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SCOTTISH BIRDS



THE JOURNAL OF THE
SCOTTISH ORNITHOLOGISTS' CLUB

Vol. 13 No. 3

Autumn 1984

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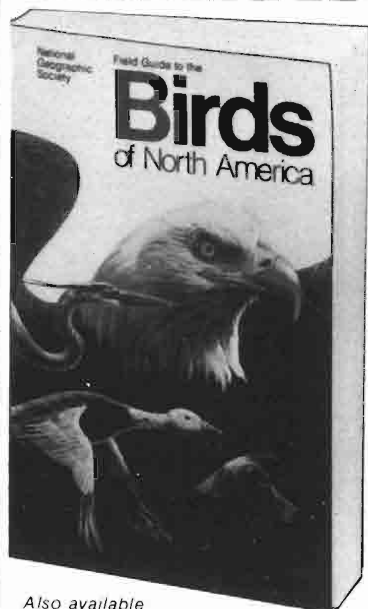
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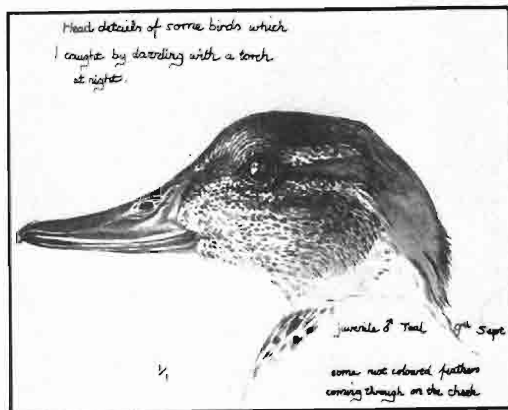
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Editor Valerie M. Thom
Business Editor Stan da Prato

12th October 1984



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illustrated by Keith Brockie

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SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB



Volume 13 No. 3

Autumn 1984

Edited by V. M. Thom, assisted by S. R. D. da Prato, R. W. Furness
and I. R. Taylor

Editorial

It has been encouraging to note recent signs of changing attitudes towards conservation among the farming community, and—even more important—a growing interest in practical opportunities for action to benefit wildlife. The formation of Farming, Forestry and Wildlife Advisory Groups followed increasingly close liaison between the Advisory Services of the Colleges of Agriculture and the Nature Conservancy Council. The National Farmers' Union of Scotland has established an Environmental Group, and a consortium including the Countryside Commission for Scotland and Scottish Agricultural Industries PLC recently launched a "Scottish Farming and Countryside Award", the purpose of which is to demonstrate that good farming and conservation are not incompatible. And landowners and farmers are funding a Game Conservancy research project designed to help farmers avoid the use of those pesticides most harmful to beneficial insects—several of which are important to Partridge chick survival.

It is perhaps opportune that these developments have coincided with a move (largely due to EEC dictates) towards "lower input—lower output" farming. Reductions in pesticide use and land "improvement" are more likely to result from a combination of conservation and financial concerns than from either one alone. With luck, similar influences may in due course help to ensure a more sympathetic approach to upland afforestation.

A Reminder Entries for the 1984 Photographic Competition must be in by 30 September—details in *SB* 12: 173.

Mrs Irene Waterston All who knew her will be saddened to hear that Irene, who had been ill for some weeks, died on 5 August 1984. A tribute will appear in the Winter number.

Isle of May Bird Observatory and Field Station report for 1983

*Prepared for the Observatory Committee by B. ZONFRILLO,
Hon. Secretary*

The Observatory's 49th year of operation officially opened on 30th March and closed on 19th November, but between 1st January and 4th December additional records were made out-with the official period. Three new species were added to the island's list: Honey Buzzard, Grey Phalarope and Rose-coloured Starling*. Rarities recorded included Thrush Nightingale*, Red-flanked Bluetail*, Woodlark, Pallas's Warbler* and Long-tailed Skua. NCC's summer and winter wardens Dr Sarah Wanless and David Pullan respectively, contributed to the Observatory's records as did Dr M. P. Harris. Keith Brockie gave invaluable help throughout much of the year. 8805 birds were ringed.

Migration summary

Observations during **January** showed that even in mid winter the island was far from barren. Species such as Teal, Sparrowhawk, Merlin, Kestrel and Snipe were present most days along with small numbers of Wren, Dunnock, Robin, Song Thrush, Blackbird and Redwing. 18 Snow Buntings were seen on 22nd. Seabirds included Black Guillemot, Little Auk, Common Gull and a Glaucous Gull on 28th. Two Short-eared Owls were present on 29th. **February** had many of the same species with additions such as Woodcock, another Glaucous Gull, one Puffin, two Iceland Gulls and six Siskins on 6th. A Peregrine on 14th didn't stay long. Of special interest was the build up of Little Auks, with a maximum of 76 on 6th. On 20th an oiling incident killed several birds; washed ashore were 2 Shags, 19 Guillemots, 9 Razorbills, 1 Puffin, 3 Little Auks, 1 Kittiwake, and 2 Herring Gulls. Dead but unoiled were 3 Guillemots, 8 Razorbills, 3 Little Auks and a Kittiwake, all of which were presumed victims of the severe weather around mid February. Cormorants at the traditional roost on the west cliffs totalled 26 and very large numbers of Guillemots were ashore on 25th. **March** saw Eider numbers grow to 240 on 3rd and 10 Lesser Black-backed Gulls arrived on 4th. Up to 300 feral Pigeons and 4 Pied Wagtails were present during the month. Two Snow Buntings arrived on 20th and a Sparrowhawk, 3 Linnets and a

*Records subject to approval of Rarities Committee

Goldcrest were around on 31st after easterly winds. **April** began rather spectacularly with the arrival on 1st of a superb Firecrest which stayed for a week. Two Wheatears and a Woodcock were also seen. A Black Redstart and a Brambling arrived on 6th as migration got under way in earnest. The first Chiffchaff arrived on 12th and the first Willow Warbler on 17th along with a Ring Ouzel and a White Wagtail. On 21st a fine male Brambling was the first bird caught in the newly built Heligoland Trap. Also on that date 5 Ring Ouzels, a Grasshopper Warbler and an early Wryneck made their appearance. On 22nd the Wryneck became the second species caught in the new trap. Easterly winds on 23rd brought in more migrants including 15 Chiffchaffs, a Blackcap, a Lesser Whitethroat and a Corncrake, now a scarce species on passage. Further migrants arrived in foggy conditions with a Merlin, 5 Redstarts, 5 Black Redstarts and 2 Swallows on 24th, Whinchat and Whitethroat on 25th, and Common Sandpiper, Yellow Wagtail and Moorhen on 27th. A Black Redstart on 30th ended the April influx.

Fog and east winds at the start of **May** brought 7 Barnacle Geese and 2 Whimbrels in addition to small numbers of passerines. On 5th a Great Grey Shrike was trapped and the island's first Whimbrel was ringed. By 6th a Swift, Yellow Wagtail, 15 Tree Pipits and 2 Fieldfares had arrived along with a rather early juvenile Blackbird. Ten Common Scoter, 2 Black Redstarts, a Turtle Dove and a Cuckoo were seen on 10th. Easterly winds continued during mid May and on 15th a Woodlark was sighted, arriving on the same day as a Black Redstart and a Collared Dove. Next day a Nightingale and then a Thrush Nightingale* were trapped and two Black Redstarts were seen. Thereafter interesting species continued to turn up each day—a Wood Warbler and Tufted Duck on 17th, a Twite on 18th and another Firecrest and a Quail on 19th. A fine Long-tailed Skua flew close by the boat on 21st. On 24th a Turtle Dove, two Bluethroats and a Red-flanked Bluetail* arrived, the last a juvenile male or a female which managed to avoid the mist nets set to catch it. Another Bluethroat was ringed on 26th and on 31st a Red-breasted Flycatcher was trapped. Excitement continued into **June** with another Quail, a Red-backed Shrike, a Blue-headed Wagtail and a Turtle Dove on 1st. On 2nd a flock of seven Canada Geese arrived and a superb adult Rose-coloured Starling* appeared. Joining the resident Starlings it didn't look too out of place amongst the Sea Pinks in flower. On 4th a Marsh Warbler was trapped and on 9th a Honey Buzzard drifted over the island, the second new species for the island's list in eight days. After a Turtle Dove on 14th

another Marsh Warbler was trapped on 21st and 4 Mute Swans were seen.

July was quiet for migration but interesting species recorded were a Treecreeper on 5th, 2 Roseate Terns on 19th and an Arctic Skua on 30th. Autumn migration was slow. **August** began with a Greenshank on 1st, then a Peregrine on 14th and little else until a Wigeon, Greenshank, Wood Warbler and Goldcrest on 29th. The first Pied Flycatcher of autumn was caught on 31st. Strong westerly winds in **September** reduced migration considerably. A Little Stint and a Mistle Thrush were seen on 4th and a Grey Wagtail and 10 Goldcrests on 7th. Waders were present in good numbers and species ringed included Curlew, Oystercatcher, Turnstone, Purple Sandpiper, Redshank and another Whimbrel. Sea passage proved interesting on 11th with 17 Sooty Shearwaters, a Manx Shearwater, 4 Great Skuas, 13 Arctic Skuas and one of the very few daytime records of Storm Petrel. On 21st a Snow Bunting, 2 Wrens and 200 Meadow Pipits arrived. A Pomarine Skua was sighted on 23rd and a Quail on 24th, while on 25th 35 Velvet Scoters flew past the island.

A Goldeneye arrived on 26th, when 2 Red-throated Divers were offshore, and a Little Grebe, 4 Common Scoter, 35 Pink-footed Geese and 7 Barnacles were seen on 27th. North easterly winds on 28th accompanied by driving rain brought down good numbers of migrants including 2 Jack Snipe, a Shore Lark, 25 Wheatears, 3 Bramblings, 3 Pied Flycatchers, 10 Reed Buntings, a Yellowhammer and 4 Grey Herons. Similar conditions on 29th yielded the best fall of autumn with a Peregrine, a Water Rail, 6 Tree Pipits, a Black Redstart, a Whinchat, a Barred Warbler, a Reed Warbler, 6 Lesser Whitethroats, a Pied Flycatcher, 4 Twites and 2 Scarlet Rosefinches. In greater numbers were 60 Skylarks, 250 Meadow Pipits, 600 Robins, 100 Redstarts, 24 Ring Ouzels, 30 Blackbirds, 55 Fieldfares, 100 Garden Warblers, 250 Blackcaps, 10 Chiffchaffs, 40 Willow Warblers, 15 Spotted Flycatchers, 12 Siskins, 50 Bramblings and no less than 3000 Goldcrests. At sea, passage included 1 Red-throated Diver, 1 Sooty Shearwater, 11 Manx Shearwaters and 4 Arctic Skuas. Improved weather on 30th slowed migration but new arrivals included a Red-breasted Flycatcher, a Snow Bunting, a Little Bunting, a Shore Lark and a Wryneck. Southerly movement at sea included a Great Northern Diver, 250 Pink-footed Geese and 170 Barnacle Geese, one of which was albinistic.

