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Plate 163. Ken Shaw, Foula, Shetland, June 2012 © Fran Dyson-Sutton

President's Foreword

I have spent a lot of the last six weeks stuck in the car overlooking some misty, rainy, glen waiting for a break in the weather. It really has been an awful June and July. In my study area, the raptors have done very poorly and I hear from Harry Bell that it is the same throughout Kinross and Fife. One positive is seeing Shorteared Owls still around. We had an excellent winter for them and I hear they have stayed on and bred in many upland areas. Stuck in my car I always have a copy of Scottish Birds or British Birds to read in those slow moments. At the moment, I have the July British Birds with the excellent rare breeding bird report for 2010 written by our own Mark Holling and the Rare Breeding Birds Panel. It is amazing how the fortunes of our breeding birds change so quickly! On the one hand, all those southern

herons colonising England, but so many of our woodland species declining. The Marsh Tit, for example, is becoming very rare in Scotland. I read with great interest and sadness the report on Slavonian Grebes written by my old friend Stuart Benn. This beautiful species is in deep decline, with only 22 pairs in 2010. I worry for this species especially as Scotland has now lost its equally beautiful cousin the Black-necked Grebe as a breeding species.

Despite the weather, there are things to be done; for some counties July will be the last chance to cover some of the weaker tetrads for their county atlas, and by the end of the month seawatching will have started and my personal quest for a Great Shearwater in Scotland will resume! After that, the passage waders will be coming back through, and after that many Scottish birders will be off to their favoured Scottish island, with hope in their hearts as passerine migration gets into full swing.

The Scottish Birdfair was a huge success for the Club and I must take this opportunity to thank all of our team who attended the event. The voluntary effort generally is superb and getting more focused. In June, Wendy, Jane and I ran a special day at Waterston house for new volunteers. It was a really positive day and we had a few laughs.

As many of you will know, we now have a digital version of *The Birds of Scotland*. We have deliberately priced it at an extremely reasonable price for members - Council was insistent on that! The reviews have started and are very positive. I would personally like to thank Jane Cleaver and the rest of the Waterston House staff for their hard work on this one.

The Annual Conference is fast approaching too; we are back in Speyside, this time at Aviemore (Note change of venue, see p234). I am really happy with the programme, a real mix of speakers and something for everyone I think. I hope you will be able to attend. Until then enjoy your birds!

Ken Shaw, President

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Plate 164. Greylag Goose, Loch of Clumlie, Shetland, June 2007. © Jim Nicolson

The status of the Greylag Goose in Shetland

P.V. Harvey, C. Mitchell, M.G. Pennington, J.D. Okill & P.M. Ellis

The past 30 years has seen a fundamental change in the status of the Greylag Goose in Shetland. Once an autumn migrant and localised winter visitor in small numbers, the species has become much more common in both seasons, and breeding birds considered to be of Icelandic origin colonised the islands in the 1980s. In 2011, the post-breeding population numbered around 5,250 individuals suggesting a breeding population of between 700 and 1,000 pairs, while the peak wintering population exceeded 7,600 individuals. These increases are expected to continue. Reports of neck-collared individuals suggest that the Shetland wintering population comprises both resident birds and migrants from Iceland, and there is evidence to suggest that in cold winters a proportion of these birds move further south. As the population of Greylag Geese continues to increase in both abundance and distribution in Shetland, conflict with the agricultural sector can be expected to increase.

Introduction

The only native wild goose breeding in Britain is the Greylag Goose *Anser anser*. The nominate subspecies breeds in Iceland, north-west and central Europe and Scandinavia, with a second subspecies *A. a. rubirostris* breeding from eastern Europe across Asia. Ring recoveries and sightings of marked birds have established that the migrants passing through Shetland and some wintering birds originate from Iceland (Pennington *et al.* 2004). The number of autumn migrant and wintering Greylag Geese has increased markedly in Shetland since the 1960s and birds, presumed to be of Icelandic origin, colonised the islands in the mid-1980s (Pennington 2000).

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The breeding population has also increased markedly in recent years, and in parallel with these increases, conflict between geese and the Shetland agricultural sector has heightened. This culminated with applications for six licences to shoot geese in the close season in spring 2010, four of which were granted, and two licences issued in 2011 (Scottish Government Rural Payments and Inspections Department (SGRPID)). In order to try and inform this debate and consider possible future management of Greylag Geese in Shetland it was considered important to try and gain accurate estimates of both the post-breeding and wintering population size, and to establish whether Shetland's breeding Greylags are resident in the islands. This paper attempts to answer these questions by reporting on these surveys and the preliminary results from a sample of birds marked with neck collars in July 2011.

Changing status in Shetland: autumn and winter

As the Icelandic breeding population of Greylag Geese increased markedly from the 1960s to the early 1990s (Hearn & Mitchell 2004) the number of autumn migrants recorded in Shetland also increased. On Fair Isle, where the observatory maintains a daily log, the number of migrants passing over/through the island has increased markedly, although with some annual variation probably as a result of differing weather patterns during migration.

As the number of migrants passing through Shetland increased, so did the wintering population. During the 1970s, small flocks of up to 60 wintering birds were recorded, usually in the south Mainland in the vicinity of the Loch of Spiggie. Numbers showed a slight increase during the 1980s, with the first significant wintering flock of 250 birds in the south Mainland during the winter of 1990/91. The south Mainland wintering flock increased, with 620 present in 1998/99, by which time smaller wintering flocks had become established elsewhere (Pennington *et al.* 2004). In 2005–06, the Shetland-wide wintering population was estimated to be between 2,000 and 3,000 birds (Harvey 2007).



Plate 165. Clutch of six eggs in Greylag Goose nest, Unst, Shetland. © Mike Pennington

Breeding history

The initial colonisation of Shetland by the Greylag Goose is described in detail by Pennington (2000). There is no historical evidence to suggest that the Greylag Goose bred in the islands until a pair probably nested on Foula in 1970. The first confirmed breeding record was on Unst in 1985, although it is likely that the species had bred there previously in at least 1981 and 1983. By 1998–99, breeding had also been confirmed on Fetlar, Yell and in the north, west, central and south of Mainland, with a total of between 80 and 100 breeding pairs and a post-breeding population of about 500 individuals (Pennington 2000). This had increased to around 120 breeding pairs in 2003 (Pennington *et al.* 2004) and a conservative estimate of between 150 and 200 breeding pairs, and a post-breeding population of *c.*1,500–2,000 individuals in 2006 (Harvey 2007).

Surveys in 2009–2011

In order to produce accurate estimates of both the post-breeding and wintering Greylag Geese in Shetland, the Shetland Biological Records Centre, in conjunction with the Shetland Bird Club and the Wildfowl & Wetlands Trust, organised a series of surveys. Post-breeding birds were counted during 24–29 August 2009 and 6–10 September 2011 and surveys of wintering birds were conducted on 4–5 December 2010 and between 29 November and 2 December 2011.

Count methodology

It is not practical to census breeding Greylag Geese in Shetland. Many breeding sites are relatively inaccessible and in some breeding areas it can be difficult to establish whether individuals refer to breeding birds or non-breeding birds. Such a census could also result in unacceptable disturbance to several Schedule 1 species that breed in Shetland.

However, several years of observations indicated that in late summer (August and September), after adults complete their wing moult and before any Icelandic migrants arrived, post-breeding flocks gather on areas of permanent pasture and re-seeds, often in the vicinity of breeding areas. Casual observations also indicated that many of these same fields are also used for feeding during the winter months. In addition, fieldwork on moorland habitats in August and September (during Red-throated Diver *Gavia stellata* survey work and in response to development proposals) and winter atlas work suggested that few Greylag Geese use moorland for feeding during the late summer and winter. A small number do occur on offshore holms during the winter months, but for logistical reasons these were not covered during these surveys.

Table 1. Numbers of Greylag Geese recorded on surveys undertaken on Shetland in 2009–11.

Area	24–29 Aug. 2009	4–5 Dec. 2010	6-10 Sep. 2011	29 Nov2 Dec. 2011
Unst	981	736	788	728
Fetlar	387	290	209	322
Yell	266	109	404	679
North Mainland	894	237	889	595
Muckle Roe	83	58	66	126
Central Mainland	438	173	1,330	993
Whalsay	51	73	93	176
Bressay & Noss	37	8	0	0
West Mainland	796	215	1,034	960
Papa Stour	0	81	26	55
Foula	0	116	8	137
Burra & Trondra	27	26	34	103
South Mainland	669	1,712	365	2,555
Fair Isle	4	104	1	244
Total	4,633	3,938	5,247	7,673

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Most areas of grassland in Shetland are viewable from tarmac roads, while large areas of re-seeded ground are usually serviced by passable hill tracks. Therefore it was decided to focus efforts on counting these areas in late summer and winter. This had the added advantage of making counts repeatable in future years, so that future trends can be more accurately estimated. As re-seeding of hill land in Shetland has now stopped, it seems likely geese will favour these areas in forthcoming years, although we acknowledge that this 'look-see' approach to monitoring is less statistically robust than undertaking a random stratified survey across Shetland.

A team of between 15 and 20 volunteers was assembled to undertake each of the four surveys reported on in this paper. Each counter was given a specific area to survey. All areas visible from the roads and passable tracks were checked for geese and, where possible, counts were made on the same day to minimise duplication. Table 1 shows the results of these counts, with the distribution of post-breeding and wintering Greylag Goose in 2011 shown in Figures 1 and 2 respectively.

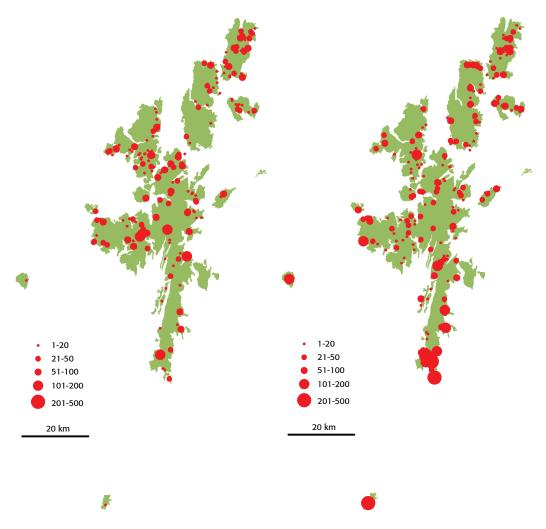


Figure 1. Distribution of Greylag Geese in Shetland on 6–10 September 2011.

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Figure 2. Distribution of Greylag Geese in Shetland on 29 November–2 December 2011.

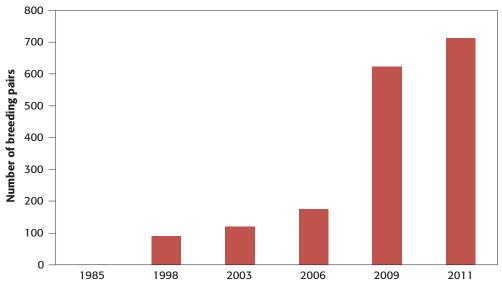


Figure 3. Estimated number of pairs of Greylaq Geese breeding in Shetland (see text for details).

Post breeding counts and distribution

The post-breeding totals of 4,633 geese in 2009 and 5,247 in 2011 suggest a continued increase in the breeding population and that the geese are widely distributed throughout Shetland. However, the 2011 count is only 13% higher than the 2009 count. Considering the potential variability in counts undertaken using the 'look-see' approach (see methodology), this apparent increase needs to be treated with caution.

Small samples of geese were studied in more detail by CM to provide data on the proportion of juveniles and the average brood size. In 2009, 41.6% were juveniles (n = 238), and extrapolating from this figure suggests that 1,927 goslings were present among the total 4,633 birds. The mean brood size was 3.09 suggesting the total breeding population numbered around 624 successful pairs in 2009. In 2011, 23.9% were juveniles (n = 109), with a mean brood size of 1.76 young. This confirmed casual observations that 2011 had been a less successful year for breeding Greylag Geese in Shetland. Extrapolating in the same way would suggest a breeding population of around 713 successful pairs in 2011 (Figure 3). These estimates, however, take no account of failed breeders and as such they represent minimum estimates for the number of breeding pairs.

In a detailed study of Greylag Geese breeding on South Uist in the Outer Hebrides, it was found that the proportion of failed nests (pairs) varied between 30 to 50% annually (Newton & Kerbes 1974). We need to exercise caution in applying these figures generated 40 years ago in another area of Scotland to Shetland but if we use a failure rate of 30% then the post-breeding surveys would suggest that the total number of breeding pairs in Shetland was *c.*900 in 2009 and *c.*1,000 in 2011.

Casual observations made in spring by PVH during moorland breeding bird surveys in various parts of mainland Shetland suggest that the non-breeding population in the islands is higher than these estimates of breeding pairs would suggest. Flocks of 10-30 birds, occasionally larger, are often associated with areas of moorland where several pairs of Greylag Geese breed in relatively close proximity. We therefore consider that the current breeding population in Shetland is somewhere between 700 and 1,000 pairs. This suggests that the Greylag Goose breeding population in the islands increased at the rate of c.17-20% per annum between 1999 and 2011.

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Wintering counts and distribution

Winter counts were undertaken using the same methodology and routes as the post-breeding counts. In 2010, snow fell in Shetland in the last week of November, and December was an exceptionally cold month by recent standards with a series of snowfalls and heavy frosts. It was evident that by the count date of 4 December many geese had moved from their normal winter haunts. The hard weather also limited access on some roads, but good coverage was still obtained. The final tally of 3,938 birds was much lower than expected and it seems highly likely that some birds had already moved south from Shetland in response to the hard weather.

In contrast, the weather in November 2011 was exceptionally mild and there is no evidence to suggest that wintering birds had left Shetland. The total count of 7,673 individuals was considered to be a good indication of the peak wintering population in the islands. Counts of sample areas made on 25 February 2012 produced a total of 3,475 Greylag Geese. This is just 15% lower than counts of the same areas undertaken in the full census in November 2011 (4,096 geese). These counts suggest that in mild winters most geese remain in Shetland throughout the winter; winter mortality might be expected to account for the 15% difference noted.

It is interesting to compare the post-breeding and wintering abundance and distribution of Greylag Geese in Shetland (Figures 1 and 2). The main change in abundance occurred in the south Mainland where far more winter than were present in post-breeding flocks. This is perhaps not surprising as flocks have traditionally wintered here, where relatively rich soils influenced by calcium rich wind-blown shell sand and/or underlying Old Red Sandstone give rise to some of the best grazing in Shetland, and several large freshwater lochs are present where the birds can roost.

Neck-collared birds

On 16 July 2011, a small sample of moulting adult and juvenile Greylag Geese were captured at Loch of Clumlie in the south Mainland by CM and members of the Shetland Ringing Group (Okill 2011). Of these, nine were marked with neck collars, the other four being too small, were fitted with coloured leg rings. Eight of the nine collared birds were recorded subsequently. Two were shot on 2 September, the day after the start of the shooting season. A further five were recorded in September, with two still being reported in late November and one present until at least mid-February. All these sightings were within 5 km of the ringing site and no reports have been received from elsewhere. These observations along with the post-breeding and wintering counts undertaken in 2011 suggest that the wintering population of Greylag Geese in Shetland comprises both presumed resident birds and immigrants from Iceland. Results from marking breeding Greylag Geese in the Inner and Outer Hebrides indicate that birds there are essentially sedentary tending to winter close to breeding areas (Trinder et al. 2010a).

It is planned to undertake further catches of post-breeding geese in the next few years to build up a bigger sample of neck-collared individuals. This should help us understand what proportion of our summering birds, if any, leave Shetland during the winter.

Reasons for change in status

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There are several factors that may account for the increase in the number of migrant and wintering Greylag Geese in Shetland and the establishment and subsequent success of a breeding population in the islands.

The increase in the Icelandic population of Greylag Geese led to more migrants occurring in Shetland, although the Icelandic population stabilised and declined during the 1990s, before increasing again between 2000 and 2010. The tendency towards milder winters in Shetland since the late 1980s (D. Wheeler pers. com.) will have rendered conditions more favourable for geese to

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remain for the winter by increasing the amount of food available by extending the growing season for food plants. In addition, more intensive management of in-bye grassland, especially in the vicinity of some of Shetland's larger mesotrophic lochs e.g. the Loch of Spiggie, will have proved attractive to migrating geese, encouraging them to winter in the islands.

Changes in agricultural practice were also a key factor in encouraging colonisation and the subsequent growth of the breeding population. Between the late 1970s and mid-1990s, grants for re-seeding hill land were available to crofters from the Government (Crofting Counties Agricultural Grant Scheme) and the Local Authority (Agricultural Improvement Grants). This resulted in the apportionment of land from common grazings and its subsequent improvement. As a consequence, the area of grassland in Shetland, excluding rough grazing, increased from 7,338 ha in 1971 to 18,618 ha in 1994 (Shetland Islands Council 1996). Many of these apportionments were set in relatively undisturbed areas of hill land throughout the islands. This created a mosaic of heather moorland, improved grassland and freshwater lochs, perfect habitat for breeding Greylag Geese: moorland for nesting, good grazing in relatively undisturbed areas to feed goslings and freshwater bodies for safety. In effect the landscape could not have been managed in a more effective way to encourage Greylag Geese to breed in Shetland.

Conflict with agriculture

After the initial colonisation of Unst and the subsequent population increase there, local crofters expressed a degree of discontent regarding the use of re-seeds by post-breeding and wintering geese and some illegal shooting of Greylag Geese during the close season occurred (Pennington 2000). In recent years, the agricultural community have made representations regarding goose damage to a number of organisations including the SGRPID, Scottish Natural Heritage (SNH) and the Royal Society for the Protection of Birds (RSPB). Grazing damage to permanent and re-seeded grassland, a reduction in soil quality and/or loss of vegetation due to foot-paddling, damage to commercial root crops (carrots and neeps) and forage crops (neeps) have all been cited. Various scaring mechanisms and shooting during the open season have been undertaken, and in 2010 four licences to shoot geese in the spring, during the close season, were issued to farmers.

Hunting

Greylag Geese are certainly targeted by wildfowlers during the open season. In the winters 2009/10 and 2010/11, over 100 were shot on Fetlar, while in the south Mainland in the region of 500 are shot annually (J. Adamson, G. Fraser, P. Sawford pers. comm.).

Trends elsewhere

Over 95% of the Icelandic population of Greylag Geese are considered to winter in Scotland (Mitchell 2011). This population increased markedly from the 1960s, almost doubling by the early 1990s but it then decreased slightly during the 1990s before recovering in the late 2000s (Trinder *et al.* 2010b). The decline was probably as a result of increased shooting pressure in Iceland, where c.30,000 to 60,000 per annum are shot in late summer and autumn (Mitchell 2011) and the subsequent recovery partly a result of the reduction of shooting in Scotland since the bulk of the wintering population has moved to Orkney (Trinder *et al.* 2010b) where hunting pressure is thought to be less than the areas further south that the birds had vacated.

There has been a major change in the distribution of wintering birds in Scotland since the 1960s with a general redistribution northwards. A rapid increase occurred in north-east Scotland in the 1980s, but key sites there have now been abandoned and this has fuelled a recent spectacular increase in Orkney (Meek 2003 and 2008, Forrester *et al.* 2007). On Orkney, numbers first exceeded 1,000 birds in the winter 1986/87 had increased to 30,126 in November 2002, 67,540 in December 2007 and 80,744 in December 2010 (Orkney Bird

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Reports). Meek (2008) suggested that a combination of a steady warming of the winter climate meant that the high quality grass in Orkney now grows throughout the winter providing the geese with ideal foraging opportunities encouraging them to cut short their autumn migration by 300–500 km.

The breeding population in Orkney is also increasing but at a slower rate than the wintering population. In 2007, it was estimated to be 580 breeding pairs, with a post-breeding population of *c*.5,000 individuals (Meek 2008) but a dedicated post-breeding survey in 2008 yielded a total of *c*.10,000 individuals suggesting that the 2007 figure was an under-estimate with a true figure lying closer to 1,500 breeding pairs (Orkney Bird Report 2008).

It was estimated that Scotland's native post-breeding populations, largely based on the Inner and Outer Hebrides, increased at 12% per annum from the 1980s to 1997 (Mitchell *et al.* 2011) although these populations have decreased since 2004/05, despite high breeding success, as a result of the increasing number shot under licence to reduce agricultural conflict.

In the Faroe Islands, lying some 350 km north of Shetland, the breeding population of Greylag Geese numbered just 2–10 pairs in 1981. In the late 1980s, a steady increase began with a total of c.250 pairs present by 2005 (Jensen 2006) and c.300–350 breeding pairs by 2011. The wintering population also increased, numbering c.500 to 1,000 in 2005/06 but geese are heavily persecuted in Faroe with adults, goslings and eggs all taken by humans (Jensen 2006).

Future population size in Shetland

Surveys undertaken in 2011 suggest that the post-breeding population of the Greylag Goose in Shetland now numbers a minimum of 5,250 individuals and the peak wintering population some 7,600 individuals. It seems likely that these populations will continue to increase in the future unless management measures are introduced, possibly including the issuing of licences to shoot in the close season, or hunting pressure increases in the open season. We consider it unlikely, however, that the increase in the wintering population will match that shown in the adjacent island group of Orkney.

Whether Scottish wintering birds continue to winter further north remains to be seen. The area of improved grassland in Orkney is around 49,000 ha (Churchill *et al.* 2009) nearly twice that in Shetland; Orkney lies on Old Red Sandstone, so the quality of much of this grassland far exceeds that available in most of Shetland. It therefore seems unlikely that Shetland will face similar increases in the wintering population to those experienced in Orkney.

The presence of both resident breeding Greylag Geese and wintering birds from Iceland in Shetland also poses problem for future monitoring. Establishing the number of both populations necessitates two surveys; one at the end of the summer (before the Icelandic migrants arrive) and another during mid-winter. Both are labour intensive and probably only likely to be carried out periodically unless funding is secured to cover costs. Further marking will help establish what proportion (if any) of the summer population leaves the islands.

Acknowledgements

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The subspecies of Guillemot on the British List

A.G. Knox

Uria aalge hyperborea, the northern race of the Guillemot, has been claimed to have occurred in Britain on a small number of occasions, but the race is not at present on the British List. The validity of the race was recently reviewed by the Taxonomic Sub-committee of the British Ornithologists' Union Records Committee, which concluded that hyperborea should be treated as a synonym of U. a. aalge. This paper examines the evidence for the occurrence of northern birds in Britain, concluding that, while an unknown number of birds from the far north undoubtedly occur, very few individuals can safely be distinguished from Scottish-breeding birds.

The Guillemot (Common Murre) *Uria aalge* has a wide geographic range and a number of subspecies distributed across the north Pacific and north Atlantic Oceans. There are five currently accepted races (Cramp 1985):

hyperborea, Norway north of c. 69°N, coast of Murmansk, Bear Island, Spitsbergen, and Novaya Zemlya

 $\it aalge$, eastern Canada, Greenland, Iceland, Faeroes, Scotland north of c. 55°38'N, Baltic, and Norway north to c. 69°N

albionis, Britain south of c. 55°38'N, Ireland, Helgoland, Brittany, and western Iberia *inornata*, North Pacific

californica, California

A number of other races, no longer recognised, have been described in the North Atlantic, including: syiloptera. Faroe Islands

intermedia, Baltic Sea (see also Peterz & Blomquist 2010 for a recent review)

helgolandica, Helgoland, Germany

ibericus, Berlengas Islands, Portugal

Wijs (1978) and Glutz von Blotzheim & Bauer (1982) recognise only *aalge* and *albionis* in the Atlantic, both of which breed in Britain: *albionis* north to Ailsa Craig, Sanda and Mull of Kintyre on the west and to Northumberland in the east, and nominate *aalge* to the north of this (BOU 1971b, Harris & Wanless in Forrester *et al.* 2007). In addition, it has been claimed on a number of occasions that *hyperborea* occurs in Britain as a rare visitor.

Geographic variation

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In the Atlantic, the colour of the upperparts, head and neck is paler in the southern *albionis*, darker in nominate *aalge*; birds from Bear Island and northern Fenno-Scandia (*hyperborea*) are the darkest. By way of contrast, in the Pacific, northern birds are paler than those in the south. Flank streaking and heavy spotting on the under wing-coverts is particularly noticeable in birds from Shetland, the Faroes and Bear Island, less so elsewhere in Scotland and Iceland, and much reduced or absent in the rest of Britain and the Baltic (and the Pacific) (Cramp 1985). However, under wing spotting is notoriously variable.

Size variation is 'more or less clinal or irregular' (Cramp 1985, Table 1). Wing and tarsus length increase northwards. Bill length is less predictable: birds from Shetland, the Baltic and Bear Island tend to be long-billed; other birds in the eastern North Atlantic are less so. Although bill depth is reported to show no distinct trends, the deepest bills on average are found in Bear Island.

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Table 1. Wing lengths of Guillemot in the north-east Atlantic (Cramp 1985).

		male			female					
		mean	min	max	n	mean	min	max	n	
albionis	Britain & Ireland	196	191	203	8	195	190	200	6	
aalge	Faroes	204	194	209	16	206	198	218	20	
hyperborea	Bear Island	212	208	219	11	216	210	225	10	

Geographic variation has been studied in some detail for large parts of the Guillemot's North Atlantic distribution. Pethon (1967) examined a sample of Norwegian birds and was of the opinion that *hyperborea* did not breed in Northern Norway (c.f. Cramp 1985). He further concluded that the Atlantic races of Guillemot failed to meet the 75% rule¹ often used to determine the validity of subspecies (though his data for *albionis* was poor). Jones (1988) documented the cline in wing length in most of the European populations. A correlation between wing length and darkness of upperparts has been demonstrated, but there was insufficient resolution in the cline for it to be useful in the identification of source areas for winter oiling casualties (Anker-Nilssen *et al.* 1988). Birds from Jan Mayen have been called *hyperborea* but the wing length is shorter than would have been expected for that race (though the sample size was small, Camphuysen 1989). More recently, Camphuysen (2007) assembled data from various sources to illustrate the cline in wing length in the NE Atlantic, and Barrett *et al.* (2008) reported measurements from nine colonies in the Barents and Norwegian Seas. In comparisons with data from other studies they again showed clinal variation, but were able to assign 'unknown' birds only approximately to origin.

Molecular variation

There have now been several studies of molecular variation in the Guillemot. Examining the mtDNA control region, Moum & Arnason (2001) reported low genetic diversity and a lack of geographic structure in the north Atlantic. Cadiou et al. (2004), using highly polymorphic microsatellite markers from more than 600 birds from 19 breeding colonies found little genetic differentiation among north-east Atlantic Guillemot colonies. Colonies sampled ranged from France to northern Norway, and from Ireland and the Faroes to the Baltic. Using data from a number of studies they also plotted (their Figure 3) the clinal variation in wing length in 12 colonies from Portugal to Bear Island and northern Norway. In a related study, Riffaut et al. (2005) studied six microsatellite markers in birds from 22 colonies in the North Atlantic. They, too, found a low level of genetic differentiation between colonies, though there was some evidence of a pattern of isolation by distance, but populations were only weakly structured, even at large spatial scales. Morris-Pocock et al. (2008) looked at the mtDNA control region, four microsatellite loci and four intron loci to study the genetic structure of populations in the northern Pacific and the northern Atlantic. As noted in previous studies, the Pacific and Atlantic populations were differentiated and were estimated to have diverged during the Pleistocene. Morris-Pocock and his colleagues also found structuring in populations on the two sides of the Atlantic and, to a lesser extent, into low-arctic and boreal groups in the east Atlantic. They concluded that there was little genetic support for the current division of Atlantic birds into races, though they conceded that this should not be based on genetic criteria alone.

