an existing covenant can always be replaced by one for a higher sum. You will notice that the form is worded to make it easier for you to complete and also save the club considerable administrative costs in the future. If you do not have an existing covenant do please consider signing one now; the extra revenue to the club is a very important part of the total annual income.

Important request The letter to all those who have a banker's order and covenant is being sent out several months before the date due for payment because of the considerable administrative work involved with a subscription increase. **Do please help our membership secretary by completing and returning the forms now;** remember that you will not be charged the new rate until 1 October, but a very heavy administrative burden is placed upon us if you leave the renewal until later in the year. Completed forms should be sent in the SAE provided to the Secretary, SOC, 21 Regent Terrace, Edinburgh EH7 5BT. Thank you in advance for your help.

SUMMER EXCURSIONS

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

1981 RAFFLE

The draw took place after the annual dinner at the conference on 31 October 1981. £751 of tickets were sold, an increase of £51 over 1980, and after deducting the cost of one prize, printing and postage, a net profit of £677 was put towards club funds. This increase of £82 over last year was most gratifying even allowing for the fact that a £50 prize was not given. We are extremely grateful to club members, two branches and three firms for donating all but one of the 22 prizes, and our thanks go in particular to all who sold tickets—your efforts were amply rewarded. A list of winners can be obtained by sending an SAE to the club secretary.

STIRLING BRANCH

The branch plan to hold two weekend excursions and a survey in the spring:

6 and 7 March Argyll weekend based at a cottage near Ford.

8 and 9 May A visit to the Isle of Eigg if the number is sufficient.

29 and 30 May A survey of the R. Devon repeating the one carried out in 1977.

Full details can be obtained from the branch secretary, A. B. Mitchell, The Barony, Airth, Stirlingshire FK2 8LS (tel. 032 483 331). Please send SAE if writing. (NB—phone number incorrect in last issue.)

SCOTTISH BIRD REPORTS

1979 and 1980 SBRs are still available from the Club Secretary. Please send cash with orders : £1 each (members) or £1.50 (non-members), post free. Earlier Reports available on request.

BORDERS BRANCH AGM

Will members please note that the date of this meeting is Monday 29 March 1982.

SOC ANNUAL CONFERENCE - 1982

The next conference and AGM will be held in the Marine Hotel, North Berwick, East Lothian, from 5-7 November 1982. Details will be published in *Scottish Birds*; bookings can only be accepted on the official booking form which will be sent to all members with the autumn journal.

SCOTTISH BIRDS - VOLUME 11 - INDEX

The index to volume 11 is now available. The cost is 60p or 75p by post. Please send your order and remittance to the Secretary, SOC, 21 Regent Terrace, Edinburgh EH7 5BT.

AYRSHIRE, ARRAN AND BUTE LOCAL RECORDER

Please note that Mr R. H. Hogg has moved. His new address is : Kirklea, 11 Kirkmichael Road, Crosshill, Maybole, Ayrshire.

Conference News

SOC conference, North Berwick 30 October - 1 November 1981 Each of the Saturday morning lectures looked at non-resident Scottish birds in their foreign quarters, which helped broaden our often too insular outlook. Dr Hilary Fry opened the proceedings with, for me, the outstanding lecture of the conference—an excellently illustrated, concise and lucid insight into the winter activities of a number of Scottish breeding birds during their stay in West Africa, describing among other things habitat, competition and predators. Bobby Tulloch continued the theme with an account of the birds seen on visits to Iceland and Scandinavia. Mark Beaman rounded off the session with the birds of the eastern Palaearctic, many of which are rare vagrants to Scotland. This talk proved particularly interesting for the twitchers present.

The Friday evening slide show maintained the standard of recent years and I personally found the contributions from Don Smith, Betty Rowling and Bobby Tulloch to be highlights but all the other contributors added to a top quality programme.

Those who attended the research workshop on censusing on Saturday afternoon had a stimulating session with talks by Pete Kinnear on sea-birds, Stan da Prato on 'wee birds' and Hector Galbraith on breeding waders.