October 1st saw the wind veer westerly once more and only a Turtle Dove, and 2 Short-eared Owls were new. As expected, migration was slight but on 15th a small influx of birds

included 4 Coal Tits, only the fifth record of this species on the May. At least one Coal Tit remained until mid November. On 16th that other scarcity the Blue Tit was trapped. A Long-tailed Duck and a Mistle Thrush were seen on 18th and on 19th 6 Whooper Swans flew over. Two Little Gulls were recorded on 23rd but from then until the end of the month migration was unspectacular. On 30th another new species was added to the island's list—a Grey Phalarope, which arrived after force 10 westerlies and performed close to shore on the South Ness.

November began quietly with only small numbers of birds around. On 3rd thrush numbers increased and 400 Redwings were counted; also present was a Black Redstart. Unusual visitors on 5th were 7 Long-tailed Tits. By 11th thrush numbers were building—1000 Blackbirds, 200 Fieldfares, 30 Song Thrushes and 600 Redwings, while 25 Woodcocks were flushed. Migration continued on 12th, new additions included 2 Black-caps, 3 Chiffchaffs, 22 Siskins and a Peregrine. On 13th 6 Long-eared Owls and 3 Short-eared Owls were present and a Water Rail strolled among the new born Grey Seal pups. A Pallas's Warbler arrived on 14th and was later caught emerging from a Rabbit burrow! This brought the records of Pallas's Warbler on the island once more to one ahead of Coal Tit. A Glaucous Gull on 18th and 4 Little Auks and a Black Redstart on 19th were new arrivals and on 24th 2 Little Grebes were seen. On 28th Little Auks had increased to 18. The first few days of **December** saw the Black Redstart still present along with other species such as Wren, Dunnock, Robin, Mistle Thrush, Starling and Brambling. A short visit to the May on 29th revealed small numbers of thrushes as well as Little Auk, Mallard, Teal, Goldeneye, Snipe and Curlew. Large numbers of Guillemots were again thronging the west cliffs.

Breeding birds

Most seabirds again showed increases in breeding numbers. Some 45 of the island's ringed Puffins were recovered dead in a "wreck" in mid February but breeding numbers were largely unaffected, with new areas colonised. Summer counts of Razorbills and Guillemots showed that these too were increasing and not materially affected by the "wreck". Fulmars showed an upsurge in breeding numbers with 94 eggs laid and 90 chicks counted in August. Shags built 1855 nests during the season and breeding success was good. Kittiwake numbers continue to increase at both coastal and 'inland' cliffs, 100 nests now decorate the cliffs to the north and south of the loch. Around 30 pairs of Common Terns nested with reasonable success while Herring and Lesser Black-backed Gulls increased to around 3,000 and 690 pairs respectively. Small numbers of

both species were shot by NCC in the vicinity of the terns' nesting area. Four pairs of Shelduck occupied burrows but no young were seen. Eiders showed a quite remarkable increase with 545 nests found and 1002 birds counted on 16th May. A vast carpet of mussel spat on the rocks in 1982 was probably the main reason for the resulting increase in numbers, as this is the main food of Eiders. Four pairs of Lapwings again laid eggs and again were unsuccessful. Oystercatchers fared better with 30 pairs breeding. Swallows, Meadow Pipits, Rock Pipits and feral Pigeons all bred. Stock Doves may have bred but the Great Black-backed Gulls did not return to nest.

Ringling

Good numbers of birds were again ringed with record totals for Fulmar 95, Lesser Black-backed Gull 1019, Guillemot 446, Razorbill 51 and Kittiwake 932. Keith Brockie, working mainly at night, boosted wader ringling totals to record levels with 125 Purple Sandpipers, 92 Turnstones, 21 Redshanks, 8 Curlews, 2 Whimbrels, 2 Woodcocks, and one each of Golden Plover, Dunlin and Snipe. Dazzling birds at night has long been a feature of ringling on the May but Keith's new equipment proved very successful. High numbers of Shags 1109, Herring Gulls 2150, and Puffins 1560 were also ringed. Ringling retraps from the May revealed a Purple Sandpiper ringed in September 1969 present in August 1983—a longevity record for this species. A Puffin ringed on the island 23 years ago was caught by Mike Harris in his study area. Strong winds meant only 4 Storm Petrels were lured. The new Heligoland trap helped increase the Observatory's catching abilities but passerine numbers were down to normal after last year's huge numbers. Rarities ringed were Thrush, Nightingale and Pallas's Warbler and unusual species caught included 2 Marsh Warblers, 2 Firecrests, a Red-breasted Flycatcher, a Reed Warbler and a Bluethroat. Four Coal Tits and a Blue Tit were added to the 'scarcities' ringed on the May.

Ringling recoveries

Over 300 ringling recoveries were received during the year with, understandably, Shags and Herring Gulls—our most ringed species, to the fore. While data on such species can be quickly accumulated others take several years or even decades to show patterns of migration or dispersal. Some species, with no recovery or retrap information whatsoever to signify movements, remain, after 50 years' effort, a total mystery.

Age codes are bracketed after species and are as detailed in the Scottish Bird Report for 1981 (page 53).

Ringed Isle of May	Recovered/controlled		
Fulmar (1)	04.08.82	08.01.83	Den Helder, Holland (injured)
Storm Petrel (4)	28.08.82	10.07.83	Fair Isle B.O. (control)
Storm Petrel (4)	02.08.81	25.06.83	Ailsa Craig, Strathclyde (control)
Lesser B-b Gull (3)	21.08.82	31.10.82	Aviero, Portugal (dead)
Lesser B-b Gull (1)	07.07.82	03.06.83	Kenitra, Morocco (dead)
Kittiwake (1)	05.07.80	23.01.83	Schluttseil, Schleswig- Holstein, F.R. Germany (dead, oiled)
Guillemot (1)	24.06.83	17.09.83	Bovbjerg, Denmark (oiled)
Razorbill (4)	28.06.82	06.02.83	Varaville, Calvados, France (dead)
Razorbill (1)	15.06.81	05.03.83	Cascais, Estremadura, Portugal (dead in net)
Puffin (8)	05.07.79	09.02.83	Hartlepool, Cleveland, England ("wrecked")

The Storm Petrels were attracted to tape lures. Lesser Black-backed Gulls make good progress towards their north African wintering grounds shortly after leaving the May, juveniles often remain there in summer. The Kittiwake and Guillemot recoveries show that oil pollution is still a problem, other oiled Guillemots were recovered in Norway and Holland. There is one previous recovery of a Razorbill in France but the bird in Portugal is our most southerly record. The Puffin is representative of some 45 birds "wrecked" along the English coast in February.

Dunnoek (4)	07.04.82	18.04.82	Akeroya, Ostfold, Norway (control)
Wheatear (3)	06.09.82	09.04.83	Bechar, Algeria (dead)
Blackcap (2 ♀)	09.10.82	25.01.83	Benicarlo, Castellon, Spain (killed)
Blackcap (2 ♀)	11.10.82	15.12.82	Carry-le-Rouet, Bouches- du-Rhone, France (dying)

The Dunnoek is our second record from Norway, and the Wheatear our first anywhere. The Blackcaps were part of the 1982 "fall".

Chiffchaff (4)	06.04.82	10.12.82	Felanitx, Mallorca, Balearic Is., Spain (dead)
Willow Warbler (4)	08.05.81	23.05.83	Stuartfield, Grampian (dead)
Willow Warbler (3)	12.08.82	02.05.83	Castle Sween, Knapdale, Argyll (control)
Willow Warbler (4)	28.09.83	14.10.83	Dounby, Orkney (killed by cat)
Siskin (3 ♂)	11.10.82	15.04.83	Sutton Coldfield, W. Midlands (control)

The Chiffchaff is our first wintering in Spain; a previous record was of one wintering in Sicily, Italy. Willow Warblers returning north and west in spring are perhaps to be expected but the autumn bird in Orkney had moved 324 km due north, with little in the line of wind assistance in the period between ringing and recovery. The Siskin is our third recovery, one of the previous birds having reached Belgium.

Ringed elsewhere		Recovered/controlled	Isle of May
Purple Sandpiper (3♂)			
Calf of Man BO, Isle of Man	07.11.77	05.05.83	(controlled)
Great Skua (1) Foula			
Shetland	01.07.82	12.10.83	(exhausted, died)
Whitethroat (3), Cousland,			
Lothian	27.06.81	18.05.83	(controlled)
Reed Bunting (3) Spurn Pt,			
Humberside	21.10.82	27.04.83	(controlled)

Few Purple Sandpipers are ringed at The Calf, and this bird's presence amongst those on the May poses some questions as to its origins. The Great Skua was a victim of westerly gales. The Whitethroat was perhaps returning to its natal area, similarly the Reed Bunting was perhaps heading back to Norway where our only previous record originated