Exchange between breeding colonies

(mainly as summarised in Harris & Swann in Wernham et al. 2002)

Although Guillemots are highly philopatric, there is much interchange between breeding colonies. This could reduce differentiation between populations, and perhaps named subspecies. In their third and fourth year, many Guillemots visit other colonies. At the Isle of May in one year, 51 birds were found originating from most of those British and Irish colonies where much ringing

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¹ Whereby 75% of one population should be distinguishable from 99% of the other (e.g. Patten & Unitt 2002; see also Knox 2007).

had been done; most were not seen again. Also at the Isle of May, at least 25% of the young reared there later bred elsewhere. Four chicks ringed in Orkney and Shetland colonies have been found as far north as Hornøya, Norway (70°N), when old enough to be breeding (and one was breeding), and singles at two Baltic colonies. A chick ringed in the Baltic bred at Skomer.

In addition, some birds ringed as chicks within the range of *albionis* have been found breeding within the range of *aalge* and *vice versa* (Harris & Wanless in Forrester *et al.* 2007). A total of eight birds ringed at colonies further to the north have now been found breeding at the Isle of May (M.P. Harris & S. Wanless pers. comm.). There is clearly significant movement between sometimes widely separated colonies. This degree of colony exchange is likely to contribute to the largely clinal plumage and biometric variation in the Guillemot (Cramp 1985).

The subspecies hyperborea and the British List

The race *hyperborea* made its appearance on the British List in 1971 on the basis of a bird ringed as a breeding adult at a colony at Murmansk, Russia, recovered in Durham in May 1950 (BOU 1971b). The latter further notes: 'since December 1965 several specimens resembling this race have been identified in Aberdeen, north-east England and Cornwall, suggesting that the subspecies occurs regularly in small numbers'. Bourne *et al.* (1967) had found that from amongst the *Torrey Canyon* casualties (in Cornwall) there was one bird which was conspicuously larger (wing 215 mm) and suggested that this was probably *hyperborea*, and they also referred to a number of birds 'as large as this race' from north-eastern English beaches in 1966 and 1967. Bourne *et al.* also noted that heavily marked underwings, as reported for the claimed race *spiloptera*, occurred in approximately 10% of *aalge* and *albionis*. Parrack (1967), writing about the wreck in north-east England early in 1966, had noted several large birds which he suggested may have been *hyperborea*.

The BOURC 6th Report in 1971 introduced the concept of categories to the British List, including Category D (a holding category) for tideline corpses (as well as ship-assisted birds and where there was doubt that birds had occurred in a wild state; BOU 1971a). Up to this, records of species based on tideline corpses had been eligible for admission to the List. Although originally applied at the species level, the Category D principles were duly extended to subspecies. In the 16th Report, it was noted that *hyperborea* was only known from tideline corpses and that the race should be treated as being in Category D3 (and thus removed from the British List; BOU 1992). In the 25th Report in 1999, the Committee changed the definition of the categories, including Category D, so that tideline corpses could be judged as eligible for Category A if they were deemed to 'have been recorded in an apparently natural state ...', even if dead, i.e., if judged to have arrived naturally and died within British waters (BOU 1999). By mistake, *hyperborea* appeared again in Category A in the 7th Checklist (BOU 2006), and was deleted altogether in the 37th Report in 2009, with a note that records would be reviewed for possible admission to Category A (BOU 2009).

Since the 1971 BOU Check-List (BOU 1971b), the race *hyperborea* has thus been suspected of occurring on several occasions. Recently, Harris & Wanless (in Forrester *et al.* 2007) noted corpses of *hyperborea* reported on the Scottish east coast, including one at St Cyrus (North-east Scotland) in 1980 (information from the 1980 *Scottish Bird Report*) and at Rattray (North-east Scotland, Bourne 1968). Large birds have also been found dead in Shetland (Pennington *et al.* 2004).

Information is not available for all of the historic or more recent claims, but some can still be re-examined. The *Torrey Canyon* bird (Bourne *et al.* 1967) was not retained. Nor were those from Parrack (1967). Of 12 large birds mentioned by Bourne (1968), skins were retained of three: Aberdeen University: ABDUZ 1966/1/36, ABDUZ 1967/1/39, ABDUZ 1967/1/40. The last mentioned is the largest of the original dozen, with a wing of 213 mm and a massively deep bill (depth at the gonys, 15.7 mm, Plate 166).

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Plate 166. Guillemot, Rattray, North-east Scotland, 1967, bill depth 15.7 mm (University of Aberdeen ABDUZ 1967/1/40, below) and typical albionis (above). © Alan Knox

Concerning the St Cyrus individual, Norman Atkinson, County Recorder at the time, has no information on this bird (and cannot recall the record), and no measurements are available, making this record unsustainable.

The Shetland birds mentioned in Pennington *et al.* (2004) specifically include three with wing lengths of 221 (February 1984), 222 (February 1994) and 225 mm (January 1985). Raw data from the 1994 wreck in the Northern Isles (Table 2, Figure 1) showed two birds from Shetland with wing 222 mm (including the one noted above), and five deep-billed birds with gonys > 15 mm (15.1, 15.1, 15.2, 15.2, 15.3 mm). Two birds from Orkney at the same time had bill depths of 15.2 and 15.7 mm.

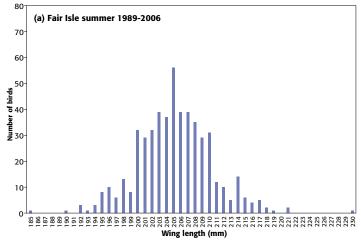
Table 2. Wing lengths of Guillemot from the Northern Isles (not sexed; data made available by Fair Isle Bird Observatory and SOTEAG).

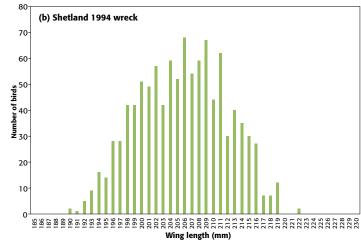
	mean	SD	min	max	n
Fair Isle, June-July 1989-2006	205.2	5.2	185	230	514
Shetland 1994 wreck	205.7	6.2	190	222	1,041
Orkney 1994 wreck	203.2	5.8	198	218	332

Are these large birds from outside Britain?

Wing lengths are given for the three races by Cramp (1985, Table 1). However, the situation is more complicated because of the cline, significant differences between measurers and sample sizes (see references above). Measurements of live summer adults from Fair Isle in 1989–2006 (Table 2, Figure 1) show wing lengths of 185–230 mm, with large birds as follows: 215 mm (6), 216 mm (4), 217 mm (5), 218 mm (2), 219 mm (1), 221 mm (2) with one extreme outlier (perhaps in error) of 230 mm (data from Fair Isle Bird Observatory). A sample from Fair Isle in 2008 (n = 23) gave bill depth at gonys of 12.4–14.9 mm (mean 13.5 mm, SD \pm 0.6 mm) (data from D. Shaw/Fair Isle Bird Observatory).

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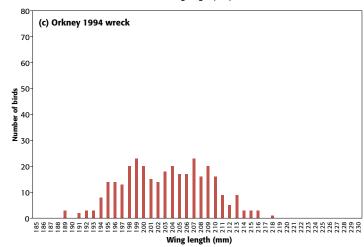


Figure 1. Wing lengths of Guillemot from (a) Fair Isle, June–July 1989–2006, (b) Shetland 1994 wreck, and (c) Orkney 1994 wreck.(Data made available by Fair Isle Bird Observatory and SOTEAG.)

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This suggests that the few largest claimed very hvperborea only marginally exceed the range measurements of nominate aalge found in summer at Fair Isle (excluding the 230 mm Fair Isle wing measurement): one at Rattray in 1967 based on gonys (15.7 mm), two from Orkney (gonys >15 mm) and eight from Shetland (three with wings of 222-225 mm and five with gonys > 15 mm). With the large Fair Isle samples to compare them to, the measurements of most claimed records of hyperborea seem less remarkable, and the possibility of assigning them to an extreme northerly origin, while plausible, is less confident. The Durham ringing recovery has shown that birds from as far north as Murmansk do occur in Britain, but the information currently available at present is insufficient to say how often this takes place.

Discussion

Genetically, there is insufficient structuring in the Atlantic support to named races. Guillemots in the northern part of the eastern north Atlantic (nominate aalge-hyperborea) are strongly clinal in the darkness of the upperparts (darker to the north) and in most measures of size (larger to the north). The amount of streaking and spotting underneath is also clinal (more to the north) but highly variable, with many birds from northern populations showing few streaks and spots and some birds in southern colonies

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being well-marked. There does not appear to be any step or discontinuity in the cline in plumage colour such that a meaningful boundary between *aalge* and *hyperborea* could be inferred. Similarly, there does not appear to be any particular point in the *aalge-hyperborea* size cline at which a step can be detected, though the more northerly breeding birds are clearly larger on average. There are no grounds to treat *hyperborea* as a separate race and it should be treated as a synonym of nominate *aalge*. This view was recently adopted by the Taxonomic Sub-committee of the BOU Records Committee (BOU 2011). Individuals from the far north of the range of the species certainly turn up in Britain, and exchange occurs between British colonies and colonies in northern Norway. Only a very small number of large birds in winter exceed the measurements of summer birds at Fair Isle, but their origin remains unclear in the absence of further ringing recoveries.

There may be a step in the colour cline which currently defines the races *albionis* and *aalge*, but this has not been quantitatively established. The situation is complicated by the extent to which birds visit non-natal colonies within the ranges of their own and other currently defined races in their third and fourth years, and some remain to breed. Despite this genetic interchange, it seems that most birds breeding within the stated ranges of *albionis* and *aalge* (*sensu stricto*) are identifiable to race. In the meantime, the colour differences between *albionis* and *aalge* suggest the former should be retained, pending a detailed review of the cline through Britain.

Acknowledgements

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Hebridean Song Thrush: a centenary review of mainland occurrences

R.Y. McGowan

Published occurrences of Hebridean Song Thrush from locations outside the Outer Hebrides were reviewed. Ornithologists such as E.R. Paton, N.F. Ticehurst, H. Whistler and R. Meinertzhagen (and possibly A. Hazelwood and E. Gorton) appear to have confused darker clarkei-type individuals for genuine Hebridean birds; in consequence, reliable evidence for Hebridean Song Thrushes having occurred elsewhere in Britain is lacking.

Introduction

One hundred years ago William Eagle Clarke described the generally darker, more heavily spotted subspecies of Song Thrush that breeds in the Outer Hebrides. He named it *Turdus philomelos hebridensis* (hereafter simply *hebridensis*) and wrote that these birds were permanent residents in the Outer Hebrides (Clarke 1913).

A few occurrences of the subspecies outside the breeding season were mentioned by Baxter & Rintoul (1953), who also remarked that '... migration routes and winter quarters need further study'. Even today, however, little information exists on non-breeding status and distribution (Forrester *et al.* 2007).

The 1922 Ayrshire record

The only specimen record of *hebridensis* on the Scottish mainland is that of a bird shot by Edward Richmond Paton at Hareshawmuir, Ayrshire on 7 October 1922 and donated to the Dick Institute, Kilmarnock (Paton 1923, 1925). Paton's 1923 account explicitly states that he saw thrushes (Song Thrushes and Redwings *Turdus iliacus*) on 6 October, and that he shot birds on the 7th; these dates have become mixed up subsequently, with 6 October mistakenly appearing as the collection date. This error was initially made by Paton himself and then repeated by later authors (Paton 1925, Paton & Pike 1929, Baxter & Rintoul 1953, Forrester *et al.* 2007). The display label associated with the bird states 7 October (see below).

During preparation of *The Birds of Scotland* (2007), an attempt was made to check the identification of the Ayrshire specimen at the Dick Institute, but it was untraceable at that time (J. Sutcliffe pers. comm., Forrester *et al.* 2007). I later learned that this specimen was held at Doncaster Museum & Art Gallery (accession number DONMG ZZ1041) having been transferred with other material from Kilmarnock in 1963. The curator at Doncaster considered that the bird did not exhibit the characteristics of *hebridensis* (M. Limbert pers. comm.).

In January 2012, I borrowed the Ayrshire specimen in order to compare it with skins of *hebridensis* and mainland breeding birds (*T. p. clarkei*). The display label (ex Dick Institute) associated with the mounted bird states

Hebridean Song-Thrush, male Turdus ph. hebridensis Hareshawmuir 7/10/22 First ever got out of the islands

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Plate 167. Ventral view of two Hebridean Song Thrush T. p. hebridensis skins (left) with the Ayrshire bird (DONMG ZZ1041, right). © National Museums Scotland / Doncaster Museum Service



Plate 168. Dorsal view of two Hebridean Song Thrush T. p. hebridensis skins (left) with the Ayrshire bird (DONMG ZZ1041, right). © National Museums Scotland / Doncaster Museum Service



Plate 169. Ventral view of two Song Thrush skins of the form 'catherinae' from Lanarkshire and Renfrewshire (left) with the Ayrshire bird (DONMG ZZ1041, right). © National Museums Scotland / Doncaster Museum Service



Plate 170. Ventral view of two Song Thrush T. p. clarkei skins from Sussex (left) with the Ayrshire bird (DONMG ZZ1041, right). © National Museums Scotland / Doncaster Museum Service

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Even at first glance, I did not consider that the Ayrshire bird showed the characteristics of *hebridensis*. Rather, it was a typical mainland breeding bird and this was confirmed by comparison with skins in National Museums Scotland (NMS) (Plates 167 and 168). Given the existence of the associated display label, there is no reason to believe that the specimen is not the one shot by Paton. It is perhaps possible to consider Paton's opinion in a little more depth.

Paton's consideration of *hebridensis* stemmed from the 'small, dark Thrushes' seen by him annually around October from 1919 to 1922 (Paton 1923). His collected specimen was examined by Norman F. Ticehurst (co-editor of *British Birds*) who agreed it was 'undoubtedly' Hebridean (comment following Paton 1923). Ticehurst reported that the Ayrshire bird could be 'picked out at once from a large series of British and Continental birds, both by the more intense blackness of the spots on the under-side and by its darker brown wing feathers, tail and back'.

However, Paton erred in believing that relatively small size was a pointer to *hebridensis* as it is comparable in size to *clarkei* (Clarke 1913). Further, there is no indication that Paton had ever seen genuine *hebridensis*, though he presumably would have been aware of the characteristic heavier spotting to the underside. Ticehurst compared the bird with a series from the British mainland (*clarkei*) and the Continent (nominate *philomelos*). Yet he made no reference to direct comparison with Hebridean material, and we may reasonably assume that this did not take place. These two taxa are generally lighter in colour and less heavily spotted, more extremely so in nominate *philomelos*. It is likely therefore that a somewhat darker, more heavily spotted bird would appear distinctive; however, these characters alone are not evidence of *hebridensis*.

Paton's specimen is indistinguishable from other skins in NMS that were collected in Lanarkshire and Renfrewshire (Plate 169), but it is darker and more heavily spotted than skins from Sussex (Plate 170). Because the mount was exhibited for some years, it will have undergone some degree of fading, but it has not suffered any overt bleaching of plumage. Critically, it does not show the features of typical *hebridensis*, namely dark forehead, crown and mantle, greyish rump, dark face and throat and heavy, dark (almost black) ventral spotting.

It is pertinent here to mention that in 1938 Phillip Clancey described a subspecies (*catherinae*) of Song Thrush from the west Scottish mainland, with claimed characters that were intermediate between *clarkei* and *hebridensis* (Clancey 1938). These birds were generally browner and slightly darker than specimens from England. *Catherinae* is now considered a synonym for *clarkei*, though the name may still be used to refer to the western Scottish population (Vaurie 1959, Cramp 1988).

I have used skins from Lanarkshire and Renfrewshire (i.e. 'catherinae') in the image here (Plate 169). Paton's bird is indistinguishable from these yet clearly different from typical hebridensis and clarkei from Sussex. The type locality of catherinae is Cathcart, Renfrewshire, only 20 km from Hareshawmuir. I believe that Paton shot one of these darker intermediates and that he and Ticehurst wrongly concluded that it was hebridensis on the basis of overall appearance rather than on any assessment of specific plumage characters of typical Hebridean birds. Paton's impression of smaller size was in any case immaterial, and in fact the wing length of his specimen (117 mm) is towards the top end for males of clarkei (range 111–118 mm) (Cramp 1988).

H.F. Witherby also remarked on this intermediate form in a foot note to the Hebridean Song Thrush account in *The Handbook of British Birds* (Witherby *et al.* 1938). More recently, Rivers (2009) has commented in detail on individual variation within *hebridensis* and the need for further fieldwork to elucidate its seasonal distribution.

The transfer of Paton's birds from the Dick Institute to Doncaster in 1963 seems slightly odd, given their mainly local significance. Paton's collection was the most important component of *c.* 230 bird

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skins and mounts acquired by Doncaster, together with a range of other natural science specimens (Lomax *et al.* 2011, Limbert 2012). At that time, the Doncaster collections were being moved to a new building and the Director, E.F. Gilmour, was actively building up the study collections. Anecdotally, one method he used was persuading colleagues in other museums to pass on 'surplus' material. It has been suggested that mis-communication at the time resulted in more specimens being released by Kilmarnock than originally intended (L. Nugent, J. Sutcliffe, pers. comm.).

Other Scottish occurrences

Baxter & Rintoul (1953) also mentioned examples of *hebridensis* that were killed at Pladda lighthouse, Arran (Clyde Islands) during autumn and spring. There can be little doubt, I believe, that the ladies were alluding to specimens from Pladda light that entered the collection of Hugh Whistler (Whistler 1939). We might assume that they were familiar with Whistler's published note, but Whistler's collection had been donated to the Royal Scottish Museum in early 1952, so they may well have had direct access to his skins during preparation of their book. Re-appraisal of the Pladda birds has shown them all to be *clarkei*, typical of western Scotland, not *hebridensis* (McGowan *et al.* 2003).

The only other source of Scottish mainland records mentioned by Baxter and Rintoul was John G. Gordon (1875–1938) of Corsemalzie, Whauphill, Wigtonshire. Baxter and Rintoul reported that Gordon had 'no doubt that Hebridean Thrushes pass here... in autumn'. These were sight records only (presumably at Whauphill) of 'dark backed, brightly spotted' birds. As Gordon died in 1938, these reports are at least 74 years old. Moreover, given the known identification errors made by other ornithologists, these records - with their vague descriptions - are impossible to verify and should be rejected.

Occurrence in England

A published record of *hebridensis* concerned a female which died after hitting wires on 5 March 1953 at Hindley, Lancashire (Hazelwood & Gorton 1954). Although the specimen was deposited at Bolton Museum, no trace of it was found during searches in May 2012 (D. Stenhouse pers. comm.). Furthermore, there is no Song Thrush with these particular collection details listed in the museum's accession register. There is one female skin dated 17 March 1953 from Hindley (BOLMG 164.1983/139). This is named simply *Turdus ericetorum* [= *T. philomelos*] on the label with no indication of the subspecies or the cause of death and no sign that the specimen was cited in any published article. It is difficult to see that this skin might be the specimen referred to by Hazelwood and Gorton. Regardless of its provenance, the opinion of curators at Bolton is that this bird is typical of mainland *clarkei*. On the basis of images, I agree with that conclusion. As the identification of the Hindley *hebridensis* cannot now be substantiated, this claim is at best unproven. However, recognising the identification errors made by other ornithologists, perhaps this record should be rejected outright.

There is an earlier reference to this subspecies in England. In a discussion on geographical races of Song Thrush, Richard Meinertzhagen referred to a specimen from Surrey which was 'typical' of *hebridensis* (Meinertzhagen 1947). However, it is now generally accepted that Meinertzhagen's reputation is considerably damaged, and all his extralimital records doubted or rejected (Knox 1993, Garfield 2007).

There is only one Song Thrush from Surrey in the Meinertzhagen collection held at the Natural History Museum (NHM), Tring. The skin (BMNH 1965.M.12937) resembles typical *clarkei*, not *hebridensis* (H. Van Grouw pers. comm.). Accordingly, this record may also be rejected because (a) it appears to be *clarkei* and indeed is named as such on Meinertzhagen's own label, and (b) all of Meinertzhagen's 'extralimital' records are suspect. In addition, the collection date of 7 September (1931) is perhaps early for a dispersing bird from the Outer Hebrides.

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Plate 171. Hebridean Song Thrush, North Loch Eynort, South Uist, May 2012. © Ian Andrews

Other records

Algeria: To complete this review, a few comments must be made on a rather questionable occurrence of *hebridensis* in Algeria (Vaurie 1959, Cramp 1988). This record is based on a *clarkei*-type Song Thrush collected by Meinertzhagen near Algiers in 1931 (Meinertzhagen 1932). Meinertzhagen described it as 'typical ... *T. p. clarkei* - in fact, if anything, it is on the dark side, and is approaching *T. p. hebridensis*', adding that 'it would appear to have been bred on the west coast of Scotland'. Like the Surrey bird, this skin (BMNH 1965.M.12941) is still extant in the Meinertzhagen collection at the NHM. Even if the specimen is genuine, i.e. collected as claimed by Meinertzhagen, it is clearly a *clarkei*-type bird, with no particular tendency towards *hebridensis* (H. Van Grouw, pers. comm.). Regardless of the fact that Meinertzhagen did not explicitly claim it was *hebridensis*, this occurrence in Algeria should be rejected.

Ireland: Occurrences of Hebridean Song Thrush wintering in Ireland are largely anecdotal and are speaking strictly outwith the scope of this article. One, 'with characteristics of *T. e. hebridensis*' was ringed and released on 1 January 1963 at Roscrea, Tipperary (Ruttledge 1964, O. Merne, pers. comm.). Richard Meinertzhagen claimed to have three specimens 'typical of this race' from the Aran Islands (Co. Galway), one from Achill Island (Co. Mayo) and two from Co. Kerry (Meinertzhagen 1947). A few years later it was formally stated by the British Ornithologists' Union's Taxonomic sub-committee (chaired by Meinertzhagen, incidentally) that 'a small proportion of west Irish and west Scottish mainland birds cannot be separated from a small proportion of Hebridean birds' (BOU 1956). Therefore the occurrence of *hebridensis*-type birds in Ireland does not necessarily indicate an origin in the Outer Hebrides. Nevertheless, critical re-assessment of the few specimen records would be worthwhile.

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Doncaster Museum Service, Doncaster Metropolitan Borough Council is thanked for the loan of Paton's specimen; in particular, Martin Limbert confirmed that Paton's specimen was extant and Laura Nugent arranged the loan. Jason Sutcliffe supplied background on Paton's collection at Kilmarnock. Don Stenhouse searched the collection at Bolton Museum and supplied specimen images. Hein Van Grouw provided reference images of skins at the NHM, Tring, and staff at The SOC kindly helped with literature held in the George Waterston Library. Alan Lauder and Oscar Merne assisted with background details on the 1963 Tipperary record.

Stuart Rivers, who has field experience of Hebridean Song Thrush, examined Paton's specimen and agreed with my interpretation. He also kindly commented on an early draft of this paper.

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Plate 172. Shags breed among the large granite boulders behind the Little Ailsa rock stack, Ailsa Craig, Ayrshire, March 2011. © B. Zonfrillo

Increase in breeding Shag numbers on Ailsa Craig, Ayrshire

H.A. Douglas & B. Zonfrillo

Introduction

Despite many centuries of being a major seabird colony, for at least the last 150 years the numbers of Shags *Phalacrocorax aristotelis* breeding on Ailsa Craig, Ayrshire, remained very low. Early records gave "a few pairs" or merely mentioned that some were to be seen around the island. Walker (1868) remarked that only three or four pairs bred but was told that formerly they had been more common. Gray & Anderson (1869) and Gray (1871) recorded the Shag as a breeding species on Ailsa Craig, as did Lawson (1888), but by 1900 Smith *et al.* stated that there was no recent record of the species breeding there. Thirty years later, Paton & Pike (1929) seemed to agree and noted that Ailsa Craig was no longer a nesting site of the Shag.

However, McWilliam (1936) indicated that it may "sometimes nest on Ailsa still", which was probably the first indication that after a long absence Shags had perhaps resumed breeding in small numbers on the island. Gibson (1951) counted 18 pairs in a survey made in the summer of 1950. From irregular counts made on the island during the 1960s, 1970s and 1980s the Shag remained as a scarce breeding bird, with around 10–15 pairs attempting to breed annually (BZ pers. obs.), but never showing any sustained increase. All but one or two of these breeding birds were on cliff sites above the boulder beaches that surround the island. Those few at ground level, or near ground level, such as at the area known as Ashydoo Kirk were seldom successful, while the cliff sites regularly produced young to fledging.

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Nesting numbers and sites

Around 20–30 pairs bred in the 1990s. The main area of colonisation began on the slopes below the west cliffs and below the south cliffs at the area near Little Ailsa, a small near-shore rock stack (Plate 172).

Numbers in 1992 were similar to those in the previous two years, c.20 pairs, with the exception that one pair nested at ground level in a 3 m-deep hole in a slope near Ashydoo Kirk. The pair in the hole continued to breed successfully over the following years (BZ pers. obs.) and may have helped attract other Shags ashore to breed. In 1993, a pair bred under the cliffs further north, with the nest situated under the large granite slabs and boulders not far above high tide mark. From then onwards the numbers of Shags increased along the west side of the island, infilling the area between the two original sites and then spreading south. By 1999, there were c.20 nests along the west boulder beach slopes and ten on the cliff sites. Coincident with this spread, the cliff nesting birds appeared to decline. It is assumed they joined those breeding nearer sea level, since high cliff nest sites would be more awkward to approach in certain weather conditions than those near sea level. After 2001, the cliff sites were not checked regularly following colonisation of the boulder beaches, since they appeared completely abandoned. From 2000 onwards the counts were only of the boulder beach breeders since Shags clearly preferred sites at lower levels.

This colonisation of the boulder beaches and scree slopes has continued to the present day. Shag numbers exceeded 100 pairs for the first time in 2006 and stood at 183 pairs in 2010 (Figure 1).

There has been an interesting trend towards earlier breeding. In 1986, eggs were first noted on 20 July, when only a small number of pairs were breeding high on the cliffs. These may have been re-laid from failed nests, however, since they were very late. By 1991, eggs were seen on 22 May but by 1993, as numbers grew, eggs were noted on 10 May. Since then, the date of first laying has shifted earlier still, as the colony has increased. Two fresh eggs were recorded in a nest on 26 March 2004, the earliest laying record to date.