On Sunday morning there was a series of short talks on ornithological research in Scotland with Martin Cook speaking about Crested Tit ecology, including distribution and habitat selection, Paul Green theorizing on the reasons for Rooks nesting in colonies, and Hector Galbraith outlining the importance of the forthcoming Scottish wader breeding survey in view of our present lack of knowledge. The talks were followed by 'A Scottish miscellany' of films shown by Chris Mylne.

The conference was as usual an outstanding success, much credit being due to the administrators. The formal lectures were only one aspect of the conference—for many the highlight was the annual dinner followed by the dance. The conference is for most of us a meeting place where each year we come together with old friends and make new ones. As Dr Ian Pennie put it in his after dinner speech, 'swopping lies in the bar' is perhaps its most important function.

RON FORRESTER

Scottish ringers' conference, Carrbridge, November 1981 Highland Ringing Group organized this two day event at the Landmark Centre, which provides excellent though limited conference facilities and, may I say, some of the best meals I have had at any ornithological conference. The lectures were again of the very high standard we have come to expect from these conferences and the various topics reflected the many different amateur and professional studies currently being worked on in Scotland.

Nick Picozzi's informative and well illustrated resumé of his work on the Hen Harrier in Orkney was followed by Chris Spray with a no less entertaining though perhaps less glamorous talk on Hebridean Mute Swans. Seabirds, in particular the Guillemot, were the main topic for Peter Hope Jones and Bob Swann who discussed the problems of following seabirds at sea and the importance of identifying where dead or oiled seabirds had originated. Bob Spencer of the BTO gave an interesting lecture correlating ringing totals at constant-effort sites with the Common Bird Census. Mike Pienkowski gave a humorous update of wader studies in Europe. Ron Summers expanded on this with a resumé of his work so far on Redshank. Tony Mainwood and Hugh Clark gave practical demonstrations of, respectively, dazzle netting and tape luring, and Hector Galbraith discussed the census of breeding waders. Derek Langslow explained the role the NCC wishes the amateur ringer to take and explained how this was encouraged by subsidies and rebates on rings for certain species.

All in all the conference reflected the healthy state of Scottish ornithology and was a great success despite the absence of Solway and Edinburgh Ringing Groups. This year's venue is to be Aberdeen and will again be a two day affair and hopefully as successful.

ROBERT RAE

Current Notes

These include unchecked reports and are not intended as a permanent record, nor will they be indexed. Please send reports to the editor via local recorders by the end of March, June, September and December.

The period October to December is covered here. October was rather disappointing for rarities though Fair Isle as usual produced the cream with an **Isabelline Shrike**—the 1st British record of the race *speculigerus*, 2 **Olive-backed Pipits**, 3 **Little Buntings** and a **Rustic Bunting**. Shetland continued its run with 3 more **Arctic Warblers**, 2 **Little Buntings** and a **Purple Heron**. A **Little Egret** appeared in Orkney. Ducks put on a good showing with **Black Duck**, **American Wigeon** and **Green-winged Teal carolinensis** in Inverness, another **Green-winged Teal** in Invergordon, a **Ferruginous Duck** shot on L. Leven, 4 **Surf Scoters** at Burghead, and 3 **Ring-necked Ducks** and 6 **King Eiders** scattered around. **Bean Geese** appeared in small parties, often at the wrong end of a 12-bore. A **Gyr-falcon** at Newtonmore was the best raptor. The **Stone-curlew** found

staggering along Scalloway high street in December got an even bigger shock than its finder and unfortunately died the following day. A **Ring-billed Gull** at Barassie was the best of only a handful of the scarcer gulls. Shetland produced a **Black-throated Thrush**. **Waxwings** made a welcome come-back after the dearth of recent years. The big freeze has no doubt taken its toll, and was probably responsible for no fewer than 3 **Bitterns** in the Clyde area. One thin bird was not hard bittern enough and had to be taken into captivity by a not so thin Glaswegian. Even more unusual was an **American Bittern** to boot.