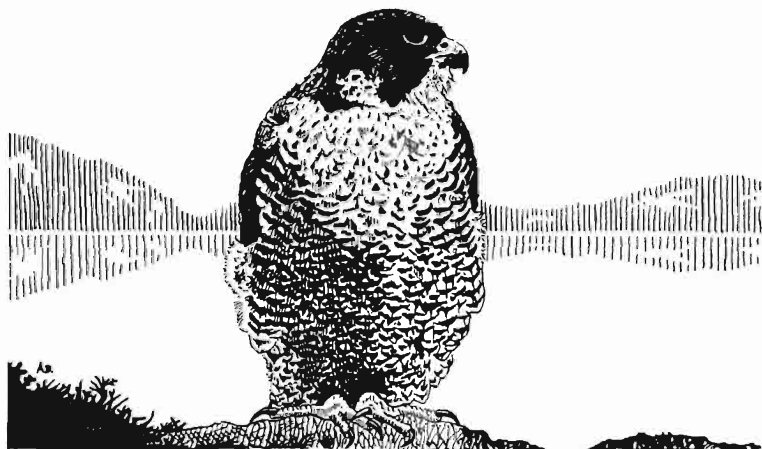
Observatory notes

1983 was an eventful year in many ways for the Observatory. The replacement Heligoland trap was erected in April and the Arnott trap rewired in September, both operations made possible largely through the generosity of the SOC. Keith Brockie, Robert Morton, Ian English, James Ferrie, Mike Harris and Sarah Wanless provided the much appreciated labour. The Low Light was generally redecorated and a new multifuel fireplace installed in the living room. Much of the unsightly driftwood lying around the island has been consumed but each turn of the tide brings new supplies. Keith Brockie spent much of the year preparing his new book on the island's wildlife (due September 1984), and following his activities was a film crew producing a programme for the BBC wildlife series *The World About Us* (screening due October 1984). In November another crew made a film on the island's seal colony for the BBC's Open University programmes. The Grey Seal *Hali-choerus grypus* numbers declined from last year's 650 to around 275 pups. Graham Trigg returned to the island to follow up some work on the island's House Mouse *Mus musculus* population, started several years ago. Graham reckoned the mouse population could number between 3000 and 6000 individuals, depending on time of year. An eagle eye was kept on the island's Rabbit *Oryctolagus cuniculus* numbers. By November a definite decline was noted with improved vegetation cover. Other mammals seen were two Common Seals *Phoca vitulina* on 10 May and a Lesser Rorqual (or Minke Whale) *Balaenoptera acutorostrata*, just off Pilgrims Haven on 19 June.

Our thanks are due to Jimmy Smith for transporting visitors and equipment alike without mishap, to the visitors themselves for their observations and ringing efforts over the years, and to the 'keepers and Commissioners of the Northern Lighthouse Board who have made possible, for all, the privilege of staying

on and enjoying such a fascinating and beautiful island. We hope the next 50 years will be as exciting.

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PEREGRINE *A. Dowell*

Winter sightings of Peregrines at Caerlaverock

R. MEARNS

The Wildfowl Trust (WT) Refuge at Eastpark Farm, Caerlaverock, was established in 1970 with the aim of increasing the sanctuary area available to Barnacle Geese and other wildfowl, and managing the farmland for their benefit. In recent years Caerlaverock has become a good area in which to see some birds of prey; more Peregrines use the area now than at any time since before the general decline of raptors in the 1960s (Newton 1979). This short note examines seasonal and annual variation in Peregrine sightings by staff at the WT Refuge in the nine winters 1974/75 to 1982/83.

Methods All sightings were of birds seen from the WT Refuge above the open merse (coastal saltmarsh) or adjacent farm-

land. Staff were present throughout the year but time in the field was longer and more consistent when the Refuge was open to visitors (every day from September to April inclusive, except 24 and 25 December).

Some of the birds were seen well enough to age as juveniles (brown streaked breasts) or adults (grey, pale breasts, dark heads) and some were sexed on the basis of size (female Peregrines are about a third larger than males). Data on the numbers of Peregrines reared in south Scotland and ringing recoveries are from a wider study of the species started in 1974 (Mearns 1982, Mearns & Newton 1984 and in prep).

Results Peregrines were rarely seen between mid-April and late August. Combining the records from all 9 winters, sightings increased rapidly in late September, remained fairly constant, increased again in February and then fell during March (fig. 1). This seasonal pattern varied when each year was examined separately, but sample sizes were small. On a three yearly basis, there was no obvious seasonal difference between the early, middle and late part of the period, and the seasonal pattern for each three year period was similar to the pattern for all the winters combined. In 8% of all sightings age was recorded; almost all birds were juveniles (23:3 adults). For those sexed (17% of all sightings) the ratio of male to female was about even (25:29).

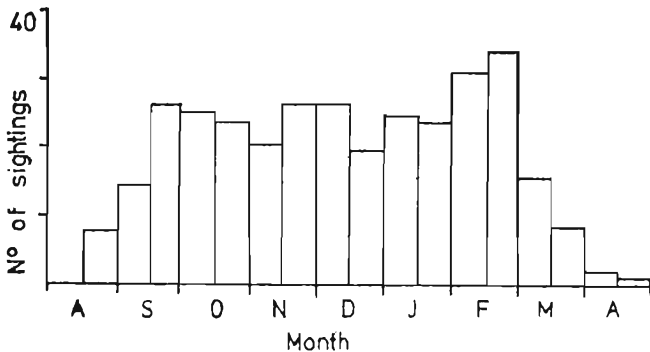


Fig. 1. Fortnightly totals of Peregrine sightings at Caerlaverock, August-April 1974-83

An almost regular increase occurred in the number of Peregrine sightings from the winter of 1974/75 until the winter of 1981/82, when numbers fell sharply (fig. 2). The number of sightings was correlated with the number of young produced in the preceding summer in south Scotland within 110 km of Caerlaverock ($r=0.87$; $df=7$, $P=0.002$), and in northern Eng-

land, within 130 km of Caerlaverock, ($r=0.69$; $df=7$, $P=0.0386$). There was a similar correlation for the two areas combined ($r=0.79$; $df=7$, $P=0.0105$). For both areas, about 95% of the young were reared within 90 km of Caerlaverock, but none closer than 25 km. Sightings were less well correlated with the general increase in the number of territorial pairs. (For south Scotland $r=0.67$; $df=7$, $P=0.05$).

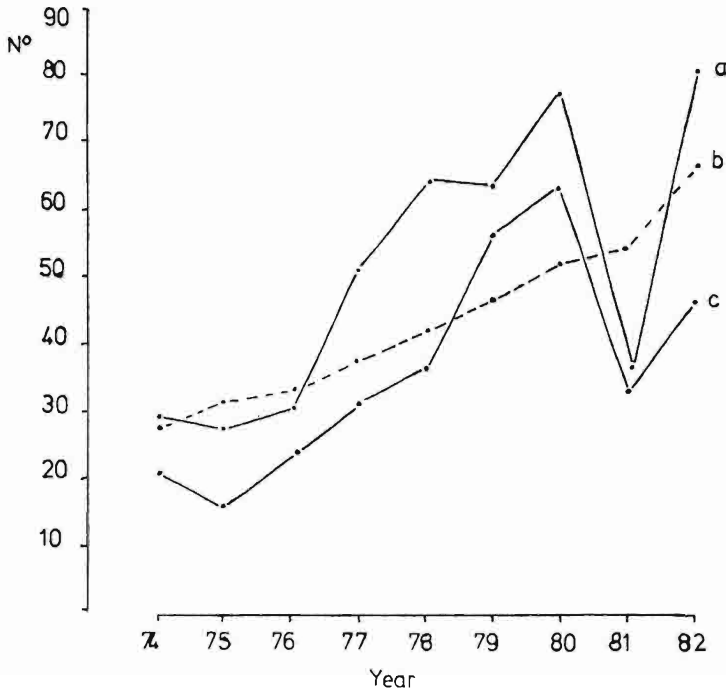


Fig. 2. Annual variation in the number of Peregrine sightings at Caerlaverock and production of young in south Scotland
 a. young reared, south Scotland.
 b. territorial pairs, south Scotland.
 c. sightings in following winter, at Caerlaverock.

Discussion Observer effort was assumed to be the same, both seasonally and annually, although there was at least some variation because time and location in the field were somewhat dependent upon the movements of the Barnacle Geese and the number of visitors. For example, the number of sightings fell over the Christmas period (fig. 1). The number of sightings did not necessarily reflect the number of individual Peregrines present. It was impossible to determine whether birds visited

the area once, for a few days or longer. Thus an increase in the number of sightings may have represented more individuals using the area or the same number using the area more often. Despite these reservations, the results seemed worth interpreting in the light of local breeding data.

Although only a small proportion of birds were aged or sexed, these observations agreed with other winter sightings on the north Solway shore, lower Nithsdale and lower Annandale, where most Peregrines on low ground in winter were juveniles, with no detectable habitat preference between the sexes (Mearns 1982).

Most Peregrines in south Scotland fledge in late June or July and then disperse, in any direction (Mearns & Newton 1984), usually to low ground where prey is abundant (Mearns 1982). The time juveniles spend with their parents varies. One bird found dead on 4 August, 87 km from its birthplace about 40 days after first flight, may have been exceptional, since the first Peregrines at Caerlaverock were not seen until the last week of August. Ratcliffe (1980) reported that separation from parents (ie dispersal) occurred from August to October or even later.

Table 1. Season of recovery (up to June 1983) for Peregrines ringed as nestlings in south Scotland, 1974-1982

Season	Age when recovered			Totals
	<1 year old	1-2 years	>2 years old	
July-December	23	7	4	34
January-June	6	2	10	18

The late peak in sightings in February was surprising, considering the high mortality of juveniles in the first six months of life and the overall higher mortality during the period July to December (table 1). However increased activity by the remaining birds in search of food or breeding territories probably accounts for the greater number of sightings in February. A similar pattern of activity occurs in some other relatively sedentary birds of prey (Newton *et al.* 1982).

The number of sightings may also have been correlated with the overall national situation, but as figures were not available for all areas or all years this possibility could not be examined. Other areas of Britain have shown different rates of increase (Ratcliffe 1980), but the poor breeding season in 1981, associated with very wet weather when young were small, was common to many areas (Ratcliffe 1984).

Ringing recoveries for south Scotland show that few Peregrines move further than 150 km from their birthplace (Mearns

& Newton 1984) and most adults remain attached to their breeding territories in winter (Mearns 1982), though they would be capable of travelling to estuaries for short periods. There is no evidence at present to suggest that Peregrines elsewhere in Britain behave differently, so it is unlikely that many of the birds at Caerlaverock were from areas further afield than south Scotland or northern England.

Summary Peregrines were seen on the Solway coast at Caerlaverock between August and April each year, with a peak in February. Most Peregrines that were aged were juveniles; the sex ratio was about even. The number of birds seen in each winter was correlated with the number of young produced locally in the preceding summer. Only a small proportion of birds were thought to have come from further afield.