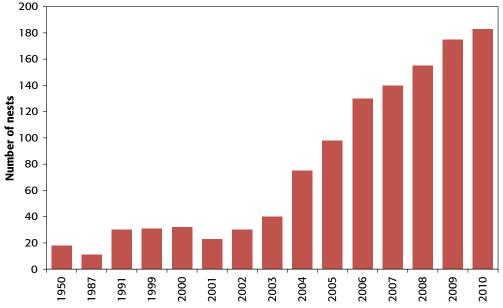


Figure 1. Counts of Shaq nests on Ailsa Craiq, Ayrshire, 1950–2010.

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Plate 173. Shags loafing on Ailsa Craig, Ayrshire, July 2011. © B. Zonfrillo

During the years up to 1990 only one or at most two nests on the cliffs were accessible for ringing. In the 10 years from 1980, only 30 Shags had been ringed on Ailsa Craig at these sites. Often chicks were mysteriously absent from the nest when checked a few days after ringing. Ringing recoveries of fledged young from this period were non-existent. As numbers increased, so the ringing effort increased and 149 were ringed during summer 2009.

Harris & Wanless in Forrester *et al.* (2007) stated that in 1994 severe weather conditions over winter caused a mass die-off of Shags on the east coast of Scotland, particularly from the Firth of Forth colonies. Such a situation was not evident on the west coast at the time and despite some exceptionally stormy conditions over several winters breeding Shag numbers on Ailsa Craig continued to rise.

Reasons for increase in breeding Shags

The increase in breeding Shag numbers on Ailsa Craig is perhaps due to a general increase in breeding numbers at other Clyde Islands. In Ayrshire numbers now breed on Horse Island, Lady Isle and along the south Ayrshire coast, where small numbers have always bred. Increases in numbers breeding on other small Clyde islands such as Little Cumbrae, Inchmarnock and Pladda have been recorded. Legal protection is perhaps a major factor in the reduction of persecution of species such as Shag, which formerly were erroneously blamed for the reduction of commercial fish stocks.

The eradication of Brown Rats *Rattus norvegicus* from the island in 1991 has also had an undoubted effect on the increase in breeding Shags, as well as other species formerly absent (Zonfrillo 2002). Shags may have been preyed upon at either the egg or chick stage by rats. If breeding was suppressed by the presence of rats, this may help explain the low success rate and mysterious absence of young from the few nests that were situated near ground level. However, there were low numbers of breeding Shags before the colonisation of Ailsa Craig by Brown Rats in 1889 (Campbell 1892). Some more open nest sites may have suffered from predation by gulls at a time when gull numbers were very high, but there was no proof of this through observation.

The progressively earlier breeding of Shags recorded on Ailsa Craig correlates with the general increase in breeding numbers in the Clyde Sea Area and presumably the need for nest selection and territory retention in the most favourable sites.

There is much breeding habitat still available to Shags on Ailsa Craig and given adequate food supplies in the surrounding waters and beyond, the increase in numbers should continue.

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Letter: Hunting behaviour of raptors targeting hirundine flocks

Derek Robertson states at the end of the vivid flight accounts contained in his Short Note (Scottish Birds 32: 134–135) that there does not seem to be a description in the literature of mimicry tactics developed by the two raptors concerned, Hobbies Falco subbuteo and Sparrowhawks Accipiter Mavrogordato (1973) - which has some fine plates by George Lodge - wrote in the chapter entitled 'The Wild Hawk' the following: "A small party of starlings was feeding in the middle of a field, when I noticed an ungainly flapping bird approaching them, which gave me the mental impression of a lapwing. It was not until it had covered half the distance separating the starlings from the hedge, that they rose with squawks of terror, while simultaneously the

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approaching bird became a Sparrow-hawk dashing with devastating speed towards them ... This isolated incident lends some support to the theory that a Sparrow-hawk will consciously imitate the flight of some harmless bird of similar size in order to get within striking distance of birds feeding in the open."

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Wren fishing

I had been watching a Wren Troglodytes troglodytes in the early afternoon of 11 March 2012 on the River South Esk, Angus, near Arrat Mill. It went back and forward along a small section of the riverbank, occasionally wading in to drink (Plate 174). It would also sit on a limb just above the river and watch. Several times it flew out to the middle of the river, hovering just above the water and then back to the bank. The depth out there was only a few inches and I wondered what it could be doing. I was then surprised to see the bird hover and pick a small fish, possibly a Minnow Phoxinus phoxinus from the water with its claws (Plate 175). It flew with the fish back to the river bank (Plate 176). I think the Wren had a nest nearby. I did go back several times over the next few days, but did not see this behaviour again; the river had risen and was flowing faster, so conditions had changed.



Plate 174. Wren presumably drinking, Arrat Mill, River South Esk, Angus, March 2012. © Catherine Webster



Plate 175. Wren picking fish from water, Arrat Mill, River South Esk, Angus, March 2012. © Catherine Webster



Plate 176. Wren flying with fish, Arrat Mill, River South Esk, Angus, March 2012. © Catherine Webster

In his monograph on the Wren Armstrong (1955) quotes Scholey (1933) who observed Wrens taking Minnows by paddling and foraging in shallow streams. Cramp (1988) states that the Wren "Occasionally enters water to secure prey, immersing head ... or rarely whole body ... Small fish taken from the water surface (Bagnall-Oakeley 1968)." Amongst food items, he lists small fish and their fry e.g. Minnow, Goldfish *Carassius auratus*.

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Recent changes in a wintering population of Snow Buntings on the Moray & Nairn coast

Trends of breeding populations of a wide range of species are monitored using the Breeding Bird Survey and other projects such as the Constant Effort Scheme and periodic surveys organised by the country agencies under the SCARABBS (Statutory Conservation Agency and RSPB Annual Breeding Bird Survey) agreement. While wildfowl and waders are monitored in winter using the Wetland Birds Survey (WeBS), the position is less comprehensive for passerines. Garden bird surveys provide some index of populations, but these omit a number of wintering species found in the wider countryside which are not covered by systematic surveys, such as Snow Bunting Plectrophenax nivalis.

A decline in the numbers of Snow Buntings wintering in coastal areas and farmland, particularly since the 1970s and 1980s, has been reported (Manson 2002, Pennington et al. 2004, Forrester et al. 2007); this note reports trends at a site on the Moray & Nairn coast in the last 22 years.

Each winter since 1996/97 we have surveyed around 12 km of coastline during the months of October, December, January and February. We counted birds in the coastal merse and

sand-dunes at Culbin and Nairn Bars, between the forest edge of Culbin Forest and the Moray Firth, as part of the Wetlands Bird Survey (WeBS). During this, we censused the number



Plate 177. Culbin Bar, Moray & Nairn. © Alastair Young

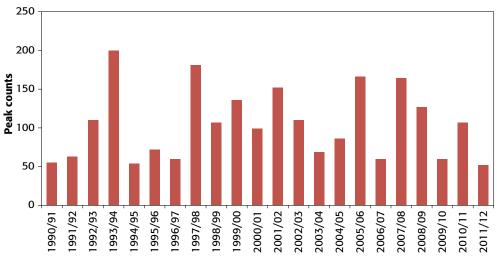


Figure 1. Peak counts of Snow Buntings on Culbin and Nairn Bars, winters 1990/91–2011/12.

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Plate 178. Nairn Bar, Moray & Nairn, January 2012. © David C. Jardine

of wintering Snow Buntings and report here on the peak counts found each winter. Similar data provided by Martin Cook for the site back to winter 1990/91 were also used in our analysis. Counts were low during October and in nine years (of the 16 years of our own survey) no birds were found. The peak counts normally occurred in December (seven years) or January (five years), but also occurred in February in four years. Details of all the peak numbers found are given in Figure 1; there is no evidence of the decline noted in the 1970s and 1980s continuing (r²=0.0002, ns). The mean peak count during 1990/91–2011/12 was 104.

Historically, Cook (1992) noted that the number of Snow Buntings reported from the Bars was usually 100–200. The mean of peak counts from the site during the 1970s and 1980s, when counts were less systematic was 139 birds, with a peak of 420 on 20 January 1984. Our data therefore suggest that there has been a decline from the numbers reported before 1990/91, but there is no evidence of this continuing. The reasons for the decline since the 1980s are unknown, but may be linked to more birds wintering nearer their breeding grounds or a genuine population decline reflecting wider agricultural changes on their wintering grounds.

We thank Mick Marquiss for encouraging us to investigate the data from our counts and Martin Cook for assistance in collating previous counts. Both commented on an early draft of this note.

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Whooper Swan without webbing on its feet





Plates 179–180. Immature Whooper Swan without webbing on its feet, Carbarns Pool, Clyde, April 2012. © David Abraham. (Inset © Jimmy Maxwell)

I first saw this particular immature Whooper Swan *Cygnus cygnus* on 9 April 2012 near Carbarns Pool, which lies in open grassland just east of Baron's Haugh RSPB Reserve, Motherwell, Clyde. On walking up the raised river banking to check the pool, I saw the bird on the grass 20 m away. On seeing me, it flew about 50 m nearer to the pool. As it lowered its feet to land, I noticed the long toes hanging down without webbing between them. The swan landed quite gracefully on the grass; the appearance of its tarsi reminded me of a stork.

It spent most of its time on grass near the pool and seemed to walk quite evenly, lifting each foot to fold the toes before spreading them out for grounding (Plates 179 and 180). Taking off from grass started with the normal accelerating run, with the separate toes held splayed out behind after take-off. When alarmed, it flew towards the safety of the pool, but chose to



Plate 181. Whooper Swan with partial webbing on its feet, Martin Mere, Lancashire, 12 December 2007. © Julia Newth

land, not on the water, but on an isolated spit of mud, from where it waded in and swam without apparent difficulty. However, I noticed that when trying to make any headway, the feet were slightly breaking the surface of the water behind it, and even more so when it was using either foot to change direction, i.e. the feet were slipping through the water rather than pushing against it. When leaving the pool, it chose to wade out rather than fly from the water.

Each winter a flock of Whooper Swans frequents Carbarns Pool, the water area at Baron's Haugh and a variety of local grazing habitats. In 2011/12, the herd peaked at 84. The last report of these birds was in mid-March and it is not known whether this immature swan had been one of that flock.

Malcolm Ogilvie has commented that the lack of webs might cause the bird difficulty in landing as swans typically use their feet as brakes. Eileen Rees of the Wildfowl & Wetlands Trust commented that she has not seen a Whooper Swan with a total lack of webbing before, but did encounter one with partial webs when ringing swans at Martin Mere, Lancashire, in 2007 (Plate 181) and that the cause was probably genetic.

David Abraham, 11 Alexander Path, Motherwell, Lanarkshire ML1 2LL.

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Revised ms accepted April 2012

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Stan Laybourne (1941–2012)

Stan Laybourne died on 8 June 2012 on his 71st birthday. He had endured poor health for many years, something he bore with his usual stoicism. Despite very obvious pain and discomfort, he rarely complained.

Stan was born in Dumfriesshire, where he spent his formative birding years. He would relate how he thought he knew all the local birds, but on joining his first SOC outing quickly realised there was still plenty to learn. He had fond memories of those early days, of the friendly welcome from the Dumfries branch members who taught him so much, and Bobby Smith especially, whom he held in high regard.

Stan had been one of the 190 passengers on board the *MS Devonia* in July 1966 for the SOC Scottish Bird Islands Cruise, a unique experience in the company of some of the world's leading ornithologists.

After completing teaching training, Stan and his wife Eileen moved north to Caithness, where they took up teaching posts in Thurso High



Plate 182. Stan Laybourne, Halkirk, Caithness, May 2012. © Martin Elwell

School. He instantly fell in love with the county, especially the peatlands, which he likened to tundra without permafrost. That's when I first met Stan and so began a friendship spanning more than 40 years. Together with the late Pam Collett we had many happy days mapping out the birds of the flows. Stan felt so strongly about the uniqueness of the peatlands that for the BTO habitat register he entered the whole vast area as one entry. When this was queried, he replied that it could not be compartmentalised. How right he was. The fragmentation of the peatlands following afforestation and the resultant negative effect on its unique breeding birds has been well documented.

Through his involvement in SOC, Stan held the position of branch secretary for many years until very recently, when continuing poor health forced him to retire. He had also been local recorder for Caithness as well as local organiser for WeBS.

His love of wildfowl and particularly geese ensured his involvement in organising local goose counts over the winter and of course surveying his beloved Greenland Whitefronts. His unique knowledge of the bird and of the local wintering flocks was recognised far beyond Caithness. His patience in attempting to read darvic rings on distant geese in poor light knew no bounds.

His contribution to Caithness ornithology was recognised by a recent presentation from local birders. The gift of a clock (Plate 182) was much appreciated, all the more as it was engraved with two flying Greenland Whitefronts, a fitting gift to a true professional. Among the gathering were some former pupils, whose lasting enthusiasm for birding owes a lot to the school bird club set up and run by Stan for many years.

Stan was a gentleman and a gentle man. The large gathering of friends at his funeral service bore testimony to his standing in the local and wider community. He will be sorely missed.

Sinclair Manson

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Andrew Currie (1930-2012)

Andrew Currie died peacefully in Broadford Hospital, Isle of Skye on 27 March 2012. Family and friends celebrated his life at a



Plate 183. Andrew Currie, c. 2011. © Duncan Currie

service in the Church of Scotland, Broadford, on 2 April, when author Jim Crumley made a fitting tribute. Born in Edinburgh in 1930, Andrew moved to Skye with his family in 1976 whilst he was working with the Nature Conservancy Council and quickly established a reputation as an individual who cared as much about people as natural history, and saw the two as inextricably mixed. Always quiet and unassuming, Andrew was an accomplished naturalist but in typical style, admitted to a little knowledge about botany and not too much about birds, which was far from the truth. He was a long-term member of the SOC and started a Skye Field Club, which eventually developed into the Skye Branch of the Scottish Wildlife Trust, and he was for many years its chairman. He was also a life-long member of the South-West Ross Field Club. Andrew's regular Nature Diary in the West Highland Free Press became something of a local institution. He gave freely of his information and knowledge and much of his ornithological data was incorporated in Skye Birds when it was first published in 2005. Our sincere condolences go to Hazel, Duncan and Malcolm.

Bob McMillan

Robert Christie Dickson (1933-2011)

Bert was well known to readers of *Scottish Birds* as R.C. Dickson of Seabhag, Stoneykirk, and latterly of Lismore, New Luce. His contributions numbered over 60 and spanned 40 years from 1970 to 2010, with at least one paper or note in every volume from 1991 to 2010 and six short notes in 1998. He also helped produce the index for ten years.

Robert Christie Dickson was born in Edinburgh on 6 June 1933 and attended Trinity Academy in Newhaven. During his teenage years, Bert's main interest centred on nature and the outdoors - anything to do with wildlife, especially birds. He often cycled and walked in the Pentland Hills and along the River Almond.

He acquired a job with the local Co-operative, delivering milk to doorsteps, not so much for the money, but in the hope was that he could take the horse's reins. His interest in moorland was stimulated by long holiday walks with his grandfather near Tarbrax in south Lanarkshire. During one of these he saw his first Merlin.

When he was 17 he applied for a job with the Hudson's Bay Company, passed all the examinations and interviews and was offered a placement in Canada but, to his great disappointment, his parents refused to let him go. At 18 he was called up for National Service and was seconded to the RAF police as a dog-handler. He realised how much he had enjoyed the

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outdoor life with the police and found employment with the Ministry of Defence police at Heathrow Airport, followed by a spell with the Ministry of Aviation at Turnhouse, Edinburgh. In 1961, he transferred to Renfrew (now Glasgow) Airport and there he met Anne. They married in 1964 and the following year moved to Galloway, where he worked at RAE West Freugh. At last, he was in a place where he could easily devote his spare time to birds, carrying out pioneering fieldwork on many Wigtownshire species.

How many visiting birdwatchers now realise that Bert was the first to discover the Hen Harrier roosts that they come to watch? Bert and Donald Watson independently observed and reported regular communal roosting of Hen Harriers for the first time in 20th century Britain, as the breeding populations on Orkney and other islands expanded to the mainland, and especially Galloway, where young forestry plantations provided good habitat away from the persecution on grouse moors. Bert and Donald were soon collaborating and sharing a correspondence that spanned over 40 years. Both studied Hen Harriers in their local breeding areas in spring and summer, followed by monitoring of winter roosts for the remainder of the year. In Wigtownshire, Bert discovered that Merlins often roosted in similar



Plate 184. Bert Dickson. © Anne Dickson

areas to the harriers and this stimulated a deep and rewarding fascination for the species that saw him become a leading expert in that field. It was his association with Merlins and Hen Harriers that brought him to the attention of fellow birders. His publications are a testimony to hours of patient observation, usually carried out on his own but sometimes accompanied by Anne or their son Grant. His lengthiest contributions to Scottish Birds concerned communal roosting of Hen Harriers in south-west Scotland (with Donald Watson) and his observations at a Merlin roost in Wigtownshire. His short notes often recorded highlights from long stints in the field, but occasionally he reported on chance encounters such as a Little Egret attacked by Sparrowhawk, Kestrels feeding on road casualties and a Jackdaw killing and carrying newly fledged Blackbird in its feet, the latter two co-written with Anne.

Although mainly focused on raptors, his publications covered a wide range of subjects: wintering grebes at Loch Ryan and the moult of Eiders and Red-breasted Mergansers (in Scottish Birds), waders on the outer Solway (in Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society) and seabirds at the Mull of Galloway (in Western Naturalist). To British Birds he contributed significant papers on Hen Harrier hunting behaviour and the habitat preference and prey of Merlins in winter. He was a keen ringer for many years and, in addition to ringing Merlins and Hen Harriers on his local moors, he undertook mist netting at the Mull of Galloway and in Northumbria. He participated in the Birds of Estuaries Enquiry, forerunner of the Wetland Bird Survey, surveying Loch Ryan and Luce Bay. His broad knowledge across a range of species and early retirement in 1989 allowed him to produce his long-contemplated The Birds in Wigtownshire (1992) with just a little help from other people. It remains the only book for the birds of this county since 1869.

Bert was a member of the Dumfries & Galloway Raptor Study Group and a long-standing member and supporter of the SOC. In addition to undertaking contract work (in retirement!) for the Nature Conservancy Council, he also gave very generously of his time and

information towards the conservation of birds in Wigtownshire, particularly the international Special Protection Area designations of Lochinch/Torrs Warren for wintering geese and Glen App and Galloway Moors for Hen Harriers in 1999 and 2003 respectively. Essentially, he was a very quiet and private man with a deep passion for moorland raptors. He was gifted in having keen observational skills and a patient determination that allowed him to record and publish minute details of behaviour for the

benefit of other enthusiasts and posterity. He was very much of the 'old school' of behavioural ornithology - we could do with more like him coming forward from the younger ranks of birdwatchers.

Bert died on 9 November 2011 after a long illness and is buried at New Luce. He is survived by his wife Anne, and their son Grant.

Richard Mearns and Chris Rollie





Plate 185. The 2012 Scottish Birdfair at Hopetoun House, Lothian, May 2012. © Leianna Padgett, RSPB Scotland

As the 'Golden Chariot' (my Ford Ka) pulled into the grounds of Hopetoun House, west of Edinburgh, on the morning of Saturday 19 May, expectations were high and the nervous energy palpable. Sleep had been minimal, breakfast unimaginable.

To think the five-month's worth of preparations would go into a single weekend was a daunting prospect. As was the fact that the event was taking place in Scotland - in May. I was all too well aware of the impact our 'liquid sunshine' could have on visitor numbers. The mercury's descent during set-up the day before had launched a last-minute (unsuccessful, "after all, it is nearly summer") hunt round the shops to acquire a pair of gloves to wear over the weekend.

Thankfully, this particular morning the temperature had risen to the occasion and forecasters predicted clear skies (the only thing they didn't say anything about was the streaming sunshine later on that afternoon which would result in more than one helper

leaving with 'Brit-abroad' sunburn at close on Sunday, myself included).

As we piled out of the car and bustled wellyclad across the grassy field towards the 'Moorland Marquee', a sense of pride washed over as the SOC stall came into view.

Four new banners promoting the Club and the launch of the digital version of *The Birds of Scotland* greeted visitors and invited them to discover more about the charity and what we do. The six-metre-long SOC sign, although cumbersome and invoking copious verbal abuse during its assembly the day before, stood poised above the top of the marquee and was legible from as far away as the Forth Road Bridge! The logoed tablecloths reinforced the stand's identity, as did the stall helpers, bearing SOC fleece, name and pin badge.

Without the manpower to staff external events in the past, the cupboard of *Events Materials* had been bare except for a single banner and

two ageing tablecloths. Designing the suite of new resources had taken time and money but I knew they would be crucial to the Club's success over the weekend and in raising the profile of the SOC in times to come. Plus after the Birdfair, we'd be able to loan the materials out to branches keen to attend local events now that they'd have the equipment to do so.

As Kathryn Cox (Admin Officer, SOC HQ), Stephen Hunter (Volunteer webmaster) and I busied ourselves with the final preparations to the stand and David Clugston (Honorary Librarian) arranged the second hand book stall, Wendy Hicks (Office Manager) set to work assembling the cupcake tower for the first ever SOC Member Thank You reception at 11am.

Bibi's Bakery (aka Cupcake Mecca) in Edinburgh had kindly donated 90 cakes to the event as part of their ongoing commitment to charitable causes (consensus amongst the staff is that we have repaid them in personal visits to their Hanover Street shop ever since). Initially, it looked like it was a good thing no one had had their breakfast that morning as cupcakes outnumbered members by around 10:1. It was then I began to wish I'd arranged the reception for later on in the day, as there was much to take in for the newly arrived visitor. However, some time later and a small crowd had gathered, many of whom were the new members we'd

welcomed to the Club earlier that morning and others, long-standing supporters of the SOC, delighted at the opportunity to catch up with birdwatching friends of old.

The abundance of things to see and do didn't seem to detract from the number of visitors dropping by the stand, however - we'd been postively inundated since early that morning. So much so, that it was time for Dave Allan's (Events Co-ordinator at HQ) one o'clock wader identification workshop, long before we knew it! It would appear birders of all levels are united in finding certain species of waders particularly difficult to differentiate given the workshop's popularity!



Plate 187. Wendy Hicks preparing for the SOC Member Thank You reception at the Scottish Birdfair, May 2012 © Stephen Welch



Plate 186. The SOC stand at the Scottish Birdfair, May 2012. © Stephen Welch

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There was just enough time for Dave to get his bearings before leading the afternoon 'Birdwatching for Beginners' walk, hoping to introduce novice birdwatchers to Hopetoun's feathered residents and visitors. Goldfinch, Greenfinch and Great Spotted Woodpecker all obliged and a Nuthatch nest was spotted, much to the delight of participants.

Not long after the walk set off, Ian Francis (coeditor of *Scottish Birds*) took to the stage in front of a busy audience to share the results of the largest local bird atlas project ever undertaken recording North-east Scotland's breeding birds, before introducing Chris McInerny (SOC Vice-President) to the audience.

Fresh from his stint on the 'Never mind the woodcocks Panel quiz', Chris delivered an engaging presentation marking the official launch of the highly anticipated *Birds* of *Scotland* Digital, which was to be available from the Scottish Birdfair onwards.

Getting the disc ready in time for the weekend had been by far the most nightmare-inducing task of entire preparations. Tracking down the 213 photographers who'd contributed images to the book to ask them to extend their original copyright permission, turned out to be rather a mammoth task and one that I hope never to repeat again. Needless to say we got there in the end, going via the Maldives, previous girlfriends, current employers and tenous acquaintances. But believe me, it's been worth it, even if just to continue the reach of this epic publication among an audience who may not



Plate 189. Chris McInerny launches The Birds of Scotland Digital in the Talks Marquee at the Scottish Birdfair, May 2012. © Lang Stewart

have been aware of it first time around. Offering the disc free to any new members joining the Club when they pay by direct debit has proved a great tool for membership recruitment and it's been a valuable means to thank *you* for your continued support of the Club (by giving existing SOC members a third off the disc's RRP).

At just after two o'clock, our events programme had finished for the day yet the stand continued to bustle with activity as Kathryn, Wendy, Dave, Chris and I warmly welcomed visitors keen to find out more about the Club and how they could get involved. Chris's presentation had been well attended and instigated a wave of fresh enquiries about the disc, plus there were the occasional bird and wildlife queries to answer. Second-hand book sales were constant throughout the day, mostly in part due to the high quality donations and legacies of some very good modern natural history books the Club had been lucky to receive recently.



Plate 188. The 2012 Scottish Birdfair at Hopetoun House with SOC stand in the distance, May 2012. © Leianna Padgett, RSPB Scotland



Plate 190. A close look at a Chaffinch during a demonstration by the Lothian Ringing Group and BTO at the Scottish Birdfair, May 2012 © Lang Stewart

A steady stream of visitors continued right up until closing time and as event-goers trickled out of the grounds, RSPB Scotland started up the music signifying the beginning of the Exhibitor Thank You reception, but sadly we were all just too tired to attend!



Plate 191. Ian Thomson leads the 'Raptor Identification workshop' at the Scottish Birdfair, May 2012. © Lang Stewart

Day Two

Hopefulness had replaced trepidation on Day Two and this morning I was able to stomach my porridge! Some of the committee members from the local branches took a turn to man the stand and engage and enthuse Birdfair visitors, including James and Doreen Main from SOC Lothian and Paul Taylor from Fife branch. Karen Bidgood (Librarian at SOC HQ) took over running the second-hand book stand from David the day before, although frequently had to moonlight on membership recruitment when I had my hands full.

lan Thomson, SOC Council member and RSPB Scotland's Head of Investigations, kicked off the Club's events programme for Sunday with a raptor identification workshop, which proved to have broad appeal amongst the early eventgoers, keen to learn from lan's wealth of knowledge on the subject.

Stan da Prato (SOC Lothian) picked up the 'Birdwatching for Beginners' baton from Dave the day before, and lead a morning and afternoon stroll around Hopetoun's woody grounds, peppering his walks with knowledge of both the bird and botanical kind, much to the enjoyment of participants!



Plate 192. Setting off on a 'Birdwatching for Beginners' walk at the Scottish Birdfair, May 2012. © Lang Stewart

In between chatting to visitors on the stand, Ray Murray (SOC Borders) took to the Talks stage and treated the audience to some early findings on the winners and losers identified in the latest South-east Scotland Atlas in his talk of the same name.

Remarkably, Day Two on the stand looked to be echoing the previous day's successes! Ray, Paul, Doreen and James relished the opportunity to meet with Club members from their respective local branches and to encourage new members to the Club. We all agreed that one of the highlights of the Birdfair was the platform it provided to meet and chat with individuals and organisations with a shared interest and passion for birds, nature and conservation, brought together by the occasion.

As 5.30pm came and the 2012 Scottish Birdfair drew to a close, we breathed a respective sigh of relief. The interest in the Club from birdwatchers of all ages, abilities and

experience had really been wonderful and over the course of the weekend we were delighted to welcome 54 new SOC members to the Club. Plus we'd had the opportunity to showcase the charity to just short of 4500 visitors who'd attended across the weekend!