Sooty Shearwater last ones Orkney: Scapa Flow 8 Nov, Pentland Firth 10 Nov. **Bittern** Gales (Ayr) Dec, Endrick Mouth (Dunb/Stir) 16 Dec, Renfrewshire 22 Dec (caught). **American Bittern** Kilmacolm (Renf) 5 Nov-25 Dec. **Little Egret** Westray (Ork) 29 Oct-15 Nov. **Purple Heron** Weisdale (Shet) 4 Oct (died). **Bewick's Swan** 5 Fenton Barns (E. Loth) 23-24 Nov, 2 L. of Strathbeg (Aber) 26 Nov, Irvine (Ayr) 29 Nov. **Whooper Swan** 400 Meikle (Aber) 2 Dec. **Bean Goose** 5 Fair Isle Oct, 2 shot S. Uist (O. Heb) Oct, 15 Ramnageo (Shet) Oct, one Skellister (Shet) 21 Oct, 3 Fetlar (Shet) 23 Oct, 6 Shapinsay (Ork) 16-23 Oct, 5 shot Orkney Nov, 22 Black Isle (Ross) Nov, 5 Slains (Aber) Nov, 38 Castle Douglas (Kirk) Dec. **Pink-footed Goose** 26,000 Lothians Nov. **Greylag Goose** 38,000 E. Ross Nov. **Snow Goose** 2 L. of Strathbeg 17 Oct, one Cleish (Kinr) 27 Oct. **White-fronted x Barnacle Goose** with Greenland White-fronts L. Ken (Kirk) Oct. **Canada Goose** Glims Holm (Ork) 10 Oct. **Barnacle Goose** 140 Barns Ness (E. Loth) 4 Oct. **Brent Goose** L. of Strathbeg 18 Oct, 9 Aberlady (E. Loth) 22 Dec. **American Wigeon** ♂ Inverness 11 Nov. **Teal** Green-winged *carolinensis* Invergordon (Ross) Dec, Inverness 28 Dec. **Black Duck** ♂ Inverness 11 Oct. **Ring-necked Duck** ♂ L. Insh (Inv) Nov, imm ♂ L. of Brow (Shet) 1 Nov, Soulseat L. (Wig) 7 Nov. **Ferruginous Duck** ♂ shot L. Leven (Kinr) Nov. **King Eider** ♂♂ Fair Isle 15-20 Oct, Sullom Voe (Shet) 25 Oct, L. Ryan (Wig) 7 Nov, Port Glasgow (Renf) 14 Nov, 2 L. Fleet (Suth) Dec. **Surf Scoter** 4 Burghead (Moray) Dec. **Smew** 2 L. Ken 8 Nov, ♂ Kelso (Rox) Dec, Inverness 24-28 Dec.

Honey Buzzard Leuchars (Fife) 4 Oct. **Marsh Harrier** ♂ New Byth (Aber) 5 Nov. **Rough-legged Buzzard** Pennan (Aber) Nov. **Osprey** Burnmouth (Ber) 29 Oct. **Gyr Falcon** Newtonmore (Inv) Oct. **Quail** Tingwall (Shet) 9 Oct, 2 Shapinsay 30 Oct. **Corncrake** caught Vidlin (Shet) 1 Nov. **Stone-curlew** Scalloway (Shet) 6 Dec. **Ruff** 36 Musselburgh (Midl) 6 Oct. **Great Snipe** Fair Isle 1-5th & 9 Oct. **Spotted Redshank** Aberlady 24 Oct. **Green Sandpiper** Kintore (Aber) 7 Nov. **Pomarine Skua** Peterhead (Aber) 19 Oct. **Long-tailed Skua** imm Bute Oct, imm Drums (Aber) 7 Nov (both dead). **Great Skua** Gullane (E. Loth) 12 Dec. **Mediterranean Gull** Balmedie (Aber) 3 Nov. **Sabine's Gull** N. Berwick (E. Loth) 3 Oct. **Ring-billed Gull** Barassie (Ayr) 3 Oct. **Lesser Black-headed Gull** L. Strathbeg 1 Dec, 2 Aberlady 21 Nov (one Scandinavian, nominate *fuscus*). **Iceland Gull** 5 Fraserburgh (Aber) Nov, 4 Girdleness (Aber/Kinc) Nov. **Glaucous Gull** 8 Fraserburgh Nov. **Sandwich Tern** Gullane 19 Dec. **Collared Dove** 66 Aberlady 10 Dec. **Turtle Dove** Skateraw (E. Loth) 4 Oct, Sumburgh (Shet) 10 Oct. **Kingfisher** 3 Inverness Dec. **Hoopoe** Fair Isle 1st & 3-4 Oct, Barns Ness 4-5 Oct, Sandwater (Shet) 5 Oct. **Wryneck** Barns Ness 4 Oct, Out Skerries (Shet) 8 Oct. **Great Spotted Woodpecker** Cunningsburgh (Shet) 4-5 Oct.