Acknowledgments Special thanks are due to C. Campbell, Wildfowl Trust manager at Eastpark Farm, Caerlaverock, for making his diaries freely available, and to his assistants who also contributed sightings: L. Colley, R. Goater, B. Sears and G. Wright. Details for northern England were kindly supplied by Dr D. A. Ratcliffe. C. Campbell and Dr M. Marquiss gave constructive comments on an earlier draft of this paper for which I thank them.

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Breeding seabirds on the Yell Sound Islands, Shetland

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The Yell Sound Islands comprise a group of 18 uninhabited islands, holms and skerries lying in the Sound which separates Yell from the Mainland of Shetland; Gloup Holm and the Ramna Stacks, which lie to the north of the Sound, may also be conveniently associated with the group. The islands range in size from about $\frac{1}{4}$ ha. up to 76 ha.

The recorded history of the breeding birds of the islands is sparse. Venables and Venables (1955) give a full species list

for only Muckle Holm, and data collected during Operation Seafarer were qualitative or non-existent (Cramp, Bourne and Saunders 1976). Interest in the islands was aroused when the Shetland Islands Council decided to site the new terminal for North Sea oil on Calback Ness in Sullom Voe. The Environmental Impact Assessment, prepared by the Sullom Voe Environmental Advisory Group during the planning of the terminal, stated that there were no major seabird colonies in Yell Sound (SVEAG 1976) and Syratt and Richardson (1981) concluded that few seabird populations in that area were of any major significance by Shetland standards. Berry and Johnston (1980) classed the marine interests of Yell Sound as quite important, though not exceptional, and the Royal Society for the Protection of Birds considered that some of the islands (Grunev, Muckle Holm, Uynarey, Samphrey and Fish Holm) were of sufficient value to justify their lease as reserves from 1980, adding to its previous acquisition of the Ramna Stacks (Tulloch 1980). The vulnerability of the Sound and its islands to the threat posed by the operations of the oil terminal was demonstrated during the winter of 1978-79 when the tanker *Esso Bernicia* spilled 1,174 tonnes of fuel oil during berthing manoeuvres at the Terminal. This oil was subsequently spread widely throughout Yell Sound and Sullom Voe causing the deaths of at least 3,700 birds (Heubeck and Richardson 1980).

Surveys of breeding seabirds of the islands have been conducted systematically since 1977 as part of a wider environmental monitoring programme. The RSPB conducted a survey of many of the islands in 1977 and surveyed terns in 1980 as part of a general enquiry in Scotland (Bullock and Gomersall 1980). The Shetland Oil Terminal Environmental Advisory Group (SOTEAG) commissioned surveys of the islands in 1978, 1980 and 1981 (Bettencourt, Enticott and Schofield, 1979; McKay, Muir and Shepherd 1980; McKay, Prentice and Shepherd 1981). Expeditions from Leicester Polytechnic have surveyed most of the islands each year since 1977 as part of a programme of more general ecological studies in the area. In 1981 the Nature Conservancy Council conducted a survey of Kittiwakes breeding on the Ramna Stacks and Gloup Holm (Pritchard 1981, Richardson 1983) and in 1983 SOTEAG commissioned a survey of Tysties throughout Shetland. This paper presents a summary of the results of the surveys conducted by these organisations in the period 1977-83.

Methods

RSPB and SOTEAG surveys were conducted in the last week of June mainly from boats, with occasional landings and ground surveys; the NCC Kittiwake survey was conducted

Table 1. Estimated numbers of pairs of the common seabird species breeding on Yell Sound Islands, Shetland. For the less common species, see text.

B=breeding, numbers uncertain; P=present, breeding not proven; *see text for further details

	Lunna Holm	Weather Holm	Linga	Sinna Skerry	Fish Holm	Samphrey	Orfasay	Broch of Copister	Bigga	Uynarey
Fulmar	20	70	150		25	55	13	10	150	250
Storm Petrel						50		B	10	?P
Shag						2			4	4
Eider	B		2	2	5	7			8	2
Arctic Skua						3			2	
Bonxie			2		1	12			10	
Common Gull						20	2		15	
Lesser B-b. Gull			10			2			2	
Herring Gull			20		10	10				20
Great B-b. Gull	20	10	30	1	30	40	20	1	40	25
Common Tern				1		2				
Arctic Tern				50	70	150*	52		225*	
Tystie	3	1				6*	1	4*		1
Puffin	50				100	120	6			100

	Little Roe	Lamba	Brother	Little Holm	Muckle Holm	Holm of Westsandwick	Gloup Holm	Gruney	Ramna Stacks
Fulmar	165	250	13	5	50	25	300	40	100
Storm Petrel			P	P				B*	
Shag		1					45	25	
Eider	4	1	3	B	4	2			
Arctic Skua			1						
Bonxie			3						
Common Gull			15						
Lesser B-b. Gull									
Herring Gull			5						
Great B-b. Gull	20	25	20	40		40	50	250	50
Common Tern	30	2	10		20				
Arctic Tern		30	50*		45*	50			
Tystie			B*		1		1		
Puffin					150		500	500	

entirely from a boat. The Leicester Polytechnic surveys, conducted in July, were ground surveys (sometimes involving several consecutive days and nights on an island) supplemented by boat surveys. The count criteria for some species were not necessarily the same for each survey. Thus, numbers of birds present; apparently occupied nests; nests with eggs or young; females with young nearby (in the case of Eider) were all used. In the results which follow, a consensus figure of the estimated number of pairs of each species is given when the results are essentially in agreement.

Results

Table 1 shows the estimated number of pairs of each of the common species of seabird found breeding on the islands between 1977 and 1983. Most species were subject to small annual variation in numbers and, in these cases, an upper limit is given. More important changes in status or other noteworthy factors, together with details of the less common species (i.e. present on fewer than three islands) are described in the individual species notes which follow.

Storm Petrel Like many of the Pictish brochs in Shetland, Copister has its colony of Storm Petrels. Ringing was first carried out in 1966 (95 birds ringed) and individuals from that sample have been recaptured in subsequent years (including 2 in 1982). An analysis of recapture data suggested a population of 1,500 pairs but as some catches were made in July, this figure is certainly inflated by wandering juveniles (Fowler *et al.*, 1982); perhaps 500 pairs is more realistic. Storm Petrels have been heard "churring" in stone walls on many of the islands, but breeding was proven on Gruney when an incubating bird was found in an old Puffin burrow in 1983. There is a small (10 pairs) colony on the broch at Westsandwick, Yell, an island only at high tide.

Leach's Petrel Birds occupying burrows were found on Gruney in 1980 and breeding was confirmed in 1981 (Fowler 1982, Fowler and Butler 1982); incubating birds were also found in 1983. This colony of perhaps 25 pairs is the second Shetland and sixth British site for this species.

Cormorant Cormorants nest in Yell Sound in only small numbers and, as elsewhere in Shetland, can suddenly move to new breeding sites (Kinnear 1978). Thus, Tinga Skerry was occupied for two seasons (12 nests in 1977, 7 in 1978) and Little Holm was colonised in 1979 or 1980 and was still occupied (20 nests) in 1983. The Ramna Stacks site, which has a recorded history of 100 years (Venables and Venables 1955) was deserted in either 1979 or 1980.



PLATE 12. This Wryneck, which reached the Isle of May on the rather early date of 21st April, was the second bird caught in the newly reconstructed Heligoland trap.

S. Wanless



PLATE 13a. April 1st 1983 brought this immaculate Firecrest to the Isle of May, where it was trapped the following day.

B. Zonfrillo

13b. "Blue" phase (back left) and normal Fulmars on Tantallon Cliffs.

S. R. D. & E. S. da Prato





PLATE 14. Glaucous (below) and Iceland Gulls are sometimes among those following the fishing boats into East Lothian's harbours; these two immatures were photographed at Dunbar and Port Seton respectively.

S. R. D. & E. S. da Prato

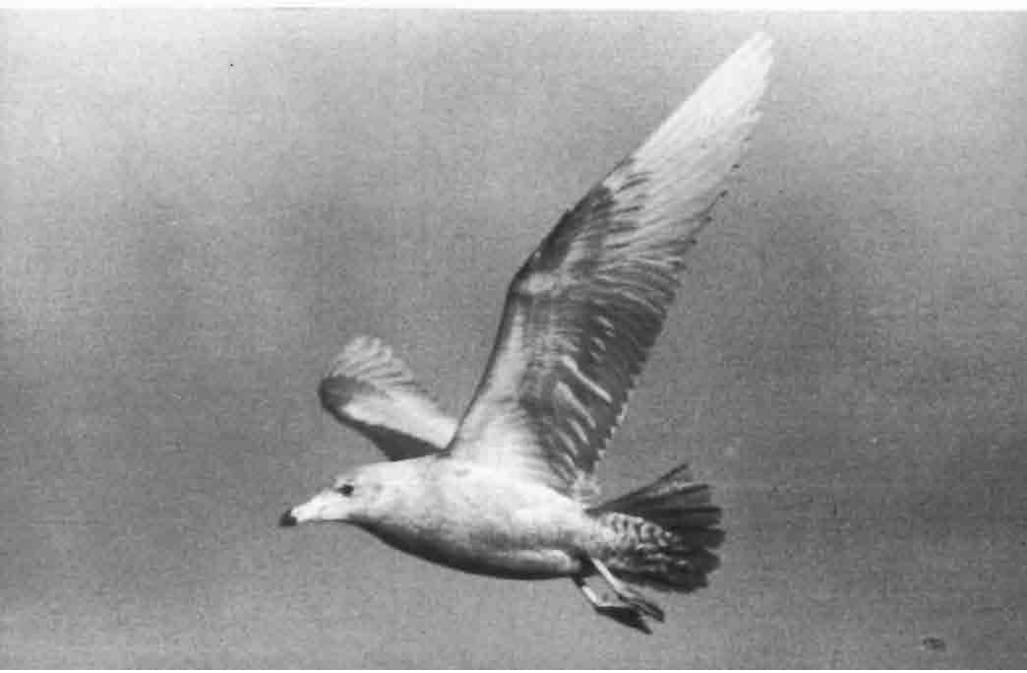




PLATE 15. East Lothian's varied coastline attracts a good diversity of waders. The Oystercatchers above were at Gosford Bay, and the Turnstones and Dunlin near North Berwick.

S. R. D. & E. S. da Prato



Kittiwake Maximum counts of 80 apparently occupied nests in 1980 on Gloup Holm and 1,350 on the Ramna Stacks in 1981 are the most recent figures.