Of course, none of this would have been possible without the combined efforts of each and every person who contributed to the event, both in its preparation and during the weekendthank you for your part in making the Birdfair such a success for the Club.

Exhausted and euphoric in equal measures, I set off home, cupcake in hand and enjoyed one of the best night's sleep I've had in a long time!

Jane Cleaver (Development Officer, SOC HQ)

PS. hope to see you all at the 2013 Scottish Birdfair on 11th and 12th May next year!

NEWS AND NOTICES

New SOC Members

We welcome the following new members to the Club: Avrshire: Mr D. Cree, Mr E.A. Johns, Borders: Mr & Mrs R. Black, Ms A. Leitch & Mr F. Hamilton, Ms M. McNally, Mr J.P. Thomas, Caithness: Mr & Mrs K. Byrne and family, Central Scotland: Mr A. Blair, Mr & Mrs P. Gilardi, Ms S. Leslie, Mr & Mrs C. MacInnes, Mr S. McGeachie, Mr A. Smith, Mr U. Stoneman, Miss C. Tatchley, Clyde: Mrs J. Ackland, Mr W. Brock, Mr A.J. Brock, Ms J. Coats, Mr J. Connolly, Ms D. Dewar, Mr J. Johnstone, Mr H. McDonald, Mr & Mrs G. Scruton, Mr E. Taylor, Mr G. Turnbull & Ms S. Taylor, Mr J. Tweedie, Dumfries: Miss F. Johnstone, Ms S. Keast, England, Wales & NI: Miss T. Allen, Dr I.S. Downie & Dr J. Yelloly, Mr S. Holloway, Mr & Mrs M. Ivison, Mr J.A. Johnston, Mr A.E. Mackie, Mr J.K. Proctor, Mr R. Ratcliffe, Ms L. Watson, Mr T. Williams, Fife: Mr T. Edwards, Mr C. Gilbert, Mr L. Steer, Mr B. Swallow, Mr H. Turner, Grampian: Mr & Mrs A. Hilton, Mr N. Littlewood, Mr P. Shepherd, Mrs J.H. Strachan, Highland: Ms W. Anderson, Mr M. Coleman, Ms V. Halhead, Ms A. Ritchie, Mr R. Wood, Lothian: Mr M. Atkinson & Ms K. Humphry, Mr C. Bailey, Mr S. Balmer, Ms J. Batty & Mr J. Park, Dr K. Begg & Mr J. Henderson, Mr & Mrs R. Black, Mr P.H. Bowers, Mr E. Buchan, Mr M. Christie, Mrs S. Davies, Mr L. do Rego & Mrs A. D'Costa e Rego, Mr & Mrs R. Doake, Ms M. Farrar, Mr M. Field, Mr R.W. Greig, Dr & Mrs B.A. Hobbs, Mr D. Holden, Mr A. Howie, Ms K. Jones, Mr S.C. Kennedy, Mr M. Knight, Mr & Mrs P. Leckie, Mr P. Madden, Mrs K. Mann, Mr J. McArdle, Mrs D. McNicoll & family, Mr N. Mitchell, Ms E. Murdoch, Mr P.D. Petrie, Mr A. Radcliffe, Ms S. Raikes, Mr S. Ramalingam, Ms J. Ritchie, Ms L. Scott, Mr D. Stewart, Ms J. Sutherland, Ms J.A. Tagg, Mr T. Williams, Mr J.S. Wilson, Ms A.I. Wolfe Murray, Orkney: Ms C. Hills, Mr R. Thorne, Overseas: Mr L. Schropfer, Scotland - no branch: Mrs G. Moore, MrT. Southall, Tayside: Mr D. Berthon, Mr K. Grant, Mr R.W. Heath, Mr & Mrs B. McInroy, Mr & Mrs J. McIntosh.

200 Club

New members are always welcome. They must be over 18 and SOC members. Please contact: Daphne Peirse-Duncombe, Rosebank, Gattonside, Melrose TD6 9NH. The latest prizewinners are: May: 1st £30 Miss C. James, 2nd £20 K. McGregor, 3rd £10 D. McKenzie. June: 1st £30 W. Thom, 2nd £20 Mrs Denney, 3rd £10 Alan Jones. July: 1st £30 D. Parkinson, 2nd £20 A.D.K. Ramsay, 3rd £10 A.J. Sprott

Waterston House Events

Art Exhibitions:

Lisa Hooper, 22 September to 14 November. Michael Warren, 17 November to January 2013. Exhibitiors confirmed for 2013 include Laurie Campbell, John Busby, Fran Knowles, Tim Wootton, Lucy Newton, Paul Howey, Keith Brockie and Darren Woodhead.

Aberlady Goose Watch

Thursday 27 September and Thursday 4 October, 4.30 pm for 5 pm. £4 SOC members/children (£6 non members) - includes refreshments. Places are limited so advance booking is essential.

Optics Demo

Sunday 14 October 2012, 10 am—4 pm. A wide range of binoculars and telescopes and friendly, expert advice. If you would like to try out any specific models, please let us know in advance.

HQ Christmas closing

Waterston House will be closed from 25 December 2012 through 2 January 2013.

Conferences

SOC Annual Conference, 'Celtic Connections' 26–28 October 2012 Change of venue: due to unforeseen circumstances, Carrbridge Hotel is no longer able to host the event. The conference will now be held at the nearby Macdonald Aviemore Resort Conference Centre, in the centre of Aviemore village. There are still twin rooms available at the Aviemore Inn (adjacent to the conference centre). Members wishing a double room or single occupancy of a twin room, or who have special requirements, should contact the office before booking. Special student discount rate of £50 is still available.

SOC Skye & Lochalsh Mini Conference,

Saturday 17 November 2012. Sabhal Mòr Ostaig (the Gaelic College), Sleat, Skye. For more information, contact jane.cleaver@the-soc.org.uk

Scottish Birdwatchers' Conference/Bird Atlas launch, Saturday 16 March 2013. Our Dynamic Earth, Edinburgh. Programme and booking form will be included with the December issue of Scottish Birds.

Branch updates

Caithness: sadly, former branch secretary, Stan Laybourne, passed away in June (see page 225).

Central: 'Scottish Red Kites - 20 years on'. Illustrated talk by Duncan Orr-Ewing. 6 December 2012, 7.30 pm. The Allan Centre, Fountain Road, Bridge of Allan.

The Birds of Scotland Digital

A reminder that the Club's two-volume book is now available on disc to SOC members at the discounted price of £10.00 (£15.00 to non-members), including UK p&p. To get hold of a copy, either send us a cheque payable to 'SOC' or give the office a call with your credit/debit card details! The disc will also be available to purchase at the Club's annual conference, as well as the mini conference in Skye.

SOC Research Grants

In April this year, the following projects were awarded a grant from the SOC Endowment Fund:

- Sex determination of Brünnich's Guillemots in Scotland Bob McGowan (£168)
- Survey of Great Skuas and Great Black-backed Gulls on North Rona - Stuart Murray (£500)
- Migration routes and winter quarters of Scottish-breeding Greenshanks - Brian Etheridge & Ron Summers (£400)
- North-east Scotland gull project Euan Ferguson (£300)

And the following projects supported last year received further funding:

- Sanday Sanderlings Colin Corse (£300)
- Handa Island skua project Claire Smith & Trevor Jones (£600)

The Club is grateful to the Research & Surveys Committee for administering these awards.

A donation from a collection made at Stan Laybourne's funeral has added to next year's allocation, and this will be available for projects specifically in the Highlands. Our thanks are extended to all those involved. Why don't you apply for an award, if you feel you have a project deserving of support? The application process is really straightforward - don't be shy!

Further details can be found at the SOC website, from where an application form can be downloaded. The closing date for applications for next year is 31 January 2013.

The Birds of Scotland Fund Grants

During 2011/12, The Birds of Scotland Fund received six applications for funding. A grant to assist the Fair Isle Bird Observatory Trust with the digitization of its historical archive of records was provided, along with a smaller grant for a similar project to capture some important records from Perth & Kinross. A grant was also provided to assist with the publication of the proceedings of the International Wader Study Group Conference held in Strathpeffer in September 2011 and to support the publication of a Bute Bird Atlas. The remaining two applications received stage one approval, for assistance with publications on birding in the Clyde and Lothian/Borders areas respectively, bringing the total of applications which have reached this stage to 13.

Payment was made during the year from the Fund to four projects; for the first four mentioned above, along with a transfer to the SOC General Funds to support the increased costs of the new format of *Scottish Birds*.

SBRC - seeking a new committee member

SBRC is seeking a new member for the committee to replace Tristan ap Rheinallt, who retires later this year. To maintain geographical representation across Scotland SBRC would prefer a candidate from the Outer Hebrides or Highland region. Any potential candidates should send their name to the Secretary (Chris.McInerny@glasgow.ac.uk). If more than one name is put forward, a ballot will be instigated with Local Recorders having one vote each.

Chris McInerny, on behalf of SBRC

Apology - Plate 79 on page 98 of the last issue was taken on South Georgia in March 2009 and should be credited to Alan Brown.



Plate 193. Corn Bunting, Rattray Head, North-east Scotland, June 2010. © Hywel Maggs

Farmland birds in Scotland

A.J. PERKINS, H.E. MAGGS & J.D. WILSON

For most people, Scotland's birds are those of our wild upland and coastal landscapes. Yet almost one third of the land area is farmland (defined here as all agricultural land except 'rough grazing' of semi-natural vegetation such as heather or grass moorland) and home to bird communities now impoverished in other parts of the UK. Almost all the UK's breeding Corncrakes



and half of the Lapwings, Oystercatchers and Curlews are in Scotland, as are a third of the Skylarks and 15–20% of Grey Partridges, Choughs, Starlings, Linnets and Yellowhammers (Forrester *et al.* 2007). In winter too, Scottish farmland hosts important populations of upland birds and from further north, including raptors such as Merlins and Hen Harriers, waders such as Golden Plovers, Curlews and Snipe, winter thrushes, Twite, Snow Buntings, Whooper Swans, and spectacular flocks of geese.

In many areas of northern and western Scotland, environmental constraints on agricultural productivity mean that low-intensity farming systems persist. The rich biodiversity of cattle-based crofting systems on the Outer Hebrides machair epitomises 'High Nature Value' (HNV) agricultural systems (Wilson 2011). It includes over 15,000 breeding pairs of six wader species, as well as Corncrakes, Twite, Corn Buntings, and high

Plate 194. The machair of the Outer Hebrides - the epitome of High Nature Value agriculture, supporting one of the most important assemblages of breeding waders in Europe. © Jeremy Wilson

densities of Greylag Geese, Skylarks, Meadow Pipits, Wheatears and Starlings. There are many other cases across Scotland too. Examples include diverse breeding wader communities in the Northern Isles, Caithness and some of the major mainland straths (e.g. Strathspey), and farmland bird communities on the Argyll islands that include high density Corncrake populations on Tiree and Coll, Chough on Islay, Jura, Colonsay and Oronsay, and internationally important wintering populations of Barnacle and Greenland White-fronted Geese.

Some important mainland landscapes for farmland birds are perhaps less well recognised than they should be. The recent publication of *The Breeding Birds of North-East Scotland* (Francis & Cook 2011) shows that the mixed farming landscapes of this area, with their mosaic of arable and grass fields interspersed with patches of seminatural habitat, retain a diverse farmland bird community now scarce in the UK. Species include breeding waders, Grey Partridge, Quail, Barn Owl, Linnet, Tree Sparrow, Yellowhammer, Reed Bunting, Corn Bunting and some of Europe's largest colonies of Rooks, as well as wintering swans, Greylag and Pink-footed Geese.

Trends in farmland birds and agriculture - UK context

Biodiversity loss in response to agricultural intensification has been a pressing conservation challenge in recent decades, and farmland birds have been no exception (Fig. 1). Increased use and efficacy of pesticides, reductions in fallow through autumn sowing of cereals, simplification of crop rotations, removal of non-cropped habitats, and intensive grassland management to support higher livestock densities have all combined to reduce the quality of breeding and foraging habitats for many birds on farmland. Meadow-nesting species such as Corncrakes, Yellow Wagtails and Whinchats have been lost due to increased rates of nest destruction and chick mortality with the replacement of singlecut, species-rich hay meadows by dense, multiple-cut ryegrass silage. Many seed-eating species have declined as autumn sowing, efficient harvesting and herbicide use have reduced grain and weed seed availability, and crop-nesting species such as Lapwings and Skylarks have suffered loss of safe nesting opportunities in more intensively managed arable fields and grassland. A few species able to feed on growing crops have thrived, though always at risk of being considered in conflict with

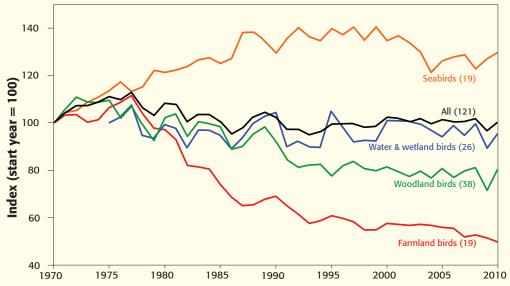


Figure 1. Population trends for common UK birds between 1970 and 2010, subdivided into species guilds according to habitat. The red line (lowest) depicts the UK Farmland Bird Indicator - a composite trend for 19 farmland specialists (see Table 1 for species list). Source: RSPB/BTO/JNCC/Defra - see http://www.defra.gov.uk/statistics/files/Wild-bird-populations-in-the-UK-1970-2010-National-Statistics-Release.pdf.

agricultural interests. For example, Woodpigeons have benefitted from subsidised sowing of oilseed rape, and wintering geese and swans from grazing protein-rich grass and cereal crops.

These changes have been encouraged by subsidy support through the European Union's Common Agricultural Policy (CAP) that currently transfers £700-800 million annually from taxpayers to Scottish agriculture. However, since the late 1980s, rising public concern over the environmental impacts of intensive agriculture has driven some 'greening' of these subsidies. Although designed to prevent over-production of food, the compulsory (until 2007) removal of some arable land from production through 'setaside' brought many benefits for wildlife, whilst there has also been investment in organic and, importantly, farming most development of agri-environment schemes ('AES'). The design of habitat management for birds in these schemes has been underpinned by a sustained research effort, and where translated into targeted deployment that benefits a sufficiently large proportion of the population, the results can be spectacular. The best example in Scotland is that of the

Corncrake, where RSPB research during the 1980s and 1990s led to incorporation of measures in AES and other conservation schemes to delay hay-cutting, cut meadows from the centre outwards (to avoid trapping birds as fields are mown), and provide areas of uncut vegetation cover in field corners. The Corncrake population has doubled as a result.

Today, AES are well embedded in Scottish agriculture, but attract only a small proportion of total agricultural and rural development subsidy support. Moreover, direction of these monies to biodiversity conservation is under growing pressure from policy initiatives to reduce EU budgets and further increase agricultural production in light of global human population growth, and to diversify environmental payments to guarantee other 'ecosystem services' including water quality, flood protection and offsetting greenhouse gas emissions.

In this uncertain world, it is timely to consider the current status of Scotland's farmland bird populations, their future prospects and the main conservation challenges.



Plate 195. Farmland birds using AES unharvested cereals at Seafield, Angus, December 2010. © Hywel Maggs

Table 1. Population size, trend and change in distribution (occupied 10-km squares) in Scotland for 31 farmland species, with long-term UK and short-term English trends for comparison. **Bold** = statistically significant trend. Na = not applicable due to insufficient data. **F** trend contributes to UK Farmland Bird Index; **a** 2004; **b** 2002; **c** England only; **d** since 1977. Sources: Gibbons *et al.* (1993), Forrester *et al.* (2007), Risely *et al.* (2012), http://www.bto.org/birdtrends.

	-					
	Scottish	% of		Change in breeding % range		
	population	UK total		population in	,	
	in year 2000		1967-2009		-2010	1968/72-1988/91
Species	(1000s pairs)		UK	England	Scotland	Scotland
Buzzard	15-20	36	c +652	+153	+33	+10
Kestrel F	7–8	21	c -6	-17	-64	-9
Grey Partridge F	11-15	19	-91	-52	Na	-25
Quail	0.01-0.1	8	Na	Na	Na	+621
Corncrake	a 1	99	Na	Na	Na	-65
Oystercatcher	84-117	71	Na	+48	-29	-1
Lapwing F	71-106	60	-34	-14	-48	-10
Snipe	34-40	65	Na	-13	+30	-7
Curlew	59	55	c -38	-31	-55	-3
Redshank	12-18	40	Na	-33	Na	-11
Turtle Dove F	0	0	-90	-81	Na	-77
Stock Dove F	10-15	5	c +166	+6	Na	-18
Woodpigeon F	488-600	19	+170	+44	0	-6
Barn Owl	0.5 - 1	20	Na	+369	Na	-34
Swallow	80-120	13	c +27	+37	+41	+4
Skylark F	290-557	31	c -63	-24	-9	-2
Yellow Wagtail F	0.025-0.035	<1	-78	-50	Na	-17
Whitethroat F	70-133	14	-61	+39	+121	-14
Chough	b 0.08	18	Na	Na	Na	+13
Jackdaw F	80-120	18	+107	+49	+29	-6
Rook F	300-500	32	Na	-8	-35	-1
Starling F	180-320	22	c -87	-55	-37	-7
House Sparrow	600-900	18	c,d -71	-14	+40	-13
Tree Sparrow F	4.6-8.1	12	c -96	+58	Na	-30
Greenfinch F	120-250	16	-3	-8	-14	-6
Goldfinch F	40-60	11	c +55	+82	+133	+27
Linnet F	70-90	16	c -76	-27	+8	-14
Twite	5.6-13.8	94	Na	Na	Na	-4
Yellowhammer F	140-220	18	-57	-23	+26	-17
Reed Bunting F	15-30	24	-20	+28	+31	-19
Corn Bunting F	0.8-1	11	-87	-31	Na	-60

Trends in Scotland

Historically, farmland bird trends in Scotland were poorly understood because of sparse coverage by Common Birds Census plots. Nonetheless, range changes between the 1968–72 and 1988–91 national breeding bird Atlases strongly hinted that the declines of species such as Grey Partridge, Tree Sparrow, Yellowhammer and Corn Bunting seen in England were also happening on Scottish farmland (Table 1), whilst national surveys confirmed the continuing decline of Corncrakes even within their Scottish strongholds.

Today, the 350 or so annually surveyed Breeding Bird Survey (BBS) plots in Scotland allow comparison of species trends with trends elsewhere in the UK, and as Table 1 shows, for several species recent change has been more positive in Scotland than England. Such species include six of the seven seed-eating farmland songbirds reporting a Scottish BBS trend (Skylark, Yellowhammer, Linnet, Greenfinch, Goldfinch and House Sparrow). One possible explanation may be that Scottish agriculture remains less intensive than in many English regions (Fig. 2), and that against this backdrop, the impact of AES

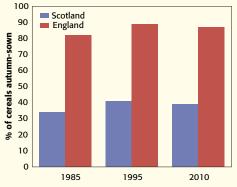
and set-aside may have been sufficient to prevent or even reverse declines. For example, 60% of Scottish cereals are still spring-sown, and barley is the main crop type. In contrast, in England, wheat is the main cereal and 80-90% of cereals are autumn-sown. Spring-sown barley benefits farmland birds by allowing the retention of overwinter stubbles that are a heavily used foraging habitat, receives lower herbicide inputs than wheat, and provides late-summer nesting habitat for multi-brooded crop-nesters such as Skylarks and Corn Buntings. Some evidence supporting this idea comes from a recent study breeding population response Yellowhammers to winter grain provision in eastern Scotland. Previous research in intensive arable landscapes in lowland England had suggested a late winter/early spring period of low seed availability (the so-called 'hungry gap') that may be a key factor limiting populations of seedeating birds, and recent developments in English AES therefore sought to include management options that ensure seed availability through this period (Siriwardena 2010). However, experimental tests by the Game & Wildlife Conservation Trust and RSPB on farmland in Angus between 2005 and 2007 to compare seasonal patterns of winter grain provision revealed Yellowhammer population increases across all four categories of treatment and control farms, suggesting that over-winter seed availability may not currently be limiting this species (Parish & Wilson 2009). Of course, not all population trends of farmland birds may relate to changes in agricultural land use and practice.

Swallows and Whitethroats have increased markedly in Scotland in recent years, perhaps affected more by conditions on their African wintering grounds than in Scotland, and Buzzards are now widespread on lowland farmland - a welcome return after decades of persecution. Milder winters have helped Barn Owl and Goldfinch populations to increase and expand northwards, but may also be responsible for recent declines in Snow Buntings on Scottish farmland if more now winter in Iceland.

The news is not all good, however. Firstly, polarisation of agricultural land use with loss of arable cropping from traditional mixed farming landscapes across much of north and west Scotland has driven long-term range contractions



Plate 196. Skylark, Corsekelly, North-east Scotland, 2010. © Hywel Maggs



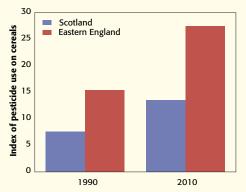


Figure 2. Comparison between Scotland and England of two indicators of arable farming intensity: a) Proportion of cereals sown in autumn (sources: http://www.defra.gov.uk/statistics/foodfarm/landuselivestock/junesurvey/junesurveyresults; http://www.scotland.gov.uk/Topics/Statistics/Browse/Agriculture-Fisheries/Abs2010). b) Pesticide usage in cereals (source: http://pusstats.csl.gov.uk).

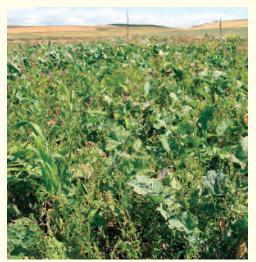


Plate 197. Weedy turnips Barras, Stonehaven, Northeast Scotland, August 2009. © Hywel Maggs

of seed-eating species including Grey Partridge, Yellowhammer and Corn Bunting. Weed-rich fodder brassicas such as turnips hold high densities of seed-eating birds, yet almost 90% of these crops have been lost since 1985 (http://www.scotland.gov.uk/Topics/Statistics/Br owse/ Agriculture-Fisheries/Abs2010), mostly replaced by grass silage. Secondly, although we have emphasised the importance of Scottish agricultural landscapes for breeding waders, the BBS records national declines of Oystercatcher (29%), Lapwing (48%), and Curlew (55%). Local studies have found similar or worse declines, with Taylor & Grant (2004), for example, recording a 77% loss of Lapwings on study areas in southern Scotland between 1980 and 2000. Moreover, some species are too scarce and localised for BBS to be able to record their trends in Scotland; Corncrake, Grey Partridge, Redshank, Yellow Wagtail, Tree Sparrow, Chough and Corn Bunting are all examples. In some cases, local studies reveal continuing declines. For example, recent detailed studies by the Scottish Chough Study Group have revealed severe recent declines in survival rates of first-year choughs on Islay (Reid et al. 2010) that are now translating into declines in this core Scottish population. In the two remaining centres of Corn Bunting distribution, numbers of breeding territories fell by 83% across 30 study areas in Aberdeenshire and Angus between 1989 and 2007 (Watson et al. 2009), and by 62% between 1995 and 2005 on

the Outer Hebrides (Wilson et al. 2007). Finally, some farmland birds where BBS trends are recorded seem to be faring worse in Scotland than elsewhere in the UK. The most striking example is the Kestrel for which BBS records 64% decline between 1995 and 2010 in Scotland, but only a 17% fall in numbers in England. The scale of recent decline in Scotland is alarming, and whilst there are several candidate explanations, including competition with other raptor species (e.g. Buzzard), toxic impacts of rodenticides, and loss of foraging habitats following the abandonment of set-aside policy, clear evidence for the causes is lacking. Research by RSPB began in 2012 to try to unravel the possible explanations.

Conservation - the impact of agri-environment schemes

The recent increase of Corncrake populations remains Scotland's only proven example of national bird population recovery driven by AES and related conservation measures. Numbers have increased from fewer than 500 territories in 1993 to over 1000 today, although the breeding range remains restricted mainly to Hebridean and Argyll islands (O'Brien *et al.* 2006). There may be more examples, as the Yellowhammer experiment discussed above and local evidence



Plate 198. Corncrake, Balranald, North Uist, Outer Hebrides, June 2010. © Cliff Reddick



Plate 199. Extensively-managed cereal crop, Barras, Stonehaven, August 2009. © Hywel Maggs

of recent recovery in populations of Tree Sparrows (e.g. Francis & Cook 2011) hint. Sadly, however, the Scottish Government has so far failed to replicate the excellent monitoring efforts funded elsewhere in the UK that are beginning to produce good evidence of the success and failures of AES and thus help to drive adaptive improvement of schemes over time (e.g. Baker et al. 2012). Recent RSPB research in Scotland on breeding waders (Lapwing and Redshank) and Corn Bunting, respectively, has shown that well-evidenced and targeted AES management can reverse population declines at the farm scale, especially when backed up by a bespoke advisory service. However, the scale of provision is currently far too limited to reverse national declines (O'Brien & Wilson 2011, Perkins et al. 2011). The Corn Bunting study found that populations increased by over 5% annually on farms in eastern Scotland where dedicated AES and advisory support provided delayed mowing of forage grasses until late July to protect nests and broods, and patches of cereal-rich crops left unharvested to provide winter grain. However, to offset rapid ongoing declines on non-AES farms, roughly 70% of the remaining population will need to benefit from such management, but currently only about one quarter of the population does so.

Future prospects

A further reform of the CAP for 2014-2020 is currently under development, bringing both threats and opportunities for farmland bird conservation. The increasing political will to diversify environmental subsidies to deliver other 'ecosystem services' risks diluting funding directed to biodiversity objectives, and could result in land use changes both favourable and detrimental to farmland birds. For example, on flood plains, wetland creation would benefit breeding waders, whilst tree planting would be damaging; either might happen in support of flood risk mitigation. Discussion is also focussing on how to link farmers' main subsidy payments more closely to environmental outcomes. This may include introduction of Ecological Focus Areas (EFAs), whereby arable farmers must manage 5-10% of their agricultural area for biodiversity, and greater support for traditional, small-scale, extensive farming or crofting that supports a rich biodiversity (HNV farming systems).