Short-toed Lark Fair Isle 12 Oct. **Woodlark** St Abbs (Ber) 1 Nov. **Shore Lark** 2 Fair Isle 8 Oct, one Sumburgh 1 Nov, 2 Westray 15 Nov, one Musselburgh Nov, 3 Tynninghame (E. Loth) 22 Nov. **Swallow** Girdleness 9 Nov. **House Martin** Seaton Park (Aber) 20 Nov. **Richard's Pipit** Sumburgh 4 Oct, Virkie (Shet) 5-6 Oct, Fair Isle 15th & 26-27 Oct, Spiggie (Shet) 15 Oct, Out Skerries 22-26 Oct. **Olive-backed Pipit** Fair Isle 4-5th & 11-12 Oct. **Yellow Wagtail** Out Skerries 1 Oct. **Waxwing** 3

Fair Isle 31 Oct, 6 Veensgarth (Shet) 2 Nov, Stromness (Ork) max 4 on 2 Nov, 2 Kirkwall (Ork) 3rd & 10 Nov, 3 N. Berwick 14-17 Nov, 4 Long Hermiston (Midl) 15 Nov, 4 Aviemore (Inv) 21 Nov, 11 Fenton Barns 29 Nov, 4 Dunbar (E. Loth) Nov, 30 Aberdeen Dec, 2 Mintlaw (Aber) Dec, one Newburgh (Aber) Dec, 11 Aberlady 2 Dec, 4 Stirling 9 Dec.

Nightingale Isle of May 22 Oct. **Bluethroat** Fair Isle 6-17 Oct. **Black Redstart** N. Berwick 4 Oct. **Redstart** Fair Isle 11 Nov. **Stonechat** Siberian *maura/stejnegeri* Fair Isle 10 Oct, Fetlar 19-20 Oct, Birsay (Ork) 21 Oct. **Black-throated Thrush** ♀ Rora Head (Shet) 7 Dec. **Grasshopper Warbler** Whalsay (Shet) & Barns Ness 4 Oct. **Barred Warbler** 2 St Abbs 3 Oct, one Barns Ness 4 Oct. **Lesser Whitethroat** Fetlar 24-25 Oct, St Ola (Ork) 5 Nov. **Garden Warbler** 30 St Abbs 3 Oct. **Blackcap** 100 St Abbs 3 Oct, one Newtonmore 2 Dec. **Arctic Warbler** Boddam (Shet) 6 Oct, Stromfirth (Shet) 13 Oct, Uyeasound (Shet) 22-25 Oct. **Yellow-browed Warbler** Holm (Ork) 1st & 4 Oct, St Abbs 4 Oct, Fair Isle 7th & 18 Oct, Isle of May 18 Oct, Shetland 24 Oct. **Wood Warbler** Veensgarth 25 Oct. **Fire-crest** Ythan (Aber) 4 Oct, Fair Isle 7 Nov. **Red-breasted Flycatcher** Fair Isle 1st & 4-6 Oct, 8 Nov, St Abbs 3-4 Oct, Cruden Bay (Aber) 6 Oct, Firth (Ork) 23rd & 25 Oct, Northwick (Shet) 31 Oct. **Pied Flycatcher** 2 Fetlar 19 Oct, one St Ola (Ork) 14 Nov.