Arctic Tern Some 1,000 to 1,500 pairs of Arctic Terns probably nest on the islands in any one year, but their distribution between individual islands can vary from year to year. Thus, on Samphrey, 120-150 pairs were present in 1977 and 800-1000 in 1982; on Bigga, numbers declined from 225 birds in 1978 to 40 in 1981.

Guillemot Breeding occurs on Gloup Holm and on the Ramna Stacks but because of the prevailing sea conditions and the topography of the stacks it is very difficult to census this species accurately. On Gloup Holm up to 100 birds have been counted on the cliffs, whilst estimates for the Stacks have varied from 3,200+ birds in 1980 to 6,550 in 1976 (an estimate of 8,800 in 1978 is now considered to be suspect).

Razorbill Over 200 birds have been seen ashore on Gloup Holm and 100-150 on the Ramna Stacks.

Tystie Numbers declined on most islands in 1978. Thus, 12 pairs on Brother, 6 pairs on Samphrey and 4 pairs on Copister Broch recorded up to 1977 were not present in 1978. Breeding recommenced in 1980 (Samphrey) and 1981 (the Broch) with 3 or 4 pairs on the Broch in 1982; breeding has not since been confirmed on Brother.

Discussion

The various visits to and surveys of the Yell Sound Islands in recent years have resulted in a comprehensive picture of the numbers and variety (19 species) of breeding seabirds in the area. Apart from the Ramna Stacks, where the breeding populations are sufficiently large to be of national importance (and have led the NCC to propose the stacks as an SSSI), the Yell Sound Islands are representative of the many small islands of Shetland. Their conservation value lies in this representativeness coupled with the fact that they are the islands most at risk from oil pollution in Shetland.

The impact of the *Esso Bernicia* oilspill on most of the species of seabirds breeding on the Yell Sound Islands was minimal since few of them were in the area in any numbers at the time. Furthermore, a proportion of those species that are resident in Shetland and which featured prominently in the mortality will have had breeding sites outwith the Yell Sound area, as was evidenced by ringing recoveries of Shags and Cormorants. The local breeding population of Tysties, however, suffered considerably from the oilspill. Although information

on the numbers of actual breeding pairs on the islands prior to the oilspill is limited, obvious decreases in numbers occurred. Tystie nests can be hard to locate and one can never be sure that some are not missed on surveys, but in spite of this, it is clear that a genuine drop in numbers occurred—which is hardly surprising in view of the 633 oiled birds found dead.

On the SOTEAG surveys, only individual Tysties seen around the islands (both offshore and onshore) were recorded and no attempts were made to locate nests. Tysties can fly considerable distances from their breeding sites to feed (P. J. Ewins *pers. comm.*) but, even bearing this in mind, the numbers counted on the SOTEAG surveys indicate a large decline in the numbers of birds in the area, thus 218 birds in 1978 were reduced to 50 in 1980 and 45 in 1981.

Acknowledgments

We are grateful to SOTEAG for permission to cite unpublished reports and to Dr M. G. Richardson for criticising the manuscript and for making available NCC counts of Kittiwakes. The RSPB gave permission to visit its island reserves and to conduct ringing studies on them. The Shetland Islands Council, Capt. Chris. Hunter and Mr Magni Anderson provided transport to some of the islands.

Financial support for the Leicester Polytechnic Expeditions (involving some 35 participants in the bird surveys) was gratefully received from the British Ecological Society, British Petroleum Co. Ltd., The British Trust for Ornithology, The Fauna Preservation Society, The Nature Conservancy Council, RSPB, The Seabird Group, SOTEAG and the World Wildlife Fund.

Summary

Surveys of the breeding seabirds on the Yell Sound Islands have been conducted by the RSPB, SOTEAG and expeditions from Leicester Polytechnic since 1977. Most of the islands are considered representative of the many small islands of Shetland and collectively support 19 breeding seabird species. On the Ramna Stacks breeding seabird populations are of national importance. The local breeding population of Tysties suffered considerably from an oil spill incident in the area in 1978.

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Birdwatching on the East Lothian coast

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Many birdwatchers are creatures of habit and tend to flock to well known localities, such as Aberlady, Tynninghame or the Bass Rock. The aim of this article, however, is to draw birdwatchers' attention to the opportunities that exist on the rest of East Lothian's coast line, where the combination of sandy bays, rocky outcrops and offshore islands creates scenery that some claim to be the finest on the east of Scotland. This is ultimately a matter of opinion but the ecological diversity that accompanies such fine and varied scenery means that the birdwatcher can see a wide range of interesting species at any season and in attractive surroundings.

The Firth of Forth is noted as a good place to see seaduck, grebes and divers especially in winter, but visitors are often disappointed when they arrive at a recommended spot only to find a large expanse of choppy sea and a number of dark specks too far out to be identified. To obtain good views one needs to know both where to go and when to visit a particular area. The use made of the various bays by different species is linked to shelter and the depth of water. A glance at a chart shows that, apart from the mouth of the River Tyne, the shore east of Fidra island shelves fairly steeply below low water but

the bays at Gullane and Gosford have extensive shallows. These are attractive to many waterbirds in the non breeding period. Weather, tide and light all affect the birder's ability to see birds on the bays; a calm day with the light behind the observer and the tide approaching full is ideal. Late afternoon is often productive since some birds, notably divers at Gullane Bay, fly in to form a roosting flock then; over 100 Red-throated Divers are not unusual in February or March.

Not all species are found together. Of the "seaduck" (all of which, apart from Eider, breed inland!) Scaup and Goldeneye are less common in East Lothian than further up Forth, where they are often concentrated around effluent outfalls. In fact Scaup are now relatively scarce in the Forth since Edinburgh's breweries and distilleries stopped discharging large quantities of grain waste. Long-tailed Ducks and the Scoters are characteristic of both Gullane and Gosford though they can be well offshore. Flying birds permit the separation of Velvet from Common Scoters and with experience even distant ducks can be identified by their shape and behaviour. For example, even in silhouette, Scoters look different from Eiders and they are much more mobile, often rushing along the surface and frequently taking flight. Surf Scoter has also been recorded here on several occasions.

Mergansers are the commonest sawbill, especially in late summer when they are in moult. The complex sequence of plumages during moult can cause confusion especially with Long-tailed Ducks and Eiders. It also affects grebes and divers which are even more likely to be misidentified when losing or acquiring summer plumage than in midwinter.

A telescope helps, but even with a 'scope some birds cannot be specifically identified. All four divers and five grebes have been recorded though White-billed Diver is obviously a rarity and, of the grebes, Black-necked is irregular, and Little Grebe unusual on the open sea. These birds may be present throughout the year—May and June are the least likely months. Late summer can be particularly interesting, with species such as Red-necked Grebe often still in full summer plumage.

Along the open coast the alternation of sand and rock creates shelter which in turn encourages a range of seaweeds and marine animals. The latter are interesting in themselves, while some are important prey for waders. In winter the coast between Gullane and Dunbar holds waders at among the highest densities so far recorded for rocky shores in Scotland. Most of the common waders occur in good numbers, for example 500+ Purple Sandpipers and 1000+ Turnstones, and there are interesting opportunities for photography along the tide line. Eiders

are the only common wildfowl though other species often occur during passage periods or after displacement by westerly gales. Rough winter weather may bring interesting birds such as Little Auks, which occur in most winters though they are not often seen until an exhausted bird is found on the beach. Sometimes larger creatures appear on the beaches but all cetaceans are now much rarer in the Forth and a repeat of the stranding of the 78 ft. (23.8 m) Blue Whale near North Berwick in 1830 (now the largest exhibit in the Royal Scottish Museum) is unlikely.

Set on cliffs and looking out to the Bass Rock and North Sea, Tantallon Castle is an excellent spot for a visit, not only for its historical interest but also for the 100+ pairs of House Martins using natural nest sites on the cliffs which they share with the second largest colony of Fulmars in the Forth. 'Blue' phase Fulmars have been seen on ledges for several seasons and opportunities for photography are excellent as the birds glide along the cliffs or hang in the updraughts. This is also a good area to watch Grey Seals hauling out on the rocks when the beach is quiet.

Birds which breed on the beach fare less well than those on the cliffs. Ringed Plovers still nest on the shingle but other waders are only sporadic and terns are virtually confined to roped-off areas in nearby nature reserves.

As spring changes to summer many creches of Eider ducklings appear on the sea with attendant females. By this time the drakes are in heavy moult and a walker between Yellowcraig and Gullane can easily count over 5,000 of these birds. Terns range along the coast, often followed by their noisy offspring. Migrant waders begin to appear and this is a good time for wildflowers and butterflies on the coastal grasslands. As well as Eiders and Skylarks, Shelducks still nest here and these isolated pairs breed more successfully than those on Aberlady Bay.

East Lothian has the biggest thickets of Sea Buckthorn in Scotland. This specialized shrub is seen at its best between Gullane and Yellowcraig and holds breeding Long-eared Owls and a remarkable number of passerines. In winter when the leaves fall the mature bushes literally glow orange due to the millions of berries. Thousands of Fieldfares rise at the bird-watcher's approach along with many other small birds, including Blackcaps, which I have seen there throughout the winter.

The harbours too are always worth a visit. Dunbar still has its famous Kittiwake colony on the walls of the old castle though the old warehouse colony has gone. Gulls follow the fishing boats into harbour and both Dunbar and Port Seton

have attracted Glaucous and, less frequently, Iceland Gulls in recent winters.

The four main offshore islands are Fidra, the Lamb, Craigleith and the Bass Rock; all are easily reached by boat from North Berwick but island visits really demand an article of their own to do them justice. However there are a number of smaller islands and rocks, some accessible at low tide, and the shore based birdwatcher can make useful observations of these, especially in winter, when boat trips are often not practicable. Since so little is known about seabirds in the non breeding period it is always worth recording how often many species are seen around the islands.

Auks—other than Puffins—occur intermittently from October, while there are few times in the year when Gannets cannot be seen circling the Bass. Towards evening hundreds of Shags and Cormorants fly in from other parts of the Forth to roost and thousands of gulls come from inland. The closer rocks are to the shore the more likely they are to be used as wader roosts at high tide both in daytime when people tend to push birds off the beach, and at night when birds have to contend with foxes and remarkable numbers of Brown Rats.