Direct subsidy support for nature conservation of this kind, in addition to well-funded biodiversity support in agri-environment schemes within Rural Development Programmes, will be essential for meeting the EU's biodiversity strategy objective to halt

biodiversity loss by 2020. However, the fate of farmland birds also depends on several overriding factors operating on a much larger scale. Regardless of policy initiatives, it is almost inevitable that ongoing technological advances crop breeding, agro-chemicals machinery, and increased adoption of existing technology, will drive further agricultural intensification. Even greater reductions in the availability of weed seed and invertebrate food for birds are likely with any future acceptance of genetically modified herbicide tolerant crops. Agricultural products such as grain are a global commodity, and their price will affect how much is grown. Consumer demand will dictate how much of our food is produced intensively, or using alternative methods such as organic farming. Costs of inputs such as fuel and fertilisers, associated with global oil prices, may affect farming practices. If oil prices continue to increase, low-input or fuel-saving methods such as minimum-tillage cultivation of crops, or growing nitrogen-fixing crops such as clover to reduce dependence on inorganic fertilisers may become more prevalent. Climate change is already affecting bird distributions, and may have a major influence on Scottish farming in future years, although it is difficult to forecast the exact nature of this. In addition, there is increasing pressure on farmland from beyond agriculture in the form of renewable energy projects and afforestation. In some parts of Scotland, the erection of wind turbines on farmland is becoming widespread as farm businesses diversify to harvest wind alongside grain and grass. Scottish Government have



Plate 200. Brooding Redshank, Strathdon, North-east Scotland, 2012. © Hywel Maggs



Plate 201. Lapwing near nest Strathdon, North-east Scotland, 2012. © Hywel Maggs

announced an aspiration to increase woodland cover in Scotland to around 25% of land area, which could involve plantings on some less productive, but potentially biodiversity-rich farmland. In an attempt to address these multiple demands on Scotland's land, Scottish Government have developed a Land Use Strategy. This aims to help achieve an integrated approach to land use, whilst maintaining the future capacity of Scotland's land. However, this aspirational document needs strengthening. Clear goals and actions need to be built in and delivered within specified timescales.

In closing, we should return to the birds. We are unlikely to re-establish some populations of farmland birds to the extent that they once were. It is hard to believe that the Corn Bunting was once so common and widespread it was actually referred to as the 'Common Bunting' and could be found in almost every Scottish region during the 1920s (Forrester et al. 2007). However, we do have the management tool kit to recover some of these species in parts of their existing range. There have been significant advances in understanding farmland bird declines, and the subsequent development of conservation measures has greatly improved the prospects for some. Without this focus, the plight of some of our previously most common birds would look particularly bleak. It is imperative that we retain this focus in the future as we head into a period of political change governing agricultural support. Whatever the policy outcomes may be, what would conservation success look like for Scotland's farmland birds in 2020? Five key outcomes would include:

- Targeted AES management and advice deployed to a sufficient proportion of the remaining Corn Bunting population in eastern Scotland and on the Outer Hebrides to ensure that the national population is increasing.
- Corncrake breeding range is expanding on the Scottish mainland, and populations of Grey Partridge and Tree Sparrow have recovered to the extent that they occur within sufficient survey squares to allow BBS reporting of annual population trends.
- A combination of catchment-focused AES backed by bespoke advisory support has succeeded in reversing declines of farmlandbreeding waders - notably Lapwing and Redshank - in core populations across mainland Scotland.
- The causes of the recent catastrophic drop in first-year survival rates of Chough on Islay understood, and sustainable management solutions implemented.
- Research has diagnosed the cause of the rapid recent decline of Kestrel population, and conservation solutions implemented - as appropriate - through AES.

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NOTES AND COMMENT_

Gull with goose egg

Members attending the RSPB Edinburgh Local Group's 'Dawn Chorus' met at Blackford Pond in Edinburgh on 6 May 2012. Shortly after our 6 a.m. start we noticed a commotion on the small island where a pair of Mute Swans and two pairs of Coots were nesting; they seemed unconcerned, but some gulls (Lesser Blackbacked and Herring) were excited and noisy. As we watched, one of the latter picked up a large cream-coloured egg. It seemed to put it down, then pick up another, which it carried out over the water, dropping it just before returning to the island (presumably because of the weight, it did look enormous in the gull's beak!) Too small for a Mute Swan's egg, and much larger than a Coot's, we concluded that these were eggs from one of the feral Greylags, which seem to be increasing in numbers there. The nearest Greylags at the time were on the farther shore, about 30 yards from the island, but didn't seem unduly concerned - so the mystery was unexplained. Interesting that the gull could hold and carry such a heavy object in flight.

Mike Betts

Aggressive Bullfinch

On 1 June 2012, I was invited to visit the garden of a local resident in Hamilton, who was witnessing some interesting behaviour by a Bullfinch. When I arrived, I noticed that the three cars variously parked before the house had all their driving mirrors covered by polythene bags. The owner explained that a male Bullfinch had been attacking the mirrors for several days, so viciously that being afraid that the bird might injure itself, he had covered them in this way. During this time, the female Bullfinch was brooding five eggs seven feet up in a slim ornamental conifer adjacent to the driveway.

In these unremitting attacks, the bird would fly at the glass and then hop quickly over the mirror presumably to reach the other bird it supposed was there, meanwhile covering each area liberally with droppings. Plate 202 shows the bird having just arrived to check its imagined adversary is still there and Plate 203, the



Plate 202. Bullfinch arrives, Hamilton, Clyde, June 2012. © Lang Stewart



Plate 203. Bullfinch attacks, Hamilton, Clyde, June 2012. © Lang Stewart

frenzied attack. Thereafter, the pair continued to visit the nest and brood the eggs, but sadly the clutch was eventually abandoned.

I was surprised that a Bullfinch of all birds should be so aggressive, as previous observations had shown pairs always going quietly about their breeding business. BWP even says "Pairs breed solitarily, but not obviously territorial. Throughout breeding cycle, male may ignore other males near nest". However, this fighting attitude is similar to that recorded between males at feeding sites where "combatants flutter in air, bills touching, until one gives way."

Jimmy Maxwell



Plate 204. Picnic spot at Loch Duntelchaig, Inverness, November 2009. © David Bain

SOC SPOTLIGHT: Highland Branch

A. JOSS

The branch covers a huge geographical area of Scotland, with members in Sutherland, Rossshire, Inverness-shire, Badenoch & Strathspey, Lochaber and Skye & Lochalsh, including the Small Isles of Rum, Eigg, Canna and Muck. Its regular meetings and outings are centred in Inverness, which is more than 60 miles from most of the outlying communities in the west and 100 miles from the far north-west. It has therefore long been an aspiration of the branch to find practical ways of engaging with its more remote membership. The mini-conference arranged by Skye, Lochalsh and Lochaber members for 17 November 2012 at Sabhal Mòr Ostaig on Skye, for which a programme and booking form are included in this issue, will hopefully lead the way.

Branch meetings

Indoor evening meetings are currently held in Culloden Library on the outskirts of Inverness, from September through to April. These are usually on the first Tuesday of the month, but later in the month in January and April. Each meeting features an illustrated talk from a visiting or a local speaker, with ample time at the intervals to meet fellow members and discuss topics of shared interest. The talks may feature the birdlife (and other fauna and flora) from almost anywhere in the world but, as we are fortunate to have a significant presence of RSPB and other wildlife and environmental organisations in this region, it is always good to also have presentations on studies or projects involving the birds which can be found in our area.

Outdoor trips

Over the same period, there are two outdoor trips per month, one of which is a full-day outing on a Saturday or Sunday, while the other is on a Thursday morning, with the option of continuing into the afternoon should there be the weather and inclination to do so.

The branch has been running these mid-week, half-day field trips as well as the full-day ones at the weekend since 2007/08 season and they have proved to be quite popular and successful. Destination details are not printed in the programme as this is often decided at the last minute, depending on weather forecasts and the reports found on BirdGuides or from our local recorder of anything unusual in the area. The halfday can also restrict the distances travelled, but for something unusual exceptions are made!

Some recent outing highlights include the visit to the Black Isle in September taking in the wintering flocks of Wigeon, alongside large numbers of Bartailed Godwits, Lapwing and Knot.

October saw the branch head east via Milton of Culloden, Ardersier and Nairn to Burghead and Roseisle, where the delightful Long-tailed Ducks, scoters, Eiders and Brent Geese obliged.

The aim is not just to see the largest number of birds, but to find and watch and enjoy. The pleasure comes from birding with like-minded people, learning identification skills, enjoying the splendid sights and taking delight in the unexpected find. If this whets your appetite and you feel you would enjoy these field trips, then you'd be most welcome to come along.

In the depths of winter, outings are usually to one or more of the excellent sites for wintering wildfowl and other species around the Inner Moray Firth from Brora in the north along into Moray or even Buchan in the east, with occasional visits to the west coast or Badenoch & Strathspey. When days are longer, in September or May/June, the club often goes further afield,



Plate 205. Highland Branch outing, Loch Duntelchaig, Inverness, November 2009. © David Bain

staying overnight for one to five nights. Then summer migrants can be added to the species list and venues range from Aberdeenshire to Lothian on the east coast to a whole variety of islands in the Hebrides and Northern Isles. Outing dates are co-ordinated to avoid clashing with local RSPB outings, as several of our group are members of both organisations.

Other activities

Quite a few members actively participate in bird surveying projects, such as Atlas, WeBS or other BTO surveys, bird ringing or manning RSPB hides. There is abundant potential for new members to get involved if they so wish. The branch may be consulted on local plans which might affect important bird habitats, but as our remit is recreational rather than campaigning, responses are left for individual members to make.



Publications

The branch issues a quarterly newsletter to members, wherever possible by e-mail. It also publishes an annual Highland Bird Report, for sale to members and the general public.

Contacts

The branch is run by a committee of nine and may be contacted via the Chair, Alex Joss, Tel. 01463 221661, e-mail ejoss99@btinternet.com or the Secretary, Kathy Bonniface, Tel. 01808 511740, e-mail kathybonniface@aol.com. There is also an editorial committee for the production of the Highland Bird Report and all noteworthy or interesting bird records are greatly appreciated. They should be sent to the Recorder, Hugh Insley Tel. 07831479804, e-mail hugh.insley@btinternet.com. The branch is represented on Council and twice in recent years has had the honour of one of its members holding the position of President.

Alex Joss

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Lisa Hooper - wildlife printmaker



Plate 206. Lisa Hooper, Whiting Bay, Isle of Arran, July 2008. © Alan Wake

"Success depends not on learning to do what is difficult, but in finding out what is easy." Pyllis Barron, quoted in Walking the Block by Jane Weir.

As a printmaker (whose subject is mainly birds), this little quote sums up the quest for me. I am trying to use quite complex craft techniques to simply and vividly express the essence of birds. Although I delight in using a great variety of methods, I am always striving to find simple and striking ways of working, so that the subject survives intact and is not killed by either too much technique or poor execution. My current solo exhibition at Waterston House (from 22 September 2012) represents two years' work (since I took part in a joint exhibition there in 2010), and includes etchings, woodcuts, linocuts, monotypes, batik works on paper and recent incursions into Japanese woodblock prints. Some are hand coloured, some are printed from multiple blocks and the batiks are not printed at all. All of them, I hope, say something about the birds or animals depicted and their natural environment.

I became a full-time artist in 2005, following redundancy from the Countryside Agency (now part of Natural England). A career conservationist, I had a strong amateur interest in natural history, starting with plants. My interest in birds really developed as a complementary winter pursuit and was initially fostered by many holidays in the

Spanish interior, where the birds are showy and the temperature is high! My business name, Hoopoe Prints, harks back to that time and is also a sort of pun on my name.

While I was working full time, I joined an evening class in etching and really caught the print-making bug. I bought a press in 1998 and started to sell work through galleries and art groups in the Cotswolds. When I was made redundant, we decided to move to Dumfries and Galloway because of its natural beauty, its birdlife and its arts infrastructure. We live at the far western end of the peninsula, within sight of our small Gannet colony on the Scare Rocks, and approximately halfway between the seabird cliffs of the Mull of Galloway and the inner Solway estuary, so favoured by geese and other wildfowl.

My approach to a piece of work is quite analytical and, unlike many wildlife artists, does not start with a field sketch, although it may well start with a walk, some birdwatching and some photographs. I tend to distil my images down and at the same time I decide on the appropriate technique to use. For example, a very moody



Plate 207. Black-tailed Godwits. © Lisa Hooper



Plate 208. Nuthatch. © Lisa Hooper

scene with a lot of tonal variation would work best as an etching, whereas a subject with strong simple patterns might work well as a linocut. Batik on paper seems to be a very good medium for insects and birds, but is less pleasing (to my mind) for landscapes. When I have decided on the medium, the size and shape might be influenced by the pieces of wood or lino I have (I often use driftwood which imposes quite a few limitations!). Then I will produce a design, sometimes using several drawings of birds in different poses, which I bring together into a convincing group.

Two of the more unusual techniques I use probably merit a brief description: batik on paper and Japanese woodblock prints. Batik is normally a textile painting process, which involves using wax, which is painted, drizzled or printed onto the cloth, to act as a resist to dyes. When the wax is cracked and the piece is dip dyed, the dye runs into the cracks giving that characteristic crazed appearance to the surface. It is a relatively simple matter to transfer this to paper, using a long fibred paper with good wet strength, which behaves just like a cloth. As I also keep bees there is no shortage of wax for my batik pots. I use dyes and wax in succession to build up an image, which is finally dip-dyed before the wax is ironed off prior to mounting. Each piece is a one-off in the same way as a painting would be.

Japanese woodblock is, like wood or lino printing, based on the principle of inking the top surface of a piece of wood and printing from it, so that the cut away areas remain white, but it is very different from western printmaking. Watercolour paints are used, in conjunction with a paste made

from rice flour, (which gives the paint body), and the paint is rubbed into the whole surface including the depressions and then brushed out with a soft hair brush. The wood is a Japanese ply. Damp, thin Japanese or Chinese paper is then laid onto the block and the impressions are taken off by rubbing with a flat 'baren'. There is one plate for each colour and a Japanese system of registration using 'Kento' marks is used to ensure that each colour is printed accurately over the last. The Japanese developed different tools for cutting the blocks as well, although I tend to use a mixture of eastern and western knives and gauges. Japanese woodblock prints are quite subtle and because they use water-based inks, are more environmentally friendly.

It is not very fashionable to say so, but the craft element of printmaking (and batik on paper) is the thing which fascinates me. It imposes a gap between the idea and its realisation which can result in happy surprises (as well as less happy ones). I also enjoy the continuum between printing and dyeing (I am a member of our local Guild of Spinners, Weavers and Dyers). However, as the quote at the top of this article suggests, good technique should not be a battle, but should eventually become second nature. At the end of the day the pictures and I hope that, through them, I share my deep affection for the wonderful landscape of Galloway and its wild inhabitants.

Lisa Hooper



Plate 209. Waxwings. © Lisa Hooper



Plate 210. Nuthatch pecking out mud from stream bank. © Jimmy Maxwell

FIELD NOTE: Nuthatches

At the Dalzell Woods site (NS760550) at Motherwell, North Lanarkshire, the population of Nuthatches starting there in 2005 has now reached five breeding pairs. At the moment in early April, the birds are busy renovating last year's nest holes or preparing new ones. One requirement is mud, with which to re-model the nest hole opening into a perfect 2.8 cm diameter circle - narrow enough to inhibit predators. This opening is beautifully smoothed by the female passing in and out against the wet mud. Scots Pine bark flakes, occasionally over a thousand, are also needed to form the nest lining in the cavity, being placed on a foundation of rotten wood chippings.



Plate 211. *Nuthatch with pine bark flakes at nest hole.* © *Lang Stewart*

The photographs show a bird pecking out mud from a stream bank (Plate 210) and another delivering mud to the hole (Plate 212). In Plate 211 we see the flakes being brought in from a nearby Scots Pine, but often a suitable tree may be hundreds of metres away. It seems that the female generally carries out these tasks while the male delivers his variety of piercing calls from above – head pointing up to broadcast the territory message to all others. About four different calls are readily recognisable apart from the normal all-year 'tweet-tweet' contact calls.



Plate 212. Nuthatch with mud at nest hole entrance.

© Dave Abraham

One interesting aspect has been the preoccupation of Blue Tits with the Nuthatch nest hole, even when plenty of other holes are available. They are repeatedly hanging down to peer in, even when the nest contains eggs. The male Nuthatch clears them off now and again, but the interest still persists. This behaviour was mirrored in mid-winter, when the Nuthatch used the hole as a nightly roost. In the fading light, its approach and entry was always made obvious by a tremendous clamour of alarm from several Blue and Great Tits in the tree.

In this estate, these Nuthatches all nest beside public pathways and are providing splendid viewing for increasing numbers of visitors. The birds practically ignore viewers and photographers and are easily located in the woodland due to their ringing calls. Some watchers have already been lucky enough to glimpse the male's rotating dance where he pirouettes round on a level branch near the nest before mating.

Lang Stewart

BOOK REVIEWS

Birds of the Horn of Africa: Ethiopia, Eritrea, Djibouti, Somalia and Socotra. Nigel Redman, Terry Stevenson & John Fanshawe, 2nd edition 2011. Christopher Helm, ISBN 978-1-4081-5735-0, paperback, 572 pages, £35.00.



When I first visited Ethiopia in 2008 the m o s t c o m m o n l y used field guide was the very good Birds of Africa,

South of the Sahara, but for my subsequent visits from 2009 the excellent first edition of this Helm Field Guide has been available, and is of course so much more locally focused. Over a thousand species have been recorded from the region, including around 70 endemics or nearendemics, residents, wintering Palearctic species and infra-African migrants, a truly must-visit region. Sadly some parts, notably Somalia, are still off-limits to birders, but a few have recently begun to visit Djibouti and Somaliland (the largely independent northern part of Somalia), and this updated edition incorporates their records. Ethiopia remains the most accessible country in the region, and fortunately most of the endemics and near-endemics can be seen there.

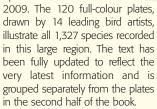
The authors and publishers are to be congratulated on bringing out this second edition only two years after the first, showing their dedication to keeping it up to date. Some half-a-dozen additional species, either newly recorded rarities or taxonomic splits, have been included; English names have largely been updated to follow the IOC-endorsed list; a few

plates, notably of large whiteheaded gulls and waxbills, have been re-painted; many maps have been updated and all are clearer to read; and the checklist of species has been enlarged, showing the status of each species in each country (separately showing Somaliland). I do hope I get the opportunity to visit the region again, in which case this excellent revision will certainly accompany me.

Mike Betts

A Field Guide to the Birds of South-East Asia. Craig Robson, 2011. New Holland, ISBN 978-1-78009-049-8, softback, 544 pages, £24.99.

For the first time this is a flexicover edition of a field guide first published in 2000, but which was fully updated in



An essential guide for any birders visiting South-east Asia.

David Clugston

A Birdwatching Guide to Brandenburg and Berlin. Roger White, 2012. Available from the author at 4 Church Avenue, Bristol BS9 1LD. ISBN 978-0-9571695-0-0, paperback, 230 pages, £19.95 + £2.20 p&p.

This book shows how selfpublishing has come on. It is printed on glossy paper with many colour photographs and maps. The author clearly knows the area well, but, as he says, it is not often visited by birdwatchers here, except for Berlin itself.

The book is a fairly standard site guide with introductory material about the area (including travel information and some vocabulary) and a species summary, with short sections on three local specialties (Lesser Spotted Eagle, Common Crane and Great Bustard). The bulk of the book is devoted to the sites of which there are about 100, divided into seven areas and Berlin. For each area there is a section giving other information, such as contact details for nature reserves and suggestions on where to stay. Then there is a section of advice on short breaks, and finally there are indexes and references.

I feel this would indeed be a useful book to consult before visiting Berlin, and certainly to take with you on a visit to the wider area.



John Davies

RSPB Birds: Their Hidden World. Peter Holden, 2012. Bloomsbury, London, ISBN 978-1-4081-5262-1, paperback, 256 pages, £14.99.

This book claims to "give readers an insight into 'how birds work" and to "share many new insights into bird behaviour". Topics covered include: All About Eggs; Feathering the Nest; Defending A Territory; Breeding Behaviour; Communal Nesting; Flocking; Songs and Calls; The Juvenile

Years; Survival and Longevity; Population Regulation; Migration; Feeding; Roosting; Birds and Weather; Plumage and Moult; Feather Care; Flight; Vision and Other Senses. Each topic is further divided into well-chosen headings, with a paragraph, or more, of upto-date information to provide greater background for the reader. In this respect it fulfils its first claim, and while there are not really any 'new' insights, most examples chosen to illustrate the points made are new.

Well produced, with many excellent colour photographs to complement the corresponding text, though wide margins mean a lot of unused page space. My criticism is biggest the disappointing lack of bibliography to allow readers to follow up points of interest. Several books and publications are mentioned in the Acknowledgements, but are not linked to the topics, leaving the reader none the wiser where to track down further information.

Despite shortcomings, this is a fascinating and stimulating book, and at a reasonable price.

Stuart L. Rivers

Birds of Sri Lanka. Deepal Warakagoda, Carol & Tim Inskipp, Richard Grimmett, 2012. Christopher Helm, London, ISBN 978-0-7136-8853-5, paperback, 224 pages, £24.99.

With an overall total of some 237 breeding resident species and another 200+ visiting species, and endemic encompassing 27 species and 72 endemic subspecies, it is not surprising that the relatively small island of Sri Lanka is a destination high on many bird watchers' lists. It is now emerging from a terrible history of civil war, though some areas in the



north remain off-limits due to indiscriminate laying of land mines, whilst the results of the devastating 2004 tsunami are slowly

disappearing, albeit still very vivid in the minds of so many local people. Now Helm has produced a new Field Guide which in every way comes up to the high standards we have come to expect from this company.

Superficially similar to the previous accepted guide, Birds of Sri Lanka by John Harrison, this book to my mind has two distinct advantages; firstly that the illustrations are spread over some 72 colour plates as opposed to 49, and secondly that all the information on any species is to be found opposite its illustration. The former allows fewer species per page, reducing confusion and providing better illustrations. This in turn means that the plumage does not need to be described in such detail, thereby leading to the second advantage of not having to turn elsewhere in the book for the written accounts. I would certainly recommend this book to anyone visiting this fascinating country.

Mike Betts

A Photographic Guide to the Birds of Malta. André F. Raine, 2011. Langford Press, Peterborough, ISBN 978-1-904078-28-9, paperback, 200 pages, £15.00.

I should start by saying, in general, I am not a fan of photographic bird guides, and indeed this guide will not be of interest to experienced European birders. However, I think less-experienced birdwatchers and natural historians visiting Malta on holiday will not only find it very useful, but will enjoy it. Malta has

a very large species list of 397 species and the book covers the 130 species which visitors are likely to encounter. This is good, because it defines the audience, but also makes using the book a lot easier. Birders who are interested in the other 267 species have plenty of other references they can use.

One problem with photographic guides is the variation of quality of the actual photographs! Here, the general standard is pretty good. For every species there is a section on identification and another on similar species, but there are also on Habitat sections Conservation Status, I like this. There are also introductory chapters on: the islands of Malta. the habitats, the avifauna, top birding locations, conservation in Malta, and hunting and trapping in Malta. Every visitor to the islands should read this last chapter. There has been much progress in Malta concerning shooting and trapping, but there is still a long way to go.

Ken Shaw

Eagle Days. Stuart Rae, 2012. Langford Press, Peterborough, ISBN 978-1-904078-44-9, paperback, 195 pages, £18.00.

Stuart Rae's book is a distillation of many years spent studying Golden Eagles in the Scottish Highlands. It captures both a sense of the remote places that these iconic birds live in



and also the efforts involved in studying them in the wild. The book is illustrated with, and enhanced by, the author's own excellent photographs of landscapes and wildlife.

The author describes the eagle's year in different chapters; 'nest building', 'incubation', 'first flight'

and so on. He uses extensive field notes and diary entries from his varied encounters with eagles to fill in the details of the natural history of the species. Interspersed with his accounts of eagle life are acute observations of other wildlife, much of which is integral to the life cycle of the eagle. He also highlights the threats to Golden Eagles in Scotland, from habitat loss and land-use change to persecution and (possibly controversially) disturbance from hill walkers.

The author's writing style may not appeal to everyone, but most readers with an interest in eagles and the highlands should enjoy this book.

Andrew Bielinski

New Naturalist 119 - Scotland. Peter Friend, 2012. Collins, London, ISBN 978-0-00-735906-6, paperback, 466 pages, £30.00, hardback £50.00.



This is not a bird book. The subtitle 'Looking at the Natural Landscapes' and back cover notes soon make it clear that this is a

book about the landscapes of Scotland. The five introductory chapters describe the format of the book, and the geological processes which act on the underlying geology to create the surface landforms and landscapes of today. The next 19 chapters look at different areas covering the whole of Scotland, loosely based on the double-page spreads of the Collins Road Atlas of Britain. Chapter 25 is an 'Overview' of how Scotland has moved in latitude and longitude relative to England, Ireland and other continents over the long-term geological timescale and how this has contributed to the current Scottish landscapes. This is followed by six pages of suggested further reading and a comprehensive nine page index.

The text is authoritative, but readable, and the production and feel of the book is up to the usual high standard associated with the *New Naturalist* series. For anyone interested in how the current landscapes of Scotland were formed, this is an excellent addition to the available literature.

Stuart L. Rivers

New Holland Concise Garden Bird Guide. The Wildlife Trusts, 2012. New Holland, London, ISBN 978-1-84773-978-0, paperback in plastic jacket, 192 pages plus fold-out ID sheet, £4.99.

This is one of a series of 11 truly pocket-sized Concise Guides to flora and fauna in Britain and adjacent North-west Europe. Since it is most likely to be used at home, you question why it is produced at a size to match its siblings, when it would have benefitted greatly from a larger format. Firstly, it would properly showcase the artwork, which is the real strength of the book, and of a remarkably high and harmonious standard given that seven different artists were involved. Secondly, it would allow the inclusion of distribution maps to clarify and complement the generalised comments under the 'Distribution' heading. A separate fold-out sheet provides a 'Quick Recognition Guide', but the



thumbnail-sized images ideally need a magnifying glass. These gripes apart, the 89 s p e c i e s covered are

well-chosen and the identification texts generally good, if somewhat basic. A 35-page introductory section covers the basics of attracting birds to your garden with plants, birdfeeders and tables and nest boxes.

Despite shortcomings, this is an ideal book for youngsters or beginners.

Stuart L. Rivers

The Smallest Kingdom: Plants and Plant Collectors at the Cape of Good Hope. Mike & Liz Fraser, 2011. Kew Publishing, ISBN 9781842463895, hardback, 220 pages, £28.00.

This attractively produced book stems from 12 years spent in South Africa by two SOC members. It showcases Liz



Fraser's excellent artwork, while the somewhat idiosyncratic text by Mike Fraser contains a great deal of information on the plant collectors and plants they introduced to European gardens. The title refers to the remarkable diversity of flowering plants in what is only a part of one country; the other five floral kingdoms in the world range from Australia to the Holarctic/Boreal, which covers much of the northern hemisphere including Britain. Table Mountain alone is said to have more species of flowers than the British Isles. Many think of heather as a particularly Scottish plant, but we have three common species where South Africa has over 500. Many South African genera are now familiar to British gardeners with Agapanthus, Gladiolus, Lobelia and Pelargonium (incorrectly sold by garden centres as 'geraniums') among the best known.

Stan da Prato

RINGERS' ROUNDUP

If you have any interesting ringing recoveries, articles, project updates or requests for information which you would like to be included in the next issue, please email to Raymond Duncan at Raymond@waxwing.fsnet.co,uk. Thank you very much to the British Trust for Ornithology (BTO) and the many ringers, ringing groups and birders who provided the information for this latest round up. Thanks also to the many bird watchers who take the time and trouble to read rings in the field or find dead ringed birds and report them.