Blue Tit Virkie 5 Oct. **Treecreeper** Firth 7 Dec. **Golden Oriole** Fair Isle 7 Nov. **Isabelline Shrike** Fair Isle 9-12 Oct, Kergord (Shet) 15 Oct. **Red-backed Shrike** Deerness (Ork) 1st & 9 Oct, Fair Isle 7 Oct, Fetlar 19 Oct, Out Skerries 26 Oct. **Great Grey Shrike** Coldingham (Ber) 4 Oct, Fair Isle 8th, 10th & 18 Oct, Out Skerries 10 Oct. **Arctic Redpoll** Toab (Shet) 4 Oct, Fair Isle 15-17 Oct. **Lapland Bunting** Out Skerries Oct, Fetlar Oct, Isle of May 22 Oct. **Ortolan Bunting** Shetland 14 Oct. **Rustic Bunting** Fair Isle 10-11 Oct, **Little Bunting** Whalsay 4 Oct, Out Skerries 6 Oct, Fair Isle max 3 on 9th & 11 Oct.

PETE ELLIS



WAXWING
Richard Richardson

WITHOUT COMMENT

[Except to say that, although not of direct interest to Scottish ornithology, we feel this piece deserves wider appreciation.]

This fictional account of the day-by-day life of an English gamekeeper is still of considerable interest to outdoor-minded readers, as it contains many passages on pheasant-raising, the apprehending of poachers, ways to control vermin, and other chores and duties of the professional gamekeeper. Unfortunately, one is obliged to wade through many pages of extraneous material in order to discover and savour these sidelights on the management of a Midland shooting estate, and in this reviewer's opinion the book cannot take the place of J. R. Miller's *Practical Gamekeeper*.

—Review of *Lady Chatterley's Lover* from the American magazine *Field and Stream* quoted in the *Sunday Telegraph* 6 December 1981.

THE SCOTTISH ORNITHOLOGISTS' CLUB

THE 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, the Borders, 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 1982 the Annual subscription is £7.50, or £3 in the case of Members under twenty one years of age or Students under 25 who satisfy the Council of their status as such at the times at which their subscriptions fall due. The Life subscription is £150. Family Membership is available to married couples and their nominated children under 18 at an Annual subscription of £11, or a Life subscription of £225. *Scottish Birds* is issued free to Members but Family Members will receive one copy between them. Subscriptions are payable on 1st October annually. Reduced rates for pensioners.

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

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, EH17 5BT (tel. 031-556 6042).

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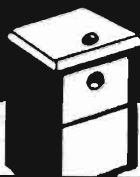
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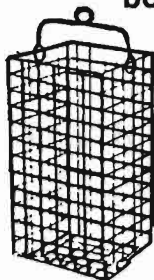
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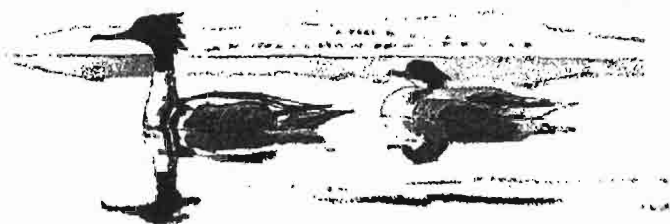
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Cairngorms - Lurcher's Gully

Many members will remember the five week Public Inquiry held last summer into proposals to double the skiing facilities on the edge of the Cairngorms high plateau. The SOC objected to these proposals, along with NCC, RSPB, SWT and many amenity and mountaineering groups. At the time of going to press the Secretary of State's decision on this was still awaited but whichever way this goes, birdwatchers can be satisfied that as strong a case as possible was made with internationally renowned witnesses stressing the importance of this area. The conservation case was presented by a leading advocate and any contributions towards the RSPB's share of the costs would be warmly welcomed.

Poison

1981 was one of the worst years on record. Four golden eagles were found poisoned and most tragic of all—one of the golden sea eagles released by the NCC on Rhum in 1980 was killed by a poisoned bait in Caithness. Recently an adult sea eagle was found long dead in Skye in circumstances which again suggest that it may have been poisoned. Anyone finding dead birds or baits which they suspect might be poisoned are asked to contact us immediately.

New films

Hopefully, "Scottish Birds" will reach you in time to go to the premieres of the new RSPB films. This is another superb trio of films featuring the short-eared owl, the art of nest-building and river management. The dates are March 5th in the Mitchell Theatre, Glasgow and March 13th, 15th and 16th in the George Square Theatre, Edinburgh.

One-day Conference

The Scottish One-day Conference will be on Saturday October 2nd 1982 at the MacRobert Pavilion, Royal Highland Showground, Ingliston—just outside Edinburgh.

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