Although migrants may occur anywhere on the east coast the small promontory of Barns Ness, just south of Dunbar, is the best place to see them in East Lothian. With an onshore wind this is also a good site for passing seabirds, which usually include Gannets, Kittiwakes and Fulmar, often passing at a thousand or more birds per hour. Other species seen include all four skuas, Manx, Balearic, Cory's and Great Shearwater, Grey Phalarope and Sabine's Gull. Seawatching is easy from a car but birders should not park too close to the lighthouse.

Passerine migrants can be looked for in the scrub, especially the jungle of elder bushes and wartime barbed wire in the hollow by the caravan site entrance. The limited cover at Barns Ness means that migrants do not stay for long and the observer will very quickly learn whether there has been a "fall" or not; if not the site can be very quiet indeed. The species to be expected are typical of sites on the east coast. Rarer species recorded include Richard's Pipit, Red-breasted Flycatcher, Yellow-browed, Barred and Icterine Warblers and Little Bunting in autumn, with Bluethroat, Red-backed Shrike, Water Pipit and *flava* wagtails in spring. Since it is such an easy site to cover observers from Central Scotland often call in at Barns Ness to see what is about and judge whether it is worth making the extra journey to St Abb's Head or even Holy Island.

S. R. D. da Prato, 38 Carlaverock Grove,
Tranent, East Lothian, EH33 2EB

Short Notes

Young Crossbill feeding a sibling

On 14 April 1983 D. N.-T. made observations from a pylon hide erected by D.W. at a Scottish Pine Crossbill's nest in a Sutherland forest. The nest, which was 3.5 m above ground was in the crown of a stunted pine surrounded by young lodgepoles of about 9 m in height. It then contained four 17-days-old chick, survivors of a brood of five.

At 16.32 two chicks, one after the other, crept on to the rim of the nest and fluttered on to a branch overlooking it. Immediately the two siblings left in the nest started to beg for food, opening their bills and shivering their wings along their backs. In reply, one of the chicks now on the nest rim also flicked its wings and took a reddish seed from a dropping and placed it inside the open mandibles of one of its begging siblings. It did this twice.

This raises the question of 'latrines' on crossbills' nests. Are the faeces sometimes used as a reserve of food, particularly in severe weather? Is this 'selected in', as against the 'giveaway' of the white mass on the side and edge of the nest? J. F. Young (in D. Nethersole-Thompson *Pine Crossbills* 1975 plate 15) photographed a juvenile common crossbill of a first brood feeding a chick in its parents' second brood nest. Have these unusual birds evolved these practices to assist survival in hard climatic conditions?

On 16 April D.W. attempted to photograph this unusual behaviour. At 14.50 and 15.05, after one of the chicks had moved out of the nest, its siblings begged food from it. The first time the returning chick touched the bill of one of its nest mates but delivered no food. The second time it ignored its three soliciting siblings.

DESMOND NETHERSOLE-THOMPSON,
DAVID WHITAKER

Golden Eagle and fox competing for mountain hare

On 31 May 1976, while watching by telescope, I saw an immature eagle soaring over Craig Tarson, Galloway. Twelve minutes later a fox crossing the hillside startled a mountain hare in summer coat from behind a small rock outcrop. Although the hare had a 5m start, the fox gradually caught up with it in 50-100m, and was within 1-2m when the hare suddenly turned uphill.

As this happened an immature Golden Eagle side-slipped with wings outstretched onto the hare, apparently killing it immediately. The fox, which had slightly overshot, came back towards the eagle which stood on the hare, wings half stretched and head forward towards the fox. The fox stopped and appeared to be snarling with teeth exposed. It raised its tail at right angles to its back with the hair bushed out, unlike its sleek flowing appearance during the chase. After backing off, the fox circled the eagle, brush erect and head pointing towards the hare. In a couple of circuits it was within 2m of the eagle which then flapped towards it for 3-4m. At this the fox retreated and the eagle returned to the hare. The fox walked and trotted to a rocky ledge some 100m away, where it curled up; after 30 minutes it left the area.

Meanwhile the eagle carried its prey 3-4m before removing fur and eating pieces of hare for 50 minutes. It then stood for at least 20 minutes,

after which rain and low cloud made further observation impossible. All that remained next day was some white fur and about 10cm of the rectum containing pellets.

JUDITH J. ROWE

Large, temporary roost of Jays in Midlothian

On 17 October 1982, at 1810 hours, I discovered a flock of Jays (*Garrulus glandarius*) on the ground, in a horse paddock, some 10 kilometres south of Edinburgh and within 300 metres of a large mixed deciduous wood where they roosted. As I watched from a car, small groups of 3, 5, 7 or more, and on one occasion 15, flew in, on a direct and similar course, from the south east, at a height of 9-12 metres. They joined the 127 already assembled, until the flock reached its maximum, of 320 birds at 1840 hours.

The birds were very active and vocal while this assembly was formed, with frequent "strutting", short flights, bill probing at the turf and posturing with outstretched wings towards Jackdaws (200) and Starlings (700) which had also gathered in the field. Eventually, with one accord, they rose and flew into the wood, below the canopy cover. I entered the wood at 2200 hours but after an exhaustive torchlight search, failed to locate a specific roost site.

Returning at dawn, expecting to record the "exodus", I was surprised to see only 5 individuals fly out separately. On the 18th, a similar pre roost assembly occurred, but only 123 birds were present. With the aid of two other observers, it was ascertained that the morning dispersal on the 19th was protracted, singly and at random. By the evening of the 19th, the flock had further decreased to 18 birds, and on the following 5 evenings no birds were seen at the site.

There is no large population of Jays resident in Midlothian and it is tempting to suggest that these were Continental immigrants (*G. g. glandarius*). None, however, were obtained to provide that proof. There were no birds present at this site during October 1983, when an unprecedented invasion occurred in Southern England.

J. G. YOUNG

Common Buzzard eating dead salmon

On Tuesday 22 November 1983, my wife and I watched a Common Buzzard pecking at and eating flesh from a dead salmon lying on shingle at the water's edge near Invercauld Bridge, Aberdeenshire. We have not seen a buzzard eating fish before and it is described as rare in BWP. This is perhaps remarkable as dead salmon are abundant on many rivers in Scotland in late autumn with, for example, hundreds or even thousands available on the river Dee. It seems surprising that such a readily available source of food has not been more exploited by buzzards which often eat other carrion. We wondered if this behaviour really is rare or if it has gone un-recorded.

DAVID JENKINS

Doug Weir comments: "I have unpublished Speyside notes which suggest quite regular catching of spawning Brown Trout at falls/rapids in small burns, but not of feeding on dead salmon, though I intuitively expect that it occurs". He adds that in various studies in Alaska, where dead salmon are abundant, the buzzards there have not been recorded feeding on them, although Bald Eagles regularly do so in some areas. "D.J.'s observation therefore appears to be genuinely unusual".

Mink in a Black-headed Gull colony in the Pentlands

A recent reduction in breeding numbers of waterfowl, especially Tufted Duck, Moorhen and Coot, in the Lothians is causing increasing concern. Much of this decline has been attributed to the presence of feral mink, but there has as yet been little more than circumstantial evidence to support this theory. It is consequently important that any proven cases of mink predation and its effect on breeding birds should be fully documented. An incident in the Pentland Hills provides an appropriate example.

In mid-May 1983 c.1400 pairs of Black-headed Gulls were occupying breeding sites at West Water Reservoir: c.800 pairs on an island, c.550 pairs on the adjoining hillside, and c.50 pairs on the dam. The reservoir was full at that time. All nests on the hillside were lost, through predation, egg-collecting, trampling or being washed out, and some collecting took place on the dam. The island, which also held 2 pairs of Common Terns, remained relatively unscathed, and as the water level dropped during June further laying occurred there. On 22 June the island held about 300 chicks, and on 29 June 100+ unfledged young, 20+ juveniles, and many adults still incubating; several unfledged young and 24 sitting adults were on the dam.

By 9 July the dam had been abandoned, with no sign of eggs or young remaining, and the reservoir keeper, Mr A. Dewar, informed us that the birds had been present one day and gone the next. A few Black-headed Gulls were still sitting on the island, and 70+ juveniles were present, but the terns had gone. By 17 July the island had been completely deserted. We would have expected many adults, unfledged young and small chicks to be present at that date, as the Black-headed Gulls do not normally vacate this reservoir until early August, and the 1983 nesting season was unusually late.

On 10 July A.W.B. saw a young mink at the north-east corner of the reservoir near the dam, and A. Dewar saw two on 16 July. On 20 July A.W.B. set 4 traps and over the week-end of 24-25 July two mink were caught and another two shot nearby; all were young animals. Mr Dewar watched two swim out to a smaller island and then saw a juvenile Black-headed Gull being pulled below the surface of the water and then dragged ashore by a mink.

It seems likely that the arrival of a family of mink at the reservoir was the cause of desertion in 1983. Similar occurrences have been recorded elsewhere in the Pentlands. In 1978 a colony of 300 pairs of Black-headed Gulls at the North Esk Reservoir deserted their eggs and young in early June, and the owner later found mink breeding on the gulls' nesting island where rats were also present (M. Jones pers. comm.). And in 1981 mink were reported to have cleared out the eggs of a Black-headed Gull colony at Harperrig Reservoir although human predation cannot be discounted in this instance (per G. L. Sandeman). Although the evidence is still largely circumstantial, it would be unwise to ignore the potential threat to ground-nesting species from mink. Action to control mink numbers is clearly desirable in order to safeguard breeding waterfowl populations.

We thank the Water Supply Services (now the Water and Drainage Department) of Lothian Regional Council for permission to set mink traps on their land at West Water Reservoir, and gratefully acknowledge the co-operation of Mr A. Dewar, the reservoir keeper.

A. W. & L. M. BROWN

Unusual Peregrine kill

On 3rd January 1983 while watching an adult male Golden Eagle flying to its roosting cliff in an Upper Deeside glen, the following was observed. The Eagle was seen flying South, low over a hill about $\frac{1}{2}$ of a mile from us and was being mobbed by four smaller birds (corvids). We noticed a fifth small bird approaching from the North; this was presumed to be another Crow, and little notice was taken of it, our attention being focused on the Eagle. It was not until this fifth bird 'bound-onto' and dropped to the ground with, the tail-end Crow that we realized it was a Peregrine. The Eagle and the remaining Crows continued in the direction of the roosting cliff. The Peregrine made this opportunist kill within 20 feet of the Eagle.