Plate 213. Cormorant HAV as a chick, Forvie, North-east Scotland, June 2008. © Chris Jones Plate 214. Cormorant HAV nesting at Holkham, Norfolk, May 2012. © Andrew Bloomfield

There's always one... Cormorant HAV

Some birds just don't read the books, and from time to time an individual bucks the trend and does something completely different to "the normal". Colour-ringed (darviced) Cormorant HAV is one such bird.

HAV was ringed as a chick at Sands of Forvie, North-east Scotland on 15 June 2008 (Plate 213). There were no further sightings until Mark Missin reported it roosting on an island at Snettisham, Norfolk on 28 February 2010; then no further reports until Andrew Bloomfield photographed it at Holkham, Norfolk on 14 May 2012... nesting in a tree (Plate 214)!

This is a very unusual and notable record for two reasons. It is the first chick from North-east Scotland to be recorded breeding away from its natal area. Over 40 others have been resighted back breeding in subsequent summers, many after wintering in England. Secondly, although it's not unusual for Cormorants to nest in trees, HAV

was raised on a sea cliff stack, so has completely changed breeding habitat. Perhaps it met a cute *sinensis* (the continental race believed to have pioneered the inland tree nesting colonies in central and southern England) and is now destined never to return home.

And another... Orkney Greylag Goose HSS

Neck collaring of the burgeoning breeding Greylag Goose population on Orkney has featured in previous bulletins, particularly in connection with the unusual link between a small number of these breeding birds which spend the winter in Norfolk/Suffolk. After using this rather unexpected wintering area, one of these birds, orange collar HSS, now appears to be trying to extend the breeding range of this population the other way!

HSS was ringed as a gosling on Loch of Hundland, Birsay on 10 July 2010. It was resighted with several other Orkney collared birds in Norfolk on 25 November 2010 and over



Plate 215. Greylag Goose HSS, Norfolk, February 2012. © Peter Allard

wintered there, last reported on 6 March 2011. It returned to Orkney for the summer, where it was seen at Loch of Banks, Birsay on 13 May 2011. It and several others again returned to winter in Norfolk in 2011/12, first resighted there on 13 November 2011 and last reported on 26 February 2012 (Plate 215).

Next report was on 27 April 2012, not back on Orkney, but in Sorvagur, Vagar on the Faeroe Islands, where it was still present on 4 May 2012!

A second Scottish breeding Greenshank on its wintering grounds

Following on from the history of colour-ringed Greenshank 'double red' ringed on its breeding grounds in Sutherland, and reported on its wintering site on the River Stour in Essex in two subsequent winters (Scottish Birds 31(3): 265), Dean MacAskill has managed to photograph a second colour-ringed bird breeding in Sutherland (Plate 216), which also has a wintering history from southern England (see



Plate 216. Greenshank DD51916, Sutherland, Northern Scotland, June 2012. © Dean MacAskill



Figure 1. Breeding and wintering locations of two colour-ringed Greenshank.

DD51916 was colour-ringed at Farlington Marshes, Portsmouth by Pete Potts and team on 23 November 2006 and over-wintered there with a final resighting on 17 April 2007. It has returned there every winter since, with multiple sightings from as early as 24 July (2008) to latest 25 April (2008). Amazingly, there had been no summer sightings in the intervening six years, until Dean's great chance encounter.

It remains to be seen if all our breeding adults winter in southern England. This highlights the importance of finding out such things given the potential threats to many of these estuaries and the impact it could have on our breeding population. The Highland Ringing Group are now putting geolocators on breeding birds in an effort to find out more about their wintering areas.

Common Sandpiper geolocated

Highland Ringing Group members Ron Summers and Brian Bates are also putting geolocators on



Plate 217. Common Sandpiper yellow over black, River Spey, May 2012. © Brian Bates

Common Sandpipers and were delighted to recapture a returning bird this spring (Plate 217). The Common Sandpiper was fitted with a geolocator on Speyside in May 2011. It took only two weeks to reach its wintering site in West Africa. The northward flight in 2012 appears to have been almost as rapid. Analysis of the light level data is revealing the bird's route, speed of travel and its wintering ground. A fuller account will be available for publication in due course.

First Scottish colour-ringed Coot

GR25480 was ringed as an adult male at Farnworth, Greater Manchester on 23 December 2010 and resighted there on 16 February 2011. It was then resighted over a year later at Straiton, Loanhead, Midlothian on 2 February 2012 (Plate 218). This is the first report in Scotland from over 1,000 Coot colour-ringed in the past few winters across northern and central England in a project co-ordinated by Kane Brides.

Around 40 Coot have now also been colourringed at Linlithgow Loch. Please check all Coot you see for colour rings and report all sightings to Kane.Brides@wwt.org.uk.



Plate 218. Colour-ringed Coot GR25480, Straiton, Midlothian, February 2012. © Robert Mackay

Black-headed Gulls head north into Scotland for the winter!

Kane Brides and team darviced a sample of Black-headed Gull chicks and adults in a colony at Killington Reservoir, Cumbria in June 2011. Resightings during the winter were perhaps a little bit unexpected, with several moving northwards into Scotland! Two birds, an adult (seen 10 December 2011 to 25 February 2012) and a chick (seen 29 August 2011), were resighted 166 km WNW at Bishopburn, Loch Ryan, Stranraer, Dumfries & Galloway, another adult was seen on 10 February 2012 112 km NNW at Johnstonebridge, Lockerbie, Dumfries & Galloway and a third adult was seen on 22 January 2012 179 km NE at Alnwickhill, Edinburgh. All the adults were subsequently resighted back at the colony in May.

Gull colour-ringing (darvicing) projects

With ever-changing pressures on our gulls from urban warfare to coastal declines there are now several gull darvicing projects in operation to monitor movements, survival and population changes. See below for some of these with codes and relevant contact details:

Black-headed Gulls (ongoing): Cumbria/Lancashire, Email: kanebrides@gmail.com

20 Black-headed Gull chicks in 2012: Grampian, Email: calumcambl@hotmail.co.uk

150 Common Gull chicks at an upland colony in 2012: Grampian, Email: calumcambl@hotmail.co.uk

110 Lesser Black-backed & Herring Gull chicks in 2012: 13 Great Black-backed Gull chicks in 2012: Horse Island, Ayrshire, Email: iainlivcrg@googlemail.com

c.150 Lesser Black-backed Gull chicks in 2012: Loch Leven, Kinross, Email: nfmitch2000@yahoo.co.uk

Ongoing; 400 mainly Herring Gulls in 2012: Aberdeen and Montrose, Email: e.ferguson 17@hotmail.co.uk

Great Black-backed Gull chicks (ongoing): Northern Scotland colonies, Email: markoksien@btinternet.com

Colour-ringed Glossy Ibis

Danny Heptinstall made a good choice to have a break from his computer screen for a wee while on 30 April 2011. A quick walk along to his local patch at the Donmouth in Aberdeen revealed three Glossy Ibises feeding on an island amongst the grasses, one with a colourring. It had been ringed as a chick on 20 May 2009 in the Lucio Cerrado Garrido area of the Doñana National Park in Spain. Great to get some feedback on the origins of some of our

rarer vagrant species and interesting that adults, and not just lost, 'thick' juveniles, are also involved in these wandering parties.

Scottish Common Gull heads for Ireland

Scottish Common Gull chick ET47509 (Scottish Birds 30(3): 255) is still going strong and spending its winters in Sligo Harbour, Ireland. Ringed as a chick by Hugh Insley at Loch Tarff, Highland in May 1997, Michael Casey reported it back in Sligo on 1 October 2011, at over 14 years old "still asserting a claim as boss of Quay Street car park on the same railing for its eighth consecutive autumn".

Scottish Cuckoos join the club

Following on from the tremendous success of the BTO coordinated project to satellite-track Cuckoos from Norfolk in 2011, the project has been expanded in 2012 to include tagged birds from Scotland and Wales. Log on to the link below to follow their fascinating movements: www.bto.org/science/migration/tracking-studies/cuckoo-tracking

White Wagtails

lain Livingstone's request for sightings of colourringed Pied/White Wagtails (*Scottish Birds* 32(1): 62) met with an almost immediate response by Rodger Wyatt (well surely everybody in England gets *Scottish Birds* too don't they?), who sent lain the superb photograph below (Plate 219) The bird was colour-ringed as a classic pale autumn bird, probably a male, on 31 August 2010 at the Olympia Centre, East Kilbride, Clyde. Rodger photographed it in its handsome summer plumage at Farmoor Reservoir, Oxfordshire on spring passage on 23 April 2012.



Plate 219. Colour-ringed White Wagtail, Farmoor Reservoir, Oxfordshire, April 2012. © Rodger Wyatt

After c.35 years and over 7,000 Pied/White Wagtails ringed, Grampian Ringing Group received their first ever Irish recovery in a recent batch from the BTO. L433859, ringed as a juvenile on 18 September 2010 in a reed bed roost on the River Ythan, was taken by a cat on 12 April 2012 at Kilmuckridge, Co. Wexford. Like the Oxfordshire bird above, this must surely have been a White Wagtail on its spring passage northwards.

And finally the lost Shag!

A big thank you to Jack Wylson and Hannah Grist for this photograph of a rather out of habitat shot of a darvic-ringed Shag on a house window ledge in Lowestoft! Just a reminder to check all Shags for darvics wherever you may be! This summer birds have been darvic-ringed in colonies from Caithness to the Farne Islands on the east coast and on the Shiants on the west coast.

Please report all sightings of colour-ringed Shags to shags@ceh.ac.uk.



Plate 220. A lost Shaq in Lowestoft, Suffolk, December 2011. © Jack Wylson



Plate 221. Lapland Bunting, Barns Ness, Lothian, September 2010. © James Wood

The arrival of two Lapland Buntings at Balranald, North Uist, Outer Hebrides on 25 August 2010 heralded the start of the largest influx of the species into Scotland and Britain ever recorded. The birds arrived in several waves over a period of about two months, with highest numbers noted from the Northern Isles and Outer Hebrides, but several other areas also experienced record counts. The pattern of the arrival is described and the likely origin of the birds and the factors leading to the influx are discussed.

Historical status of Lapland Bunting in Scotland

This species has three subspecies (BOU), with all Scottish and British records believed to relate to the nominate form lapponicus. This is the most widespread subspecies with a circumpolar breeding range, extending from northern Canada, Greenland, Scandinavia, and eastwards through northern Russia to easternmost Siberia. It is entirely migratory, with birds wintering from southernmost Canada to California and across central USA to North Carolina Newfoundland, along North Sea coasts and from coastal north-west France to Denmark, and in large numbers on the steppes of Southeast Europe and Russia east through Kazakhstan, Mongolia, northernmost China to Korea and East and South-east China.

Prior to the early 1950s, it was believed to only be a migrant in Scotland (Baxter & Rintoul 1953), but wintering flocks have been recorded in most years since then, particularly at favoured traditional sites on the east coast. Numbers vary considerably from year to year and birds are typically nomadic, showing little or no tendency to remain at the same sites throughout the winter. Though essentially a migrant and wintering species, Lapland Buntings have bred in Scotland, with at least 16 confirmed and 38 possible breeding pairs found in upland montane areas during 1974-80. Further birds on suitable breeding habitat were noted in 1968, 1988, 1989, 1992, 1994, 1995 and 1997 (Forrester et al. 2007).

The highest counts of Lapland Bunting in Scotland have come from the Northern Isles and the east coast of the mainland. A count of 100 birds was made on Foula on 15 September 1966, and 90 birds were noted on Fair Isle on 13 September 1960, with up to 80 there on 9–12 September 1953, 80 on 16 September 1973 and 70 on 11 September 1987 (Pennington *et al.* 2004). Aberlady Bay (Lothian) was host to 70 birds on 4 November 1956 and 50 were present at Phingask Bay, Fraserburgh (North-east Scotland) on 29 January 1994 (Forrester *et al.* 2007). Elsewhere in Britain, high counts are typically in the low to

mid double-figures, though the highest counts in England have been 350 at Butterwick, Lincolnshire on 18 January 1986, 230 flew south at Spurn, Yorkshire on 15 November 1956, 200 were at Allhallows, Kent in November 1985, 130 at Halvergate Marshes, Norfolk on 27 January 1980 and 125 at Burnham Norton, Norfolk on 22 January 1987 (Brown & Grice 2005); in Wales the highest count is of 26 birds on Strumble Head, Pembrokeshire in both October 1987 and September 1988 (Lovegrove et al. 1994). In Ireland, the highest day count is of 70+ on Tory Island on 10 September 1960 (Williamson 1961).

The autumn 2010 influx into Scotland

birds on Fair Isle on the latter date.

Last week of August - earliest arrivals
The first birds on 25th were followed by mass
arrivals on 28th and 31st, with a peak of 142

The first Lapland Buntings to be reported in Scotland in autumn 2010 were two at Balranald, North Uist (OH) on 25 August. These were followed by two on Fair Isle and one on North Ronaldsay (Ork) on 27th and then a notable arrival occurred on 28th with three at Scatness (Shet), 60 on Fair Isle, 58 on North Ronaldsay and two at Griminish Point, North Uist (OH). The following day the total on Fair Isle rose to 90+, 53 remained on North Ronaldsay and six were found at Alkerness, Evie (Ork). On 30th, 90 were still on Fair Isle, 49 on North Ronaldsay and five were feeding in the stubble at Balelone Farm, North Uist. A further wave of Lapland Buntings arrived on 31 August, with five at Kettla Ness, Burra and two on Mousa (both Shet), 142 on Fair Isle, 92 on North Ronaldsay, 30 were noted at Mull Head and 13 plus a dead bird reported at Brough of Birsay (all Ork), at least one flew over Stinky Bay, Benbecula (OH) and five flew over South Glendale, South Uist (OH). Single birds were also arrived on the east coast, with one at Donmouth, Aberdeen (NES) and one on the Isle of May.

There have been August records of Lapland Buntings in Scotland on many previous occasions, but never in such numbers. The earliest ever autumn sighting date was of a male at Mull Head, Papa Westray (Ork) on 22 July 1999, with the second also from Orkney - one at Orphir on 5 August 1983. Other early records involve singles on St. Kilda (OH) on 7th and 18 August 2002 and at Carinish, South Uist (OH) on 22 August 1998. The next is one on Fair Isle on

23 August 1957, with many other August sighting dates also from there, including one on 25th (2008), and three on 27th (1959, 1991 & 1995). Elsewhere, the earliest Shetland autumn sighting was a single at Sumburgh Head on 28 August 2002 (Pennington *et al.* 2004), and the earliest autumn record from the mainland of Scotland (excepting presumed breeding or summering birds) appears to be one which flew over with Meadow Pipits in the Clyne Valley, Sutherland (High) on 4 September (Mainwood 1993).

The previous highest day count from August was 'at least 10' on Fair Isle on 31st in 1999. Clearly the Lapland Bunting occurrences of August 2010 were exceptional, but even more remarkable is that they were just the beginning of a much larger and extended influx of the species into Scotland, the rest of the UK and Ireland.

First week of September

The first two days of the month saw a marked arrival of birds, particularly on the Outer Hebrides (peak site count of 250), Fair Isle (peak 140) and Orkney (peak 104), though birds soon moved on.

Shetland had two at Quarff, one at Sumburgh Head and one at Saxa Vord on 2nd, and nine at Hermaness, Unst on 5th. There were 184 on Fair Isle on 1st, 140 on 2nd, 110 on 3rd, 140 again on 4th, dropping to 90 on 5th & 6th and 70 on 7th. In Orkney, North Ronaldsay hosted 104 on 1st, 30 on 2nd, 72 on 3rd, 22 on 4th, 46 on 5th, 36 on 6th and 35 on 7th; Brough of Birsay had 13 on 1st, 71+ on 2nd, 14 on 3rd, 25 on 4th, and 12 on 5th; Black Craig had six birds on 1st, and 26 on 2nd; White Braes, Stromness hosted 12 on 1st and 26 on 2-3rd, and three were on Burray and two on Egilsay on 2nd. On the Outer Hebrides, there were 2+ at Ardvule Point on 1st, with one at Drimsdale the same day and eight there on 2nd, 15+ at Eochar on 1st, one at Bornish (all South Uist), five at Paiblesgarry (North Uist), 74 at Butt of Lewis (Lewis) all on 1st, with 17 there on 4th, 11 at Labost on 2nd and one at Brue on 5th (both Lewis). There were 20 at Ardvule Point on 4th, and eight at Bornish that day. Highest counts came from Balranald, North Uist, with 50+ on 1st, up to 200 on 2nd, 250 on 3rd but then just five on 6th and 23 on 7th, with 21 at Baleshare, North Uist on the latter date.

Five were reported from Duncansby Head on 3rd, with a total of 27 just west of Holborn Head, Thurso Bay (both Caith) also on 3rd, at least five there on 4th, and 30 on 5th. A total of 71 birds were noted from Sandwood Bay to Balchrick (High) on 2nd. In North-east Scotland, two

[Recording area abbreviations used are those listed in the quarterly sightings review at the end of this issue of Scottish Birds.]

were noted at Sands of Forvie on 1st, and a flock of seven on 3rd, one flew over Rigifa Pool, Cove on 3rd, one flew over Loch of Strathbeg RSPB Reserve on 3rd, with another there on 6th, one flew south over Collieston on 4th, and two (possibly 5) were at Girdle Ness on 4th. At least five were present at Barns Ness (Loth) on 5th, and one was seen at St. Abbs Head (Bord) on 7th. In Argyll, most reports came from Tiree with two at Salum on 1st, six at Hough Bay on 2nd, 10 there and singles at Balephuil, Loch an Eilein and The Reef on 3rd, 48+ at Hough Bay on 5th, 24+ there and two at Miodar and three at Greenhill on 6th, and one at Sandaig on 7th. On Islay, there were singles at Machir Bay and RSPB Gruinart Reserve on 5th, and on mainland Argyll there were two at Port Ban, Knapdale also on 5th.

The movements through the Outer Hebrides were totally unprecedented, and presumably some of these birds were involved in the record numbers seen in Argyll. Historically, the relative lack of observer coverage in these areas means that this species has probably been much underrecorded in the past. Equally the same probably applies to the 2010 influx with many arrivals passing through unseen. On the Northern Isles record totals continue to be set and reset, while the east coast of mainland Scotland is starting to witness birds filtering down.

Second week of September

Another notable arrival took place from 8 September, with several large flocks found on Orkney and particularly the Outer Hebrides on 12th, while Shetland saw small influxes on 11th and from 14th.

On Shetland, there was one at Skaw, Unst, four on Fetlar and and 12 at Scatness on 10th, with five still at the latter site, 10 on Noss, 35 on Foula and one at Toab, South Mainland on 11th and 30 were at Lamba Ness and 30 on Foula on 14th. Fair Isle was still host to 72 birds on 8th, rising to 104 on 9th, 140 on 10th and 148 on 11th, then dropping to 73 on 12th and 55 on 14th. In Orkney, North Ronaldsay had 39 on 8th & 9th, 78 on 10th, 55 on 11th, rising to 135 birds on 12th, but just five on 13th and 29 on 14th; Brough of Birsay 25 on 9th, 10 on 10th and one on 12th, 11 at Birsay Links on 11th and seven there on 14th, two at Hoxa Head, South Ronaldsay on 12th, one on Stronsay also on 12th, three at Whitemill, Sanday on 13th, and five at Rackwick, Westray on 14th.

On the Outer Hebrides, there were six at Bornish on 8th, with 20 at Ardvule Point on 9th, with one still on 12th, four were at Drimsdale on 9th, with one on 12th–13th, seven at West Gerinish (all South Uist) and three at Loch Paible, North Uist on 10th, 40 at Butt of Lewis and 17 at Brue (both Lewis) on 11th, 80+ at Eochar, South Uist on 12th, with 12 at Torlum, Benbecula that day and seven still there on 14th, and one at Loch Ordais, Lewis on 14th.

Again highest counts came from Balranald, North Uist, with 50 on 8th, 55 on 11th, 275+ over SE on 12th, and about 250 present on 13th.

Four were reported on Handa Island (High) on 14th. Two were seen at Troup Head (NES) on 9th, and 21 at Sands of Forvie (NES) that day, with one still there on 11th, and one flew south past Blackdog on 14th. There were two at Easthaven (Ang) on 11th with one still present the next day. One was noted at Kilminning (Fife) on 9th, and five on the Isle of May on 10th. In Lothian, there were seven at Scoughall and seven at Barns Ness on 9th with five there on 11th, five at Skateraw on 11th, and one at Musselburgh Lagoons on 12th. In Argyll, at least 30 were present at Sandaig and 20 at Hough Bay on Tiree on 8th, with 20 still at both Sandaig and Hough Bay on 10th, 17 at Cornaigmore on 11th and 12 at Sandaig on 13th, with nine at Crossapol, Coll on 13th and 12 at Gallanach, Coll on 14th. There were two at Maidens (Ayrs) on 9th.

Third week of September

The small influx into Shetland continued at the start of the week, while new waves of arrivals were noted on the Outer Hebrides from 16th and Fair Isle and Orkney from 19th. Good numbers also filtered south down the east coast (peak of 54 in Lothian on 19th) and west coast (peak of 30+ on Tiree on 17th).

Shetland had 40 on Foula from 15–21st, 40 at Lamba Ness on 15–16th, and 45 there on 18th, 12 at Scatness and seven at Norwick, Unst on 18th, 15 at Kettla Ness, Burra, three at Dalsetter, South Mainland, and seven at Scatness on 19th, and 26 at Burravoe, Yell and 26 at Scatness on 21st. On Fair Isle there were 42 birds present on 15th, 90 on 16th, 67 on 17th, 79 on 18th, 160 on 19th, 112 on 20th and 125 on 21st.

In Orkney, high counts again came from North Ronaldsay with 26 on 15th, nine on 16th, 31 on 17th, 15 on 18th, 48 on 19th, 32 on 20th and 68 on 21st. Elsewhere there were 15 on Papa Westray on 16th, seven at Orphir on 17th, 10 on Birsay Beach on 18th, with 35 at Hill of Borwick, Yesnaby and one at Kirkhouse, South Ronaldsay the same day. There were 52 at Birsay Links on 19th, with 66 counted between Black Craig and Lyre Geo, from Stromness, a flock of 36 at Outertown, Stromness, a flock of 35 at Head of Holland, St. Ola and 40 counted from Yesnaby to Lyre Geo, Sandwick also on 19th. On 20th there were nine at Cleat, Holm, five at Marwick Bay, Birsay, and 76 at Head of Holland, St. Ola, with 50 still there the following day. In the Outer Hebrides, there were four at Ardvule Point on 15th, two at Drimsdale and one at South Glendale (all South Uist) that day, with 20 there on 16th and 30 on 17th, five at Paiblesgarry, North Uist on 16th, with 110 at Balranald, North Uist, 18 at Glen Miavaig, Harris, and 49 at Butt of Lewis, Lewis that day, 12+ at Bornish, South Uist on 17th, a total of 90 on South Uist on 19th, and 100+ on 20th.

Seven were reported at Neist Point, Skye on 16th, and seven were seen at Dornoch (both High) on 17th. In North-east Scotland, two were at Girdle Ness (NES) on 17th, with one at Collieston the same day, one at Blackdog Links on 18th, with one south past there on 19th, seven at Girdle Ness on 20th and one at Millden Links, Hatton on 21st. One flew west at Elie Ness, Fife on 20th, with five noted heading south there on 21st. In Lothian, one or two were at Musselburgh Lagoons on 16-17th, plus two at Tyninghame on 16th and one there on 20th, 19 were present at Barns Ness on 18th, with 45 there on 19th, with nine at Aberlady on the latter date - the peak counts for both sites in the autumn. In Argyll, most reports were again from Tiree with three at Aird on 15th, one at Greenhill and 15 at Sandaig on 16th, 30+ at Loch an Eilein on 17th, 20 at Sandaig and one at Hynish on 19th, and six at Salum on 20th. On Coll there were 18 at Acha on 16th, and on Islay there were three at Kinnabus, Oa on 15th. Three were

present at Corsewall Point (D&G) on 17th, and one at Lady Bay, Loch Ryan (D&G) on 21st.

22nd to 30 September

The 22–25th provided the main peak of the entire influx, with 172 birds present on Orkney on 22nd, 125 on Fair Isle on 24th, and c282 on Shetland and at least 660 on the Outer Hebrides on 25th. The 25th saw the best day total ever recorded in Scotland with at least 1,080 birds present.

On Shetland, up to 40 were regularly noted on Foula, but peaked with 105 on 24th, 27 were noted on Fetlar on 22nd, six at Scatness on 23rd, 12 at Lamba Ness and one at Virkie, South Mainland on 24th, 34 on Foula, 83 on

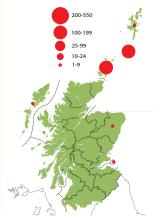


Figure 1. Distribution of Lapland Bunting sightings by recording area, 31 August 2010.

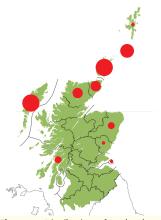


Figure 2. Distribution of Lapland Bunting sightings by recording area, 1–3 September 2010.



Figure 3. Distribution of Lapland Bunting sightings by recording area, 8–12 September 2010.

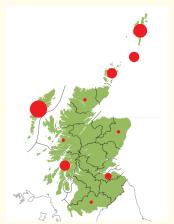


Figure 4. Distribution of Lapland Bunting sightings by recording area, 15–18 September 2010.

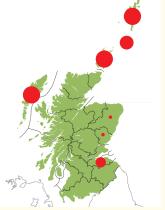


Figure 5. Distribution of Lapland Bunting sightings by recording area, 22–25 September 2010.

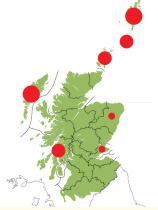


Figure 6. Distribution of Lapland Bunting sightings by recording area, 1–3 October 2010.

Articles, News & Views

Fetlar, 80 at Eshaness, North Mainland, c42 at Lamba Ness, 38 at Scatness and at least five at Baltasound, Unst on 25th. On 26th there were 36 at Scatness, 20 at Eshaness on 27th rising to 30 on 28th, with 23 on Fetlar the same day, and one was present on Out Skerries on 29-30th. Fair Isle had counts of 80 on 22nd, 100 on 23rd, 125 on 24th, 113 on 26th, 123 on 27th, 195 on 28th, 160 on 29th and 175 on 30th. North Ronaldsay (Ork) was host to 67 birds on 22nd, 15 on 23rd, 27 on 24th, 107 on 25th, 208 on 26th, 272 on 27th, 156 on 28th, 118 on 29th, and 146 on 30th. Elsewhere on Orkney there were 25 at Black Craig, Stromness and 80 at Head of Holland, St. Ola on 22nd, seven at Outertown, Stromness on 23rd, 12 at Birsay Links on 25th and 27th, 11 on Sanday on 26th and 50 at Yesnaby also on 26th but with just one there the next day, 12 at Birsay Beach, and two at Eves Loch, Deerness on 27th, then four at Burray Ness, Burray, 14 at Yesnaby, 12 at Durkadale, Birsay and one at Marwick Head, Birsay on 30th. On the Outer Hebrides, there was a total of c.350 on South Uist on 25th, with a single flock of 200 birds on North Uist on 24th, 130 noted there on 25th and 70 at Butt of Lewis, Lewis also on 25th. Up to six were in stubble fields at Eoligarry, Barra on 26th. Up to 110 were in stubble fields at Eoligarry, Barra on 25th, 12 on 26th, 30+ on 27th, 3+ on 29th and 40 on 30th, with one flying N over Northbay, Barra also on 30th. Around 40 were on Baleshare, North Uist, 10 at Howmore, South Uist, 10 flew east over Drimsdale. South Uist, at least 120 were on the Bornish machair, South Uist on 29th and 10 at Loch Paible, North Uist on 30th.

In North-east Scotland, there were five at Girdle Ness on 22nd, with five, possibly six, at Rattray Head on 26th, one flew over Portlethen village on 27th, one flew over Troup Head on 28th, and nine were present at Millden Links, Hatton on 30th, with up to four at Girdle Ness, six at Loch of Strathbeg, plus one flying south over Cove Bay Community Woodland that day. Five were present at

Scurdie Ness (Ang) on 25–26th, with two at East Haven (Ang) also on 26th. Twelve were at Wormiston, Fife Ness (Fife) on 26th. In Lothian, there were 34 at Barns Ness on 24th, dropping to 20 by 28th, two at White Sands on 26th, one at Old Craighall on 29th, and one at Tyninghame on 30th.

In Argyll, most records were again from Tiree with six at Sandaig on 26th, eight there on 27th, six on 28th and 10 on 29th, four at Barrapol on 27th, three at Loch Bhasapol on 29th, with 12 at The Reef the same day and at least 29 there on 30th. On Islay three were at Upper Killeyan on 28th. Three were present at the Mull of Galloway (D&G) on 29th.

First week of October

Again record day and site counts continued to be broken and new ones made, and there was little sign of a let up as still more birds arrived at the start of October. Away from the Northern Isles and Outer Hebrides, birds continued to filter south and east along the mainland coasts and adjacent islands.

On Shetland, there were 18 birds on Out Skerries and four at Virkie, South Mainland on 2nd, up to 60 at Uyeasound, 40 at Norwick, 40 at Baltasound, 30 at Haroldswick and 10 at Burrafirth (all Unst) on 2–3rd, 10 were still present on Out Skerries on 3rd, while counts on Foula peaked at 114 on 6th, with 13 at Skaw, Whalsay, 10 on Papa Stour, four at Norwick and one at Skaw, Unst also on 6th. Ten were at Virkie, seven on Out Skerries and three on Fetlar on 7th. Fair Isle had 74 birds present on 1st, 103 on 2nd, 128 on 3rd, 85 on 4th, 60 on 5th, 118 on 6th and 67 on 7th. In Orkney, North Ronaldsay was host to 43 on 1st, 145 on 2nd, with 97 on 3rd, and just three on 4th, 53 on



Plate 222. Lapland Buntings, Scatness, Shetland, September 2010. © Steve Minton

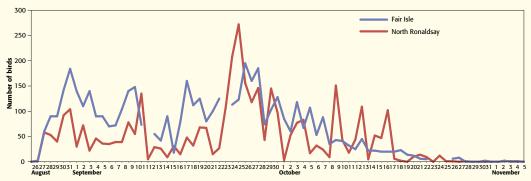


Figure 7. Daily totals of Lapland Buntings recorded on Fair Isle (blue) and North Ronaldsay (red) in autumn 2010.

5th, 77 on 6th and 83 on 7th. Elsewhere there were eight at Birsay Links on 2nd and 20 there on 3rd, 28 at Black Craig, Stromness and 40 at Head of Holland, St. Ola on 4th, two at East Hill, Shapinsay on 5th and 19 at Salties, Sanday on 7th. On the Outer Hebrides, at least 10 were on Baleshare, North Uist on 2nd, with a few still present the next day, 150 birds were present at Howmore, South Uist on 3rd—7th, 200 in the Ardvule/Bornish area, South Uist on 3rd, with 100+ still present on 6th, at least 40 were on Baleshare, North Uist and eight flew over Drimsdale, South Uist on 6th, and 100 were at Borve, Benbecula, 25+ at Aird an Runair, North Uist and one at Bruernish, Barra on 7th.

In North-east Scotland, two were at the Torry Battery, Girdle Ness on 1st, seven in stubble fields at Troup Head, two at Forvie and one at Collieston on 2nd, three at Girdle Ness on 3rd, with two still on 4th, and two were at Millden Links, Hatton on 5th. Twenty were in stubble fields at Wormiston, Fife Ness (Fife) on 3rd, and five at Barns Ness on 2nd and three at Musselburgh (both Loth) on 4th. In Argyll, 87 birds arrived in small groups from the NW at Whitehouse, Tiree on 2nd and 17 were present at Sandaig, Tiree the same day, with 20 there on 3rd, 12 on 4th, seven on 5th and 17 on 7th, 26 were at Clachan and 35 at Upper Kennovay on 5th, and 30 at The Reef on 6th.

Second week of October

Notably lower numbers present on the Northern Isles, Outer Hebrides and Argyll in the first half of the week, but totals boosted again from waves of new arrivals on 10–12th: North-east Scotland saw a rise in numbers (38 at Loch of Strathbeg) and Argyll experienced record totals (160 on Tiree).

Shetland saw 20 still on Foula to 12th, 25 at Scatness on 10th, 12 at Skaw, Unst on 11th, and 10 at Eshaness on 12th, and five were on Foula on 14th. Fair Isle hosted 107 on 8th, 53 on 9th, 88 on 10th, 35 on 11th, 43 on 12th, dropping to 41 on 13th and 32 on 14th. On Orkney, North Ronaldsay had 17 on 8th, 32 on 9th, 24 on 10th, nine on 11th, 151 on 12th, 43 on 13th and 18 on 14th. Elsewhere there was one on Sanday on 9th, one at East Denwick, Deerness, 37 at Head of Holland, St. Ola and five at Old

Manse, Holm on 12th. On the Outer Hebrides, there were around 25 at Ness, Swainbost, Lewis, and four flew over Loch Druidibeg, South Uist on 10th, 60 were at Siadar, Lewis, 70+ at Paible, North Uist, and one at Smerclate, South Uist on 11th, 100 present at Borve, Benbecula on 12th, with at least one over Baleshare, North Uist, three on Orosay, South Uist and at least two over Loch Druidibeg that day, and one flew N over Ard Mhor plantation, Barra also on 12th. There were 20 at Siadar, Lewis and 28 at Aird an Runair, North Uist on 14th.

In North-east Scotland, one flew over Troup Head on 8th, with 10 at Loch of Strathbeg that day, and at least 38 there on 9th, with one at Rattray Head, one at Forvie and two at Collieston also on 9th, four at Strathbeg, three at Forvie and one at Asloun, Alford on 10th, one still at Forvie on 11th, and two at Blackdog Links on 12th. At least six were present in stubble fields at Wormiston, Fife Ness (Fife) on 9th and c 12 the following day with a further bird nearby at Kilminning. In Lothian, three were at Barns Ness on 9th, two at Skateraw on 10th, one or two at Torness on 10–13th and three at Thorntonloch on 11th. In Borders, one was at the Lighthouse Garden, St. Abb's Head with a further eight noted flying south there on 12th, and one was at New Mains Farm, Reston on 13th.

In Argyll, large numbers were reported from Tiree with 10 at Vaul on 8th and 12 there on 10th, two at Cornaigbeg on 9th, 20 at Sandaig on 9th, 10 there on 10th, and 40 on 11th, 40 at The Reef on 12th, with 160 birds present there in four flocks on 13th. On Islay, there was one at Ardnave on 9th, five there on 10th and four at Bolsay on 11th, with two at West Tarbert, mainland Argyll also on 11th. One was present at Corsewall Point (D&G) on 10th.

Third week of October

A marked reduction of numbers on the Northern Isles, and particularly the Outer Hebrides, was evident, while Fife enjoyed its best-ever site and day total (70 at Wormiston, Fife Ness).

Shetland had 60 at Skaw, Unst on 15th, and a peak of 40 at Virkie on 20th. On Fair Isle, there were 25 birds present on 15th, 45 on 16th, 22 on 17–18th, and 20 on 19th–21st. On Orkney, North Ronaldsay hosted 44 birds

on 15th, 109 on 16th, just five on 17th, 52 on 18th, 47 on 19th, 102 on 20th, but only six on 21st. Elsewhere, there were four at Birsay Links on 17th and five there on 20th, and one at Greens, Upper Sanday (South Mainland) on 19th. On the Outer Hebrides, three flew north over Drimsdale, South Uist on 16th, with at least 40 on the machair there on 18th, and at least four in the Balranald area, North Uist on 20th.

A total of 70 birds were present on stubble fields at Wormiston, Fife Ness (Fife) on 16th, and six flew west at Elie Ness, Fife, on 17th. In Lothian, one was at Thorntonloch on 16th, singles at Musselburgh and Aberlady on 17th, and at least one at Barns Ness throughout the week. In Borders, five were noted flying south at St. Abb's Head on 16th, with one in the Lighthouse Garden there on 17th. In Argyll, there were five at The Reef and two at Gott Bay on 16th and one flew west over Milton (all Tiree) on 20th, with one at Ardnave, Islay on 21st.

22nd to end October

Numbers dropped further, with only the Outer Hebrides hosting more than 50 birds (peak site count 35), and many birds had obviously moved through to more southerly latitudes.

Shetland had 12 at Haroldswick, Unst on 23rd, 28 at Scatness on 23-24th, eight around Exnaboe/Toab, South Mainland on 25th, and 11 at Virkie on 28th. Fair Isle had 23 on 22nd, 14 on 23rd, 12 on 24th, six on 25th, five on 26th, 15 on 28th, six on 30th and eight present on 31st. In Orkney, numbers dropped, with North Ronaldsay providing two on 22nd, 10 on 24th, 14 on 25th, nine on 26th, 12 on 28th, and one on 29-30th. Elsewhere, there were 12 at Black Craig, Stromness on 22nd, three at Brodgar, Stenness on 27th, and 14 at Durkadale, Birsay on 28th. On the Outer Hebrides, seven were on the Borve machair, Benbecula on 23rd, 35 between Askernish and Frobost, South Uist the same day, one flew over Eoligarry, Barra on 24th, three were at Smerclate, South Uist on 25th, with eight at Siadar, Lewis also on 25th and then a single at Borve on 31st.

Two were seen at Arbroath Cliffs (Ang) on 24th. In Fife, one was present in stubble fields at Kincraig Head on 23rd, one flew over Morton Lochs car park on 28th, and three singles flew west at Elie Ness on 31st. In Lothian, a handful of birds lingered at Barns Ness to the end of the month, and six were noted in stubble fields at Dowlaw (Bord) on 30th. Five flew south over Barassie (Ayrs) on 30th.

November

Numbers were now much reduced on the Northern Isles (peak site count of 19 birds) and Outer Hebrides (peak seven birds), and although there was a good spread of records elsewhere, numbers were low.

In Shetland, there was one at Haroldswick, Unst on 4th, three at Wester Quarff, South Mainland, and one at Skaw,

Unst on 6th, two at Virkie on 9th, 19 at Exnaboe on 10th, 14 at Scatness on 10–12th, one at Baltasound, Unst on 27th and two there on 29th proved the last of the year. There were two on Fair Isle on 4th and 7th November, with no further sightings to the end of the year. In Orkney, North Ronaldsay was host to singles on 1st, 7–9th, 15th and 21st, with two present on 22nd, with six at Black Craig, Stromness on 4–5th and one at Langskaill, Toab on 9th. On the Outer Hebrides, there were singles over Drimsdale and North Locheynort on 5th, Snishival on 10th, near West Loch Ollay on 16th and two on The Range (all South Uist) on 14th. Further singles were noted at Siadar, Lewis, and Stoneybridge, South Uist on 20th and Balemore machair, North Uist on 23rd, with five at Drimsdale, South Uist on 27th and at least seven there on 28th.

In North-east Scotland, one flew north over St. Combs on 13th, and one was present at Old Rattray on 26th. One flew west at Elie Ness, Fife on 15th. In Lothian, one was at White Sands on 2nd, four flew north at Barns Ness on 5th, and three flew west and four south at Musselburgh on 6th, with further singles noted there on 11th and 28th, singles at Tyninghame on 5th, 16th and 23rd, and one at Thorntonloch on 14th. In Borders, an immature female was seen at Hummelside, near Alemoor Reservoir, on 10th, and one at Mill Burn, Coldingham on 28th. In Argyll, there was one at RSPB Gruinart Reserve, Islay on 3rd, three on stubbles at Balephetrish, Tiree on 15th, four at Ardnave, Islay on 17th, and one at Ben Hynish, Tiree on 21st.

December

Numbers dropped further, with none on Shetland or Fair Isle, reduced numbers on Orkney and the Outer Hebrides (peak of seven) and just six on the mainland.

North Ronaldsay had two on 3rd, one on 6–7th, six on 17th, and finally one on 24th.

Two were at Tarbat Ness (High) on 18 December. On the Outer Hebrides singles were on the machair at Drimsdale, South Uist on 2nd and 5th, three at Upper Aird Point, Lewis on 9th, three at Kilpheder on 16th, three at Askernish on 19th, seven at an RSPB feeding station at Kilpheder on 26th and at least three at Bornish (all South Uist) on 29th. One was noted at Kilrenny, Fife on 7th, one at Musselburgh (Loth) on 2nd, one at Girvan Mains (Ayrs) on 20th, and three were at RSPB Mull of Galloway (D&G) on 15th.

Numbers and probable origins of the birds

This is not the first time there has been a large autumn arrival of Lapland Buntings in Scotland, though it is far and away the biggest documented to date. Other sizeable influxes have been recorded in 1949, 1953, 1959, 1960, with the 1953 invasion the biggest recorded prior to the 2010 event (Williamson & Davis 1956, Davis 1960, Davis 1961).

It is impossible to know just how many birds were involved over the period of the immigration of Lapland Buntings into Scotland in 2010, but obviously several thousands of birds must have passed through. To get a rough idea of numbers we can examine the totals at our two northern observatories, where virtually daily systematic counts were made and there is a discrete recording area. If the number of apparently new birds for these two locations are calculated (and with no additional turnover taken into consideration), then the absolute minimum number of birds passing through Fair Isle would be 820 and on North Ronaldsay would be 1,267. Given the numbers on the Outer Hebrides as well, it would seem that a total of 5,000 birds might not be an unrealistic estimate, though the actual total could be significantly higher.

The overwhelming evidence points to a northwestern origin to the birds, and this can be seen by examining totals seen in Iceland, where Lapland Bunting is a rare to scarce migrant. A count of 240 in south-west Iceland on 5 September 2010 (*Dutch Birding* 32(5): 348) was particularly notable and indicates that birds were being displaced southeastwards in the North Atlantic at the early period of the influx into Scotland.

In a similar comparison of birds in Ireland with Scottish arrival dates, the first birds noted in Ireland were at Bridges of Ross, Co. Clare, with one on 26 August, four there on 27th, and seven on 28th, with 10 also further south-west at Brandon Head, Co. Kerry on the latter date (www.irishbirding.com). These are all west coast locations and comparatively early dates by recent standards. Yet another example is that the wave of new birds on the Outer Hebrides, Shetland, Fair Isle and Orkney during 19-21 September correlates well with two of the highest totals observed in Ireland - 59 on the Balmullet Peninsula, Co. Mayo on 18 September 2010 and about 58 some 40 miles to the south on Inishbofin, Co. Mayo, at the same time (A. McGeehan pers. comm.). Likewise, the highest published count in Ireland in autumn 2010 is of 62 birds at Malin Head, Co. Donegal on 4 October (www.irishbirding.com), which is in the middle of a period of fresh arrivals on the Northern Isles and Outer Hebrides.

The period prior to 8 September saw comparatively low numbers on Shetland compared to Fair Isle, Orkney and the Outer Hebrides, which points to a westerly or even south-westerly vector to the displacement of arrivals at that time. Relative numbers on Shetland increased from 8 September, by which time birds arriving there could feasibly include parties displaced via Iceland and the Faroe Islands rather than directly windblown from Greenland.

Williamson & Davis (1956) found that the arrival of Lapland Buntings in Scotland in 1953 coincided with the arrival of numbers of the Greenland race of Northern Wheatear Oenanthe oenanthe leucorhoa and of White Wagtails Motacilla alba alba. By contrast, in 2010 autumn numbers of 'Greenland' Wheatears were notably low or absent on Shetland, Fair Isle and Orkney. However, there was something of a correlation with White Wagtails arrivals - while Shetland had a poor year, with only 1-2 noted daily, on Fair Isle birds arrived from 18 August, peaking at 34 on 25 August, with 1–30 then noted through to 20 October, and on Orkney a 'small influx' was noted, with up to 40 birds daily on North Ronaldsay from 26 August to 6 September, with small numbers then until 30 September.

The 1959 influx (Davis 1960) saw the Lapland Buntings accompanied by good numbers of the Greenland race of Common Redpoll Carduelis flammea rostrata. In 2010, rostrata redpolls were found on Shetland from 13 September, with larger than usual numbers to mid-October and 1–3 present to early November. Several were also found on Fair Isle during this period and also in Orkney, but not in notably increased numbers compared to other years. Autumn 2010 also saw the occurrence of a greater number of Arctic Redpolls of the race hornemanni on the Northern Isles than usual. This form breeds in NE Canada from Ellesmere Island to Baffin Island and in northern Greenland. Seven were found on Shetland (four on 19/09, one on 20/09, one on 23/10, one 4/11), two on Fair Isle (23/09 & 16/10) and two on Orkney (20/09 & 26/09). The September find dates coincide with notable arrivals of Lapland Buntings on Shetland (from 18th) and Fair Isle, while 19 September saw the

largest day count of Lapland Buntings on Orkney (277 birds) of the entire influx.

Probable factors behind the influx

The analysis of the 1953 influx into Scotland (Williamson & Davis 1956) found that there was a much larger wintering population of Lapland Buntings in North America in the winter of 1953/54 than in previous years. This was taken as indication of a particularly good breeding season in Greenland and eastern Canada in 1953, which led to a much greater number of birds migrating in that autumn. Subsequent ringing evidence shows that many Greenland birds do winter in the USA (Lyngs 2003), and it is suggested that "Perhaps some of the Lapland Buntings from E. Greenland simply use the route to Europe in some years and the route to North America in other years depending on weather conditions" (Lyngs 2003).

Weather patterns

Of all the elements leading up to the mass arrival of Lapland Buntings in autumn 2010, probably the most critical is the weather immediately before and during the period of movement. When analysing the 1953 influx Williamson & Davis (1956) concluded: "that the

biggest influxes of Lapland Buntings to the north and west of Britain take place when anticyclonic conditions (usually a NE extension of the Azores High) become established in the Atlantic Ocean to the west of Ireland, giving a NW airflow between SE Greenland and our own area. It is probable that a proportion of this immigration takes place via Iceland ..."

In autumn 2010, the weather in the North Sea and the North Atlantic during the main periods of immigration was very similar to that during the 1953 influx. From 22-28 August a low drifted east to the south of Greenland creating ideal winds for departure of birds from Greenland south eastwards towards Britain and North-west Europe. This low had originally moved across from Canada, effectively blocking the southwesterly movement of passerines from Greenland towards North America. During 27–30 August, an area of high pressure was established off south-west Ireland, so recreating conditions similar to 1953 and promoting a south-easterly direction of travel for migrants leaving Greenland. Conditions at the start of September were again conducive to birds leaving the east coast or tip of Greenland to head south-east as a complex system of lows south of Greenland would act to

Table 1. Lapland Buntings recorded in Scotland in August–October 2010. Estimated minimum number of birds present in each recording area (where recorded) for the given date period. Totals are the sum of the highest count recorded for separate sites in the respective areas. Bracketed totals are abnormally low due to a lack of specific counts in the date period.

Area	25-28 Aug	31 Aug	1–3 Sep	4-7 Sep	8-12 Sep	13-14 Sep	15-18 Sep	19–21 Sep	22–25 Sep	26-28 Sep	29-30 Sep	1-3 Oct	4-7 Oct	8-11 Oct	12-14 Oct	15-17 Oct	18-21 Oct	22-25 Oct	26-31 Oct
Shet	-	7	4	9	60	60+	104	70	350	89	. ,	200+		57	35	70+	40+	48	11+
FI Ork	60 58	142 135	184 206	140 90	148 163	55+ 44+	90 99	160 310+	125 220	195 345	175 160	128 165	118 170+	88 40+	43 194+	45 113+	22 108+	23 26+	15 29+
ОН	-	6+	366	90		259+			660+							(3+)			(1+)
Caith	-	-	33	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
High	-	-	71	-	-	4+	14	-	-	-	-	-	-	-	-	-	-	-	-
NES	-	1	13	6	23	1+	3+	9	5	2	20	12	4	51	2	-	-	-	-
A&D	-	-	5	-	2	-	-	-	5	7	-	-	-	-	-	-	-	-	-
Fife	-	-	-	-	1	-	-	6	-	12	-	20	-	13	-	76	-	1	4
IoM	-	1	2	-	7	-	-	-	-	-		-	-	-	-	-	-	-	-
Loth	-	-	-	5+	11	-	23	55	34	22	2+	-	4	10	2	3	1+	2+	2+
Bord	-	-	-	1	-	-	-	-	-	-	-	-	-	-	10	6	-	-	6
Arg	-	-	12	56	50+	21	66+	27	-	12	42	107	108	65	160	7	2	-	-
Ayrs	-	-	-	-	2	-	-	-	-	-		-	-	-	-	-	-	-	5
D&G	-	-	-	-	-	-	3	1	-	-	3	-	-	1	-	-	-	-	-
Total	118	292	896	427	942+	444+	614+	738+	1,399+	-690+	583+	992+	996+	485+	601+	323+	217+	154+	73+

block departing birds from following their more usual south-westerly direction. Around 11 September, northerly winds over Greenland would have promoted bird migration, while lows to the south would be generating westerly winds which could have carried birds in an arcing displacement eastwards and subsequently bring birds to the Outer Hebrides and Orkney the following day. Similar conditions existed around 15 September with a high pressure system sitting over the east coast of Greenland promoting departure. This prevailed until 22 September and would have been ideal to deliver birds to the north and west of Scotland and encompassed a period of considerable arrivals in the Outer Hebrides, Fair Isle and Orkney. Yet another low moved east across Canada on 22-24 September and would block south-westerly migration from Greenland, while a high was again in place over eastern Greenland to promote departure of migrants. This high soon extended to northern Britain and Ireland creating light northerly winds becoming stronger on 25-26th.

The succession of weather conditions promoting the south-easterly migration of birds from east and south Greenland correlates well with the timings of arrivals of Lapland Buntings in Scotland in autumn 2010. This observation, the appearance of other Greenland breeding species at the same time, and the occurrence of birds in Iceland and Ireland during the influx period all point to a north-westerly origin, with Greenland as the most obvious source, of the birds involved in the influx.

Record counts

The remarkable influx of 2010 produced new record day and site counts for many recording areas in Scotland, where known these are listed below:

Shetland: the previous highest day count was of 100 birds on Foula 1966, with very few double-figure counts elsewhere. The total of 105 on Foula on 24 September 2010 becomes the new record site count, and at least 271 birds were noted overall on 25 September.

Fair Isle: the previous best day counts were of 90 birds on 13 September 1960, and of 80 birds (1953 & 1973). In 2010, a new record count of 195 birds was made on 28 September, with 185 on 30th and 184 on 1st September.

Orkney: a total of 47 birds on North Ronaldsay (plus three Stronsay and one South Ronaldsay) on 4 October 1993 was the previous highest day count for Orkney, followed by 40 on North Ronaldsay on 28–29 September 1987 and 'up to 40' present there on 6–9 October 1993. The new record site count is 272 on North Ronaldsay on 27 September 2010, with 208 there the day before, and elsewhere on Orkney is of 80 at Head of Holland, St. Ola on 22 September, with 76 there on 20th, and the best day count involved 277 birds on 19 September 2010.

Outer Hebrides: the previous highest counts had been 30 to 40 birds on the Flannan Isles between 6th and 21 September 1904 (Dr W.E. Clarke), and more recently up to 30 birds on St. Kilda on six dates during September 2000, 20+ birds at Kilaulay/Ardivachar, South Uist in September 2000, and 20 on St. Kilda on 8 September 2002. The new record site count in 2010 is of 275+ which flew south-east over Balranald on 12 September, with 250 there on 3rd and c.250 on 13th. Elsewhere, there was an overall count of c.350 on South Uist on 25 September, with 130 on North Uist, 110 at Eoligarry, Barra and 70 at Butt of Lewis the same day.

Caithness: the previous highest counts were of six at Reay on 1 December 1985 and four at Noss Head on 23 April 1988. The 27 birds at Holborn Head, Thurso Bay on 3 September 2010 with five at Duncansby Head the same day constitute new site and day count records.

Highland: the largest count was of seven birds at Eilean nan Ron, Sutherland on 9 September 1962. A total of 71 birds were noted from Sandwood Bay to Balchrick on 2 September 2010 and become the new record day count.

Moray & Nairn: the highest day count is of five birds at Spey Bay on 19 October 1977, with two birds recorded on four occasions. None were recorded in 2010.

North-east Scotland: the highest counts are still of 50 birds at Phingask Bay, near Fraserburgh on 29 January 1994, with 37 at nearby Sandhaven on 16 March 1997 and 34 on the Ythan Estuary on 17 December 1977.

Angus & Dundee: highest counts are still of at least nine (up to 13) at Ethie Mains on 16 November 2002, six at Usan on 30 December 1977, and of 4+, possibly 10, at Seaton Cliffs/Farm, Arbroath on 3 November 1993.

Perth & Kinross: the highest count is of two birds on the north-west side of Loch Turret on 6 December 1980. None were recorded in 2010.

Fife: the previous best day counts were of 34 birds at Crail Airfield, Fife Ness, on 3 April 1988, with 29 birds at nearby Kilminning the next day, and

20 were noted at the Airfield again on 5 November 1988. A new record total of 70 birds were present on stubble fields at Wormiston, Fife Ness on 16 October 2010.

Isle of May: the previous highest day count was of four birds on 30 September 1993. A new record count of five birds was achieved on both 10th and 27 September 2010.

Upper Forth: four at Kinneil on 10 January 1987 and two at Skinflats on 25 December 1984 are the highest site/day counts. None were recorded in 2010.

Lothian: the highest counts remain 70 at Aberlady Bay on 4 November 1956; then 48 at Musselburgh on 15 March 1987 and 46 flying west at Aberlady Bay 25 October 2005.

Borders: the highest day count remains 31 at Eyemouth on 29 December 1986, with 30 there on 9 January 1987, and 27 there on 19 December 1987 and 10 February 1989.

Argyll: the previous highest counts were of 14 birds at Kilchoman, Islay on 31 October 1987, with eight still there the next day. The new record counts are of 160 at The Reef, Tiree on 13 October 2010, with 87 at Whitehouse, Tiree on 2 October, and 18 were at Acha, Coll on 16 September. None of the counts on Islay exceeded those made in 1987.