IAIN C. MACLEOD, KEITH DUNCAN, INNES SIM

Reviews

A Field Guide to the Warblers of Britain and Europe by A. Moore; Oxford University Press; 145 pp; 32 col. pl; 45 maps; £9.50

Anyone hoping this book will do for warblers what Grant has done for gulls or Porter *et al* for raptors will be disappointed. The book covers 53 species in 32 plates, with supporting text and 45 maps. The maps for Green and Greenish Warblers have been transposed while the British breeding distributions of Grasshopper, Garden and Reed Warblers and Lesser Whitethroat extend much further north than shown. There is no indication that Chiffchaffs may winter in Britain, or that Blackcaps often do so in Scotland, while not a single warbler or 'crest' is shown to occur in Orkney or Shetland even on passage! The text borrows heavily from others, but is often vague and sometimes wrong; Whitethroats aren't larger than Blackcaps (p 97) nor are all young leaf warblers "dull editions of the adults" (p 104). Many plates are too bright and some contradict the text—as in the female Whitethroat shown with a bright brown crown although on p 74 this feature is said to be grey. Several pitfalls mentioned in the text are ignored in the plates: the Willow Warblers are all yellowish birds with pale pink legs while none of the Garden Warblers show the greenish tinge of some juveniles. Misleading impressions of size often occur as in *Locustella*, where Lanceolated is painted the same size as the larger Pallas's Grasshopper but Gray's Grasshopper, which is larger still, appears diminutive.

Even non ringers are still better off supplementing their field guides with the Williamson/BTO warbler guides. I sincerely hope that O.U.P. plan a higher standard for the warbler section of the B.W.P.

STAN DA PRATO

Field Guide to the Birds of North America edited by J. L. Dunn & E. A. T. Blom; David & Charles, 1983; 464 pp; incl. 220 full col. plates; £7.95 (limpback).

This book is a serious rival to Peterson's now rather dated two volumes, and to the first single volume guide to North American birds, by Robbins *et al* in the Golden Guide series. No less than 13 artists and even more ornithologists were involved in producing this National Geographic field

guide. Compared to the Golden Guide it uses a larger format which gives a less cluttered appearance, and provides more space for showing plumage variations. It also illustrates more species, largely due to the inclusion of vagrant seabirds, Eurasian species mostly recorded in Alaska, and many of the feral species increasingly likely to be encountered in parts of the U.S.A. Reproduction is generally excellent and the cost is reasonable; my main criticism is that the combination of above average size (for a field guide) and very soft cover will not stand up to hard use. This is an excellent book to take on a birdwatching holiday to the U.S.A. or Canada and better than its competitors for identifying North American vagrants in Europe, though with the really difficult species recourse to specialist literature will still be necessary.

STAN DA PRATO

The Life and Letters of Alexander Wilson by Clark Hunter; American Philosophical Society, Philadelphia, 1983; 456 pp, 4 colour plates, 24 monochrome illustrations and maps; 40 dollars.

Alexander Wilson, "Father of American Ornithology", was a Paisley weaver later turned packman, and a Scottish poet of considerable talent. He was also a social reformer and, largely in consequence of a scurrilous poem lampooning (not mention blackmailing!) a local manufacturer, was forced to emigrate to America. There his boyhood interest in natural history developed and, through friendship with William Bartram, he was encouraged to travel and work towards the publication of his magnificent *American Ornithology*.

It was from Wilson that Audubon received the stimulus to publish his own work, using Wilson's book as his guide, and there is evidence that he actually plagiarized some of Wilson's illustrations. As Clark Hunter puts it "Wilson planted the seed but Audubon reaped the corn".

The letters comprise about two thirds of the book and give a great deal of insight into contemporary American life. This fascinating, elegant volume is a testimony of fine historical research by a dedicated author-editor.

IAN DURANCE PENNIE

PAPERS OF SCOTTISH INTEREST Articles and reports on birds in Scotland, mainly on status and distribution, are listed here. Some biological studies are excluded, as are references from the widely available journals *British Birds*, *Bird Study*, *Ringing and Migration*, and *Ibis*. Most items are available for reference in the Waterston Library. The librarian welcomes reprints or copies of papers on any aspect of ornithology.

Lothian Bird Report for 1982. (66 pp). D. J. Bates & M. R. Leven (eds) 1984.

Includes a report on the 1982 Mute Swan Breeding Census in the Lothians. Estimation of age-specific survival in Hen Harriers. P. Rothery in *Inst. Terr. Ecol. Ann. Report.* 118-119, 1982.

Breeding biology of polygynous Hen Harriers in Orkney. N. Picozzi 1984. *Ornis Scandinavica* 15, 1-10.

Fluctuations in the number of wintering waders at Burntisland Bay, the Firth of Forth. J. Barrett & C. F. Barrett 1984. *Wader Study Group Bull.* 40, 44-48.

A survey of waders breeding on the west coast of the Uists and Benbecula (Outer Hebrides) 1983. (10 pp). G. H. Green (ed) 1984. Published jointly by the Wader Study Group and the Nature Conservancy Council.

The Birds of Canna. (13 pp). R. L. Swann 1983. A checklist giving past and present status of all species recorded on the island up to April 1982.

The Birds of Colonsay and Oronsay. (4 pp). J. Clarke & P. M. Clarke 1983. A list of the birds positively identified in and around the islands since 1970.

Colonsay Bird Report for 1983. (7 pp). J. Clarke & P. M. Clarke.

Ayrshire Bird Report for 1983. (39 pp). A. Hogg (ed) for the Ayrshire Branch

- of the S.O.C. Includes reports on Grey Herons, Mute Swans and Buzzards in 1983.
- Orkney Ringing Group Report* 1983. (32 pp). C. J. Corse & E. R. Meek 1984. This first report from the Orkney R.G. includes articles on seabirds on Aukerry 1971-83 by A. D. K. Ramsay, on Merlin, Hen Harriers and Black Guillemots by E. R. Meek, and on post-juvenile moult in Orkney Black-birds by C. J. Corse.
- Holyrood Bird Records* 1978-82. (20 pp). L. L. J. Vick (ed). The collected records for Holyrood Park, Edinburgh, including Duddingston Loch and Bird Sanctuary.
- Orkney Bird Report for* 1983. (64 pp). Includes an article on the breeding population of Black Guillemots, and a full systematic list. £1.75 post free from SOC Bird Bookshop.
- Influences of adult age and experience, nest location, clutch size and laying sequence on the breeding success of the Great Skua *Catharacta skua*. R. W. Furness 1984. *J. Zool. Lond.* 202, 565-576. A study of the Great Skua on Foula, Shetland.
- Scandinavian Herring Gulls wintering in Britain. J. C. Coulson, P. Monaghan, J. E. L. Butterfield, N. Duncan, K. Ensor, C. Shedden & C. Thomas 1984. *Orn. Scand.* 15 : 79-88. A detailed study based on 13000 gulls caught and ringed in northern England and southern Scotland.
- Effect of date on counts of nests of Herring and Lesser Black-backed Gulls. S. Wanless & M. P. Harris 1984. *Orn. Scand.* 15 : 89-94. They conclude from counts made every three days on the Isle of May that censuses should be made as late in the breeding season as possible.
- Hebridean Naturalist* no. 8. (67 pp). £2.25 post free from SOC Bird Bookshop. This journal has a broad range of natural history articles, with several on birds—on breeding wader populations, on wader ringing in the Outer Hebrides, "Birds and birdwatching on the Uists" and the annual bird report for 1983.
- Inherent changes in the body size, viability and behaviour of a fluctuating Red Grouse population. R. Moss, A. Watson & P. Rothery 1984. *J. Anim. Ecol.* 53 : 171-189.
- Movements of wintering shorebirds within the Firth of Forth. F. L. Symonds & D. R. Langslow 1984. *Biol. Conserv.* 28 : 187-215.
- The impact of changes in sewage treatment on Seaducks wintering in the Firth of Forth, Scotland. L. H. Campbell 1984. *Biol. Conserv.* 28 : 173-180.
- Survey of Eider moult flocks in Shetland. M. Heubeck 1982. (15 pp). *Shetland Oil Terminal Environ. Advisory Group*.
- Surveillance of breeding Red-throated Divers in Shetland. (36 pp). C. H. Gomersall & L. H. Campbell. *R. Soc. Prot. Birds* 1982.
- Guillemot monitoring at Hermaness, Shetland. (11 pp). A. F. G. Douse 1981. *Dept. Zool. Aberdeen Univ.*
- Borders Bird Report for* 1983. (40 pp). £1.50 post free from SOC Bird Bookshop.

W. G. HARPER

Grouse Symposium Report

The natural regulation and management of grouse populations was the theme of the Third International Grouse Symposium, 26th-31st March 1984, held for the first time outside Scotland. During the conference Yorkshire grouse moors were visited and a post conference tour to Scotland visited two native pinewoods and grouse and Ptarmigan habitats. Papers on Red and Black Grouse and Capercaillie in Scotland were amongst numerous contributions, many of a high standard, some controversial. At a session on acid rain speakers from Scotland pointed to a

lack of evidence of harm to trees from this cause. Papers of interest about Capercaillie came from Norway, where a woodland grouse project is approaching the report writing phase, and transatlantic contributions included papers on the ecology of Blue Grouse, Sage Grouse and White-tailed Ptarmigan.

Anyone interested in grouse research, in the role of predators, social behaviour and disease in limiting populations and in the contribution of some ethological and ecological ideas to conservation practice should find worthwhile reading in the conference proceedings. These will be available from the World Pheasant Association (Daws Hall, Lamarsh, Bures, Suffolk CO8 5EX), membership of which is open to anyone interested in the conservation of game birds not just to aviculturists and hunters.

A. M. JONES

Notices

West coast Eiders As part of an investigation into Eider predation at mussel farms on the west coast of Scotland, regular counts of Eider numbers along the coast have been carried out during the past year. Large sections of coastline remain uncovered, particularly in the north-west Highland area. Anyone willing to carry out counts, even on a very irregular basis, for any section of the west coast—or having count data from previous years—is asked to contact Colin Galbraith at the address below. To investigate Eider movements, a number have been marked with coloured wing tags, numbered individually. Reports of sightings of tagged birds, giving date, location, colour of tag and if possible tag number, would be greatly appreciated by Colin Galbraith, Culterty Field Station, Newburgh, Ellon, Aberdeenshire AB4 0AA.

British Birds We are again able to offer SOC members a 25% discount off the normal subscription for BB. We can thoroughly recommend this excellent monthly magazine for birders, keen birdwatchers and amateur (& professional) ornithologists. Payment should be made using the enclosed form and sent to Mrs Ericka Sharrock, B.B. Subscriptions, Fountains, Park Lane, Blunham, Bedford MK44 3NJ.

BTO/WSG Winter Shorebird Count (supported by BTO, NCC, RSPB, WSG) This winter (December 1984 - January 1985) there will be a survey of the British coastline, excluding estuaries, in order to count waders, Eiders and Herons. This will provide valuable information on the numbers and distribution of these species, and will permit the identification of important sites for conservation. The survey will involve walking sections of coast at low water and recording bird numbers in relation to simple habitat parameters. A full description of the survey, with names and addresses of local organisers, is given in the September issue of BTO News. Non-members are welcome to participate, and help is particularly required in remote areas. For more information, please send an s.a.e. to Mike Moser, BTO, Beech Grove, Tring, Herts.

Barnacle Goose migration A Wildfowl Trust expedition is to visit Bear Island, 74°30'N in the Barents Sea, in September/October 1984. The aim of the expedition is to study the migration patterns and mortality of Barnacle Geese as they head for their Solway wintering area. Bear Island is the last staging post for the geese, as they leave their Spitsbergen

breeding grounds in August and September. They stay on this bleak and barren island for 2-4 weeks to build up their energies for the flight.

The final stage of migration takes place between 20 September and 10 October, and the 1500 miles (2500 km) are covered by most of the geese non-stop. Some head south over the Norwegian and North Seas and fly over the Northern Isles and down across eastern Scotland to the Solway. Others fly down the Norwegian coast and head south westwards, arriving in Britain at the Scottish borders and Northumberland. Few normally stop to rest, but in some years, when flying conditions are poor, large numbers have been seen on the ground, anywhere from the Wash to Shetland, and as far west as Ayr.

We would be grateful for any observations of migrating geese, indicating exact position, date, time, number of geese and flight direction. About 20% of the geese are carrying plastic rings which may be yellow, orange, white or blue and have 2 or 3 engraved letters, readable at up to 200 m with a telescope. Records of ringed geese are particularly valuable. Information should be sent **Dr M. Owen, The Wildfowl Trust, Slimbridge, Gloucester GL2 7BT.**

Cormorant survey The SOC is collaborating with the BTO and IWC in a survey of the numbers and distribution of Cormorants in winter, especially their use of inland waters. 1984/85 will be a pilot and planning year, one use of which will be to establish the places in Scotland where Cormorants roost at night and those freshwaters (including rivers) that they frequent. If you know of such a place, please send a note of the locality and whether it is a roost or a daytime site to **Dr Jeremy Greenwood, Dept. of Biological Sciences, The University, Dundee DD1 4HN.** Information on the numbers of birds will be welcome, but there is no need to make special counts at this stage.

Birds of the Outer Hebrides An up-dating 'addendum' covering 1983 is now available from the author; send SAE plus 10p in stamps to **W. A. J. Cunningham, 10 Barony Square, Stormoway, Isle of Lewis PA87 2TQ.**

The Scottish Ornithologists' Club

ANNUAL CONFERENCE and A.G.M.

The 37th annual conference and 48th AGM of the Club will be held during the weekend 2nd-4th November 1984 in the Marine Hotel, North Berwick, East Lothian. The conference programme, booking form and AGM agenda are enclosed with this issue of *Scottish Birds*.

ENDOWMENT FUND GRANTS

This year 10 applicants received a total of £1,450. Applications for grants for 1985 must be made on forms obtainable from John Davies, the Club Secretary, and submitted by 31 December 1984.

ANNUAL RAFFLE

A book of raffle tickets is enclosed with this issue of *Scottish Birds*. We apologise to those members who do not like to receive raffle tickets in this way. However, the Club does benefit significantly from the raffle each year. Additional books of tickets are available at Branch meetings or direct from Pat Webster, the Membership Secretary. Ticket counterfoils and payments must reach Pat Webster by 31 October if sent to the SOC offices or they may be given to her at the Conference before the draw.

WINTER FIELD TRIPS

DUNDEE BRANCH. All trips leave Crichton Street, Dundee at 10 am (bring lunch & tea).

Sunday 14 October 1984 TAY ESTUARY SURVEY. Leader B. M. Lynch.

Sunday 18 November MONIKIE AND CROMBIE. Leader R. Whyte.

Sunday 16 December LAIRD'S LOCH & PIPER DAM. Leader, B. Pounder.

Sunday 13 January 1985 CAMPERDOWN. Leader Alf Robertson.

Sunday 10 February TENTSMUIR AND MORTON LOCHS.

Sunday 10 March DUN'S DISH AND MONTROSE FORESHORE. Leader Norman Atkinson.

Sunday 14 April GLEN GARR (Bankfoot to Hermitage). Leader Irene McKinnie.

THE SCOTTISH BIRD REPORT 1982

We apologise for the confusion which arose over the publication of the 1982 *SBR* a few days after the publication of the summer issue of *Scottish Birds* (13:2). We also apologise to Alan Brown and Ray Murray whose names and addresses were omitted from the list of local recorders. We rectify that now :

East Lothian A. Brown, 23 Kings Court, Longniddry, East Lothian, EH32 0QP.

Berwickshire, Peeblesshire, Roxburghshire, Selkirkshire R. D. Murray, 143 Eskhill, Penicuik, Midlothian.

We hope that this is the end of this saga !

THE SCOTTISH BIRD REPORT 1983

Angus Hogg, the new editor, reports that work on the 1983 *SBR* is well under way. We aim to publish this *SBR* before the end of this year (1984).

THE SCOTTISH BIRD REPORT 1984

As from the beginning of 1985 observers are asked to note that all records from the previous year should be sent to local recorders by the end of January. This will help recorders, compilers and the editor to restore the publication date for the *SBR* to October—a move which will be welcomed by everyone. In addition, the editor invites the submission of black and white prints or transparencies of rare or uncommon birds taken in Scotland in 1984, along with any line drawings of Scottish birds. Remember, it is **your** report; please give it your full support by being prompt with the submission of your records.—ANGUS HOGG, editor *SBR*.

CHANGES IN LOCAL RECORDERS

Nairnshire, Morayshire, Banffshire Norman Elkins, after 9 years as recorder, has now handed over to Martin J. H. Cook, Rowanbrae, Clochan, Buckie, Banffshire.

Arran & Bute Angus Hogg, the recorder for Ayrshire has now handed over responsibility for Arran & Bute to : Iain R. Gibson, Arcadia, The Glen, Howwood, Renfrewshire.

STRANRAER BRANCH

At the request of the branch, the Wigtown Branch has been renamed the Stranraer Branch since all their meetings are now held in Stranraer.

REQUEST FOR A FILING CABINET

Alan Brown, one of the compilers of the *SBR* and local recorder for East Lothian, would like a second-hand 4 drawer filing cabinet to store the

large amounts of data he is acquiring. If you can help please get in touch with Alan at home: 23 King's Court, Longniddry, East Lothian, EH32 0QP, tel. no. Longniddry 4013 or at work: tel. no. 031-556 8400 ext. 5056.

Recent Reports

These notes include unchecked reports and are not intended as a permanent record, nor will they be indexed. Please send reports to Pete Ellis, Houss, East Burra, Shetland, via local recorders, at the end of March, June, September and December. The period April to June is covered here.

Most spring migrants were late arriving in force, but when migration did at last get underway it brought some exceptional rarities, particularly to northern areas. The spring and early summer were very dry and perhaps as a result most raptors had a good breeding season, though in Orkney the few **Merlin** nests found all failed. Waders and the small gulls fared poorly in some areas and low water levels prevented divers nesting on many lochs. Terns seem to have had a poor breeding season; in Shetland most colonies failed completely, with only a few producing a handful of young.

In June summer plumage **White-billed Divers** were off Whalsay and Portmahomack and, most unusually, a **Slavonian Grebe** was at Meikle Loch and a **Black-necked Grebe** off Burra, Shetland. A **Little Egret** visited the new RSPB reserve near Motherwell and there was another in Shetland. Reports of **Garganey** were widely scattered from the Borders to Shetland; Orkney's first **Ring-necked Duck** turned up in May; and there were **Ruddy Ducks** in Ayrshire, Aberdeenshire and Orkney. Unusual raptor records included **White-tailed Eagles** at Fair Isle and Shetland, male **Marsh Harriers** at Barns Ness and Strathbeg in May, a June **Goshawk** on North Ronaldsay, several **Red-footed Falcons** in the Northern Isles, and a **Hobby** on Fair Isle.

Notable among the waders were the **Little Ringed Plover** at Aberlady in May and **Kentish Plover** at Rattray in April, and June reports of **Dotterel** in Shetland and **Little Stints** at Meikle Loch and Aberlady—where there were also 2 different **Broad-billed Sandpipers** in May and June. A **Marsh Sandpiper** at Lossiemouth in April was very unusual, as were a **Lesser Yellowlegs** and **Nightjar** in Shetland. But the bird of the spring was the **Needle-tailed Swift** which spent late May and early June at Hillwell, Shetland.

Records of rarer passerines included **Woodlark** on Fair Isle, **Red-rumped Swallow** and **Richard's Pipit** on the Isle of May, and **Thrush Nightingales** on both islands. There were 7 **Bluethroats** on the Isle of May and at least 12 in Shetland, and 6 **Black Redstarts** at St Abbs, while **Mistle Thrushes** bred in Lewis for only the second time on record. Fair Isle had **River and Paddyfield Warblers** and there was an unprecedented influx of **Marsh Warblers** with 15 on Fair Isle and 13 in Shetland. Seven **Lesser White-throats** were in song at Heads of Ayr in April. An unusually large influx of **Red-backed Shrikes** brought widely scattered reports, the largest numbers (total 70+) being in Shetland and on Fair Isle, which also had a **Lesser Grey Shrike** in early June. Fetlar produced the other special bird of the spring, when the RSPB warden investigated a report of a 'funny bird in my garden' and found a **Yellowthroat**, Britain's second record and (if accepted) the first for Scotland.



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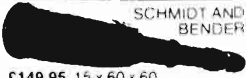
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