Clyde: the highest count is still a party of three seen at Yonderston Farm, near Glasgow Airport on 28 September 1998.

Clyde Islands: no previous records. None were recorded in 2010.

Ayrshire: the largest counts previously were of four which flew south over Turnberry Point on 8 October 2000, four at Kileekie, near Maybole on 26 October 2004, followed by two (male and female) at Portencross on 24–25 January 1984. The five flying south at Barassie on 30 October 2010 becomes the new highest day count.

Dumfries & Galloway: the highest count is of three which flew west at Mull of Galloway on 3 October 1986, followed by two at Caulkerbush, Dumfries on 10 December 1992. The record count was equalled three times in autumn/winter 2010, with sightings at Barnhills Farm, Corsewall Point on 17 September, and at Mull of Galloway on 29 September and 15 December.

Conclusions

Autumn 2010 saw the largest immigration of Lapland Buntings into Scotland/Britain ever recorded. Birds arrived in a succession of at least eight distinct waves, from 25 August to mid-October, with greatest numbers observed on the Northern and Western Isles. The largest initial

falls were on Fair Isle and Orkney at the end of August, with the first large arrivals on the Outer Hebrides coming at the start of September, and on Shetland from 11th. Over 5,000 birds (perhaps many more) could have been involved, and several points indicate a northwesterly origin of the birds, with Greenland the nearest breeding area for the species on that heading. It is possible that the individuals observed in North-east Scotland and on the Isle of May on 31 August and in the first week of September could have been from the northern European breeding population, but the remainder are consistent with a north-western origin. The peak period of the immigration was at the middle of the fourth week of September, with an estimated overall total of at least 1,080 birds present in Scotland on 25th. The prolonged period of the immigration appears to be the result of a sequence of weather systems which promoted south-easterly migration from east and southern Greenland rather than the more typical south-westerly direction into North America.

The birds do not appear to have lingered at their points of discovery for long, with many noted filtering southwards down the east and, particularly, west coasts of Scotland - the Outer Hebrides and Argyll experienced vastly greater numbers than ever before. Numbers decreased steadily from mid-October, though the total for November exceeds previous counts. None remained on Shetland or Fair Isle into December, but several were noted in Orkney, and a record monthly total was achieved on the Outer Hebrides, with a few lingering to the year's end.

Ten local recording areas in Scotland noted new record site and day counts for the species, though four areas (Moray & Nairn, Perth & Kinross, Upper Forth and Clyde Islands) did not record any at all. The biggest day count for a single site in Scotland was of 275+ birds flying south-east over Balranald, North Uist, Outer Hebrides on 12 September, very closely followed by a count of 272 on North Ronaldsay, Orkney on 27 September.

[* calculated total uses an estimate of 113 birds present on Fair Isle since bad weather prevented full completion of the daily count on 25 September: 125 birds were present on 24th and 113 on 26th]

Request for further records

A significant number of 'unattributed' sightings have been omitted from this article. The current position adopted by Local Bird Recorders in Scotland is to only accept records where the identity and contact details of the observer are known: i.e. anonymous reports do not (and should not) form part of the official historic record. Such reports can arise when sightings are texted, phoned or e-mailed to information networks, such as BirdGuides, Rare Bird Alert etc., but are not also sent to the relevant Local Bird Recorder. It is worrying that many genuine records are effectively 'lost' in this way. If you know of any Lapland Bunting records from this period which are not included in this article would you please submit details via the relevant Local Recorder (see the SOC website:



Plate 223. Lapland Bunting, Barns Ness, Lothian, September 2010. © James Wood

www.the-soc.org.uk) in order to make the documentation of this remarkable event more complete and accurate.

Acknowledgements

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Plate 224. European White-fronted Goose, Cleish, Perth & Kinross, March 2012. © John Nadin

At the annual Scottish Ringers' Conference in Carrbridge on 12 November 2011, news filtered through to the delegates that a flock of 38 'whitefronts' had been seen near Kingussie. Initially, it was assumed that they were Greenland White-fronted Geese, since a small number have irregularly wintered in Badenoch & Strathspey in recent years. How wrong we were, since the sightings heralded a remarkable influx of European White-fronted and Tundra Bean Geese into Scotland.

Seven flocks of European White-fronted Geese were reported on Saturday 12 November from Lothian to Moray, including the Kingussie flock. On the same day, two flocks of Tundra Bean Geese, two birds at Sumburgh, Shetland and 11 on North Ronaldsay, Orkney were also seen. The days that followed saw a steady arrival of both species across many parts of Shetland, eastern and south central Scotland. Records were, in part, driven by birdwatchers hearing the news of the first few sightings and making an effort to check local flocks of Pink-footed and Greylag Geese. But the timing of the sightings suggests that the arrival was over a prolonged period rather than a spectacular 'fall' driven by a weather event.

Assessing the scale of the arrival proved difficult due to multiple records from locations close to

each other or movements of geese between sites within Scotland. However, estimates of the numbers involved are given below and have been calculated by:

- 1 for multiple records at sites within 10 km of each other, the highest count reported was used (this may have slightly underestimated the number of geese involved).
- 2 an attempt was made to try to account for large groups reported at different sites. For example, 300 European White-fronted Geese were recorded at Loch of Strathbeg, Northeast Scotland on 19 January and 101 geese were reported at Garmouth, Moray (120 km to the west) 11 days later, building to 221 birds on 19 February. This may have involved some of the same birds and hence only the largest count was used. However, the movement of smaller flocks within Scotland was hard to detect and this may have slightly overestimated the number involved in the influx.

The arrival patterns of the two species appeared to be different. By adding the records from November from different sites, larger numbers of European White-fronted Geese appeared to arrive earlier, notably so around 16–18th of the month, than Tundra Bean Geese (Figure 1), the latter appearing to arrive steadily throughout November.

The influx may not have been restricted to November either since the highest counts tended to occur later in the winter, for example 158 Tundra Bean Geese at Loch of Strathbeg, North-east Scotland on 10 December and 300 European White-fronted Geese at the same site on 19 January (see below). This suggests that the arrival was staggered over several weeks - and hence the initial arrivals were not associated with a particular weather pattern (see below).

A regular wintering flock of 200-250 fabalis Taiga Bean Geese near Slammanan, Falkirk and about a half of the world's population of Greenland White-fronted Geese on the west coast allow Scottish birdwatchers to familiarise themselves with both of these races. However, an influx of rossicus Tundra Bean Geese and European White-fronted Geese into Scotland provided some interesting identification challenges. Autumn 2011 also saw small parties of Greenland White-fronted Geese displaced from their normal wintering areas on the west coast and birdwatchers needed to be wary of quickly assigning races. Light conditions played an important factor when scanning whitefronts. Bubble-gum pink bills and paler upper body parts of the European birds appeared darker on overcast days or those without bright sunshine. Bill shape and size, neck length and again, upper body colour, were variable both within Tundra Bean Geese and between rossicus and fabalis Bean Geese. All good stuff to keep identification skills honed.

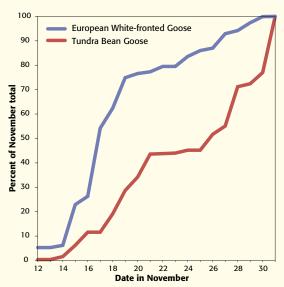


Figure 1. Cumulative counts of European White-fronted Geese and Tundra Bean Geese expressed as a percent of the November total.

In all, 686 records from BirdGuides were used in this brief assessment of the scale and distribution of the influx. It is recognised that these records do not represent a complete picture of the influx and that more records are likely to be submitted to SOC county recorders in the fullness of time - so this brief assessment should be treated as preliminary. Many sightings involved mixed goose flocks with both European White-fronted and Tundra Bean Geese seen in the same flock (30% of the records) and either species seen together with Pink-footed Geese and/or Greylag Geese.



Plate 225. European White-front with Pink-footed Geese, Rossie Bog, Fife, February 2012. © John Nadin

European White-fronted Geese

Anser albifrons albifrons

There were 384 records, ranging from one to 300 birds (median 12 birds) and these probably refer to c. 3,220 birds at 108 sites (Figure 2). The largest count was of 300 birds at Loch of Strathbeg, North-east Scotland on 19 January, 2012 (Table 1). Records were widely scattered in Scotland with the largest number on Shetland, the east coast and in south central Scotland (Figure 2). However, smaller flocks were also reported in Badenoch & Strathspey, Caithness, the Moray Firth, Argyll, Ayrshire, Dumfries & Galloway and the Outer Hebrides.

White-fronted Geese (not assigned to race) There were seven records of Greater White-fronted Geese (not assigned to race), ranging from one to 111 birds, and these probably refer to a further 123 geese. The largest count was of 111 birds at Loch of Strathbeg, North-east Scotland on 5 December, however, like most of the other six records, these were eventually assigned to race and recorded on separate occasions.

Taiga Bean Goose Anser fabalis fabalis

Away from the traditional wintering area at Slammanan near Falkirk, there were 27 records, ranging from one to 22 birds, and these probably refer to c. 50 birds at ten sites. Sightings included 22 geese at Portlethen, North-east Scotland seen on 12 November; a date too late to involve birds on passage to Slammanan. Records were widely scattered with three (possibly six) reported from Benbecula, Outer Hebrides, three on Islay and six on Shetland. Taiga Bean Geese at six of the sites were recorded together with Tundra Bean Geese posing identification challenges.

Tundra Bean Goose Anser fabalis rossicus

There were 375 records, ranging from one to 158 birds (median 6 birds) and these probably refer to c. 1,350 geese at 103 sites (Figure 3). The largest count was of 158 geese on 10 December at Loch of Strathbeg, North-east Scotland (Table 1). Records were widely scattered in Scotland with the largest number on Shetland, the east coast and in south-central Scotland (Figure 3). The distribution of records is remarkably similar to that of the European White-fronted Geese, partly a reflection of careful scrutiny of goose flocks by birdwatchers. However, there were few records from Dumfries & Galloway.

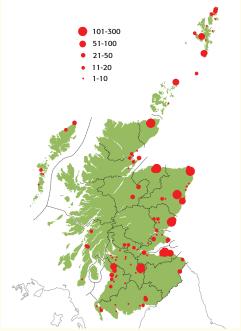


Figure 2. Distribution of maximum counts of European White-fronted Geese recorded at 108 'sites' in Scotland during winter 2011/12.

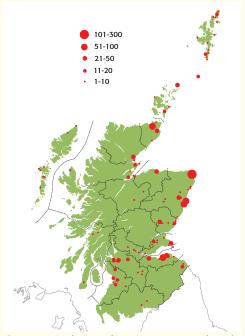


Figure 3. Distribution of maximum counts of Tundra Bean Geese recorded at 103 'sites' in Scotland during winter 2011/12.

Table 1. The ten largest counts of European White-fronted Geese and Tundra Bean Geese in Scotland during winter 2011/12. Whilst attempts have been made to try to account for large groups reported at different but nearby sites, the symbol * indicates likely counts of some geese that may have been recorded at two sites.

European White-fronted Gees	_		Tundra Bean Geese		
Site	Count	Date		Count	Date
Loch of Strathbeg, NE Scotland	300	19/1/12	Loch of Strathbeg, NE Scotland	158	10/12/11
Inverkeilor, Angus & Dundee	240	3/12/11	Newtonhill, NE Scotland	95*	27/11/11
Carnwath, Clyde	232	27/12/11	Rigifa Pool. NE Scotland	82*	28/11/11
Garmouth, Moray & Nairn	221*	19/2/12	Longniddry, Lothian	59	21/12/11
Loch of Skene, NE Scotland	150	24/12/11	Durran, Highland	53	24/2/12
Fenton Barns, Lothian	120	11/12/11	Lochill, Moray & Nairn	42	18/11/11
Durran, Highland	104	24/2/12	Loch of Skene, NE Scotland	42	24/12/11
Urquhart, Moray & Nairn	100	9/1/12	Fenton Barns, Lothian	31	11/12/11
Tyninghame Bay, Lothian	88	14/11/11	Loch of Kinnordy, Angus & Dundee	30	14/1/12
Aberlady Bay, Lothian	85*	16/11/11	Erskine, Clyde	29	11/12/11

Bean Goose (not assigned to race)

In addition to the records of *fabalis* Taiga and *rossicus* Tundra Bean Geese, there were 38 records of Bean Geese not assigned to a race. These ranged from one to 59 birds (median six) and probably refer to a further 310 birds at 25 sites. The largest count was of 59 geese on 14 November on Fair Isle, Shetland. The majority of these were probably Tundra Bean Geese, thus the influx is likely to have involved more than the c. 1,350 birds noted above, although some were undoubtedly seen again, assigned to a race and recorded separately. Thus, we have a little less confidence in the number of Tundra Bean Geese involved in the influx, but it is likely to be between 1,350 and 1,500 birds.

Both European White-fronted Geese and Tundra Bean Geese winter in very large numbers in The Netherlands and Germany, with recent winter population estimates of c. 800,000 of the former and c. 250,000 of the latter in The Netherlands alone. Thus, the winter influx into Scotland involved relatively modest number of birds compared to wintering numbers on the near continent. However, compared to winter records of both species in normal winters the winter 2011/12 influx appears to be the largest in living memory. There were two records of colourmarked European White-fronted Geese in Scotland and records of these geese in previous winters suggest that the influx stemmed from birds than normally winter in The Netherlands.



Plate 226. Tundra Bean & European Whitefronted Geese, near Crail, Fife, November 2011. © John Nadin

The cause of the influx remains a mystery. Weather conditions, particularly the strength and direction of wind in the week preceding 12 November and the week that followed, did not reveal any indications of strong south-easterlies easterlies (www.wetterzentrale.de/ topkarten/tkfaxbraar.htm) which may have aided a rapid influx. Nor was the arrival related to a cold weather movement associated with occasional influxes in mid-winter from continental areas. For example, from mid-January to early March 1996, more than 20 Tundra Bean Geese (and more than 100 'Bean Geese') and at least 600 European White-fronted Geese were recorded in eastern Scotland during a cold spell on the continent (Forrester et al. 2007).

Weather charts for early November suggest a period of relative calm prior to the first arrivals. A high pressure system was sitting over the southern Baltic Sea area on 11 and 12 November providing only light south-easterlies across the continental part of the North Sea. However, weather records from Terschelling (an island on the north-west coast of The Netherlands, 53.38N 5.35E) reported fog on 8, 9 and 10 November. Could a combination of fog and light south-easterlies have been sufficient to promote a drift of European Whitefronted Geese to the north and west over the North Sea? Kees Koffijberg and Kees Camphuysen kindly reported that 11 European White-fronted Goose carcasses were found on beach surveys in The Netherlands in the month of November and that this number was unusually high. Perhaps some migrating Whitefronts became disorientated on arriving at the North Sea, some perishing, others migrating further west.

However, this does not explain the staggered arrival of Tundra Bean Geese. Contact with the Wetlands International Goose Specialist Group (an umbrella group of goose researchers in Eurasia) confirms that the influx was not restricted to Scotland. Large numbers of both European White-fronted Geese and Tundra Bean Geese were reported from east England and the latter from southern Norway. Thomas Heinicke (Germany) suggested that the influx of Tundra Bean Geese into Norway comprised birds most likely from northern Scandinavia and north-west

Russia and that, based on the timing of the sightings there, the influx could easily have continued into Scotland. This might explain the early records from Shetland, Caithness, the Outer Hebrides, for example. Tony Fox (Denmark) indicated that both European White-fronted Geese and Tundra Bean Geese have been increasing in number in south-east Denmark in recent years from their normal wintering areas in The Netherlands and Germany. Johan Mooij (Germany) mentioned that European Whitefronted Geese 'discovered' Flanders and the lower Rhine as wintering areas as recently as the early 1960s and that their numbers increased dramatically there from the early 1980s. Perhaps they exhibit occasional wanderings?

So, perhaps Scotland witnessed influxes on two fronts: a drift of European White-fronted Geese across the North Sea from The Netherlands/Germany and an unusual migration of Tundra Bean Geese from northern Scandinavia and north-west Russia, south-west into Norway and continuing on into Scotland?

Unusually, many flocks of European White-fronted and Tundra Bean Geese in winter 2011/12 remained until well into early spring, for example, the flock of 38 Whitefronts seen near Kingussie on 12 November built to 101 birds by 3 February and remained there until the second week of March. There will be considerable interest next autumn to see if any of the long-staying 'wintering' birds of 2011/12 return to Scotland. For the first-winter geese which arrived in autumn 2011, Scotland is now their 'normal' wintering area.

Acknowledgements

Thanks go to Stephen Menzies who kindly provided records submitted to BirdGuides (www.birdguides.com) and to birdwatchers in Scotland who took the time to record their sightings. Tony Fox, Johan Mooij, Thomas Heinicke, Paul Shimmings, Kees Koffijberg and Kees Camphuysen are thanked for their thoughts and provision of records.

Carl Mitchell, 1 Station Cottages, Kingussie, PH21 1EW.



Plate 227. Long-tailed Skuas, Aird an Rùnair, North Uist, Outer Hebrides, May 2012. © I.J. Andrews

Spring skua passage off Aird an Rùnair, North Uist re-visited, May 2012

M. DARLASTON

We owe much to our current knowledge of the skua passage off Aird an Rùnair, North Uist to the work of the late David Davenport, who followed up on reports of passing skuas witnessed at the then new RSPB reserve at Balranald way back in 1971. In the following years up until 2007, David made numerous spring trips to North Uist to record this passage and identify the species involved. Through this pioneering work, we now know the peak passage dates, when one is likely to encounter day counts of 100 or more skuas, as they make their annual spring migration to their northern breeding grounds. For Pomarine Skua, this window of opportunity is restricted to 22 April to 26 May, while for Long-tailed Skua it is narrower, during 12-29 May. This annual migration is not witnessed every year, as a key element in observing a good passage is favourable onshore winds, generally with a westerly bias to push the skuas closer to the Outer Hebridean chain without these winds the passage does not occur close to the islands. David also suggested that the wind direction is often key in determining which species occurs in large numbers. Weather systems resulting in strong south-westerly winds, often veering west as they pass, with a clearance, tending to deliver the larger numbers of Long-tailed, while Pomarine have occurred in a wider variety of conditions.

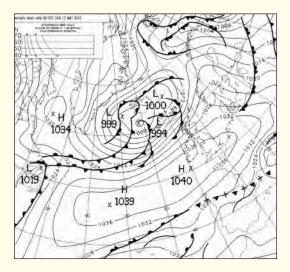
May 2012

So it's May 2012 and my wife Adele and I are planning a trip to North Uist hoping to connect with the skua passage, which we have witnessed in previous years. We are keen seawatchers and as our planned trip gets closer; I'm studying the weather predictions for the coming week. The modern day seawatcher is lucky in having Internet access to very sophisticated weather computing tools helping predict what might be a good seawatch. Three days prior to our intended departure and a very deep low-pressure system is forming with a predicted trajectory perfect for the Outer Hebrides, the one small snag is it's going to reach North Uist before we get there! We quickly re-jig our plans, as we now must be on the island for Sunday 13th to coincide with the arrival of this system, but on trying to book the 09:15hrs Sunday ferry,

I'm advised it may not run due to the predicted winds being too strong! We also contact our good friend and resident birdwatcher on the island, Brian Rabbitts, who kindly offers us a bed, as camping is looking iffy in a severe gale!

For us it's a 715-mile journey from south Devon to catch the Uig to Lochmaddy ferry and indeed this would be a similarly long journey David Davenport would have made from Kent (although often using the Oban to Lochboisdale ferry), with the same great anticipation knowing a good weather system and potential skua watch was on its way. We were privileged to have got to know David well before his untimely death in 2008 and I remember him recounting that back in May 1993 a similar deep depression was forecast, so he headed up, arriving to witness what is still the record day count of 1,250 Long-tailed Skuas on 18 May 1993.

So here we are leaving Devon early on 12 May and by early morning of the 13th we are waiting at the Uig ferry with fingers crossed. Lucky for us the ferry still runs and we head out for Lochmaddy across the Little Minch into the SSW gale. The weather predictions are correct, with the synoptic chart for 00:00hrs on 13 May showing tightly packed isobars (see Fig 1), indicating a deep and extensive low-pressure system centred south of Greenland, moving east with its associated fronts extending southwest into the Atlantic - potentially a perfect system to produce large numbers of skuas!



On arrival we drive straight out to Aird an Rùnair (on the west side of North Uist), wondering what we've already missed. However, conditions are too severe with heavy rain and a gale force SSW wind and not a seawatcher in sight, so we head to Brian's house to sit out the worst of the gale and look at the latest weather predictions. The forecast reveals the main rain bearing front moving through and the winds to slowly veer west, but will this happen before its gets dark? Late afternoon there is a glimmer of brightening in the west; this is our cue, so all three of us hop in our car and head back out to the watch point without delay. On arrival back at Aird an Rùnair at 17:00 conditions are challenging to say the least, the sea is spectacular, very rough and machair sand is blowing everywhere, so we opt to watch from inside the car for some protection from the gale (which was also David's preferred option). As we start to watch, the first skuas are already moving, shearing through in loose flocks. Brian records as we all set about identifying and counting skuas. In these conditions highpowered binoculars are ideal (both Brian and I use modern 12x50s, while David was the master with a pair of Zeiss 15x60); keeping a telescope still can be difficult, though I use one to confirm the identity of some of the more distant flocks.

For those who have not witnessed skuas in these conditions it can be a steep learning curve, as both the flocks of Long-tailed and Pomarine are at times using a similar shearing flight close to the sea and can look superficially alike. A feature on the distant flocks is the amount of white showing on the underside, with the heavier, pale phase Pomarine Skuas showing a more extensive white belly (pale phase birds being the dominant morph, accompanied by a few dark phase birds). While with the slimmer Long-tailed (where all adults are pale phase), the white is restricted to the breast and upper belly giving the front end a highlight. In these rough conditions Long-tailed is generally greyer looking than Pomarine and can more easily blend with the sea. But when birds climb higher above the waves, Long-tailed become more obvious with their bouncy tern-

Figure 1. Synoptic chart for 00:00hrs on 13 May 2012, the perfect system for skuas! © Crown Copyright 2012, The Met Office.

like flight, although at mid-range and beyond their thin long tail-streamers are not visible, while the more chunky twisted spoons of Pomarine often are.

As we watch the great spectacle of passing skuas, the numbers in Brian's notebook grow and grow. There are some big flocks, with our largest Pomarine group of 94 and Long-tailed flock of 90. By 20:30hrs the wind seems to have both strengthened and veered more westerly, forcing some big flocks to rest on the sea just off the beach before they then rise to make their way around, some crossing the headland. At this point we actually get some Long-tailed mixed in with the Pomarine flocks and vice versa, which makes recording very interesting. We finally call it a day at 21:05hrs; Brian adds up and we have witnessed an amazing 550 Long-tailed and 600 Pomarine. This is actually the second highest recorded Long-tailed count here and its also a unique day, as its not often when both species come through in big numbers, usually one species dominates. As it turns out, this is the first time when over 500 of both species have been recorded on the same day (see Table 1).

During our watch, we also notice that some seawatchers and photographers (including Ian Andrews and Mervyn Griffin) have braved watching from further out on the point, where shelter from the wind, spray and showers is very limited. Ian's dramatic photos capture some of the action, although he recounts getting quite wet and cold in the process. Arguably the experience from out on the point may be better in terms of views and atmosphere, but in these conditions many skuas actually cut across the headland and can be missed - though normally only Long-taileds take this short-cut, on this day some Pomarines did too.

Although the low pressure system has moved further east, it has not done yet, and the forecast for the next day is for the westerly winds to slowly back north-west force 4–6 with showers. It's an early start next morning and we're back watching (at Aird an Runair) by 06:00hrs. As conditions are now easier, we walk out to the headland where we can now sit down and watch with telescopes and binoculars, only troubled by the odd squall; Pomarine Skuas are the main feature and move through all day. With the wind moving north-west scanning above the



Plate 228. Long-tailed Skuas moving north, Aird an Rùnair, North Uist, Outer Hebrides, May 2012. © Steve Duffield (www.western-isles-wildlife.com)



Plate 229. Pomarine Skuas, Aird an Rùnair, North Uist, Outer Hebrides, May 2012. © I.J. Andrews

horizon is also necessary to pick up all the passage, as some of the flocks pass in high formation well above the waves - with a flight style quite different to the conditions of the previous day. The passage finally dries up in the afternoon. From 06:00 to 16:00 we end up with 635 Pomarines (largest flock 55), but there is little Long-tailed movement, with only four seen. Both UK breeding skuas are also seen most days, with Arctic Skua passage counts complicated by local breeders, although 27 were counted along with 24 Great Skua on this day.

This was the last major passage for spring 2012, with no more favourable weather systems occurring during the rest of the peak passage period, although we did witness a single flock of 20 Pomarine on the 15th. Reflecting on the two days of excellent skua passage witnessed on 13–14 May, many of David's original observations are again highlighted. The movement happened within the given period; once again a south-westerly veering westerly produced the Long-tailed Skuas, while the next day a more north-westerly airflow was dominated by Pomarine Skuas.

High skua counts at Aird an Rùnair

Table 1 shows Pomarine or Long-tailed Skua counts that have exceeded 100 birds at Aird an Rùnair. The wind direction and force (Beaufort scale) is also given, although this must be viewed with the caveat, this is often changeable during the day, especially during a fast moving depression, so can only be taken as a rough guide. Also worth noting, there are far more days when smaller numbers (less than 100) have occurred.

Key seawatching information

The main passage period is between 22 April and 26 May for Pomarine Skua and 12–29 May for Long-tailed Skua, but favourable weather conditions are required. Look for approaching Atlantic low-pressure systems or warm/cold fronts, although Pomarine can be held back by blocking northerly winds and move through when they ease. Pomarine may also move close to shore in less predictable conditions, i.e. on 19 May 2006 we witnessed a passage of 558 birds on a SSW3 that backed to a showery NE4 for most of the day. A good weather system does not necessarily guarantee a good passage - a

Table 1. Pomarine and Long-tailed Skua counts that exceeded 100 birds at Aird an Rùnair, North Uist, Outer Hebrides, 1982–2012. Data sources: David Davenport 1982–2002 (see *The Birds of Scotland* for a full reference list), Outer Hebrides Bird Reports 2003–2007 and www.western-isles-wildlife.com.

Date	Wind	Pomarine	Long-tailed	Date			Long-tailed
4 May 1982	NW6-7	345	-	22 April 2004	SW4-W3	156	-
19 May 1983	N4-5	436	-	7 May 2005	NW4-6	144	-
21 May 1983	N4-5	-	271	19 May 2006	NNE4	558	-
21 May 1986	WSW5	766	168	26 May 2006	?	105	-
17 May 1987	NNW4	703	-	6 May 2007	W6-8	167	-
12 May 1991	W5	-	424	18 May 2007	SW6-7	234	336
19 May 1991	SW5	-	540	19 May 2007	WSW4	167	117
21 May 1991	W5	-	180	3 May 2009	SW6	213	-
12 May 1992	SW6	440	121	4 April 2009	WSW6	237	-
15 May 1992	W5	701	389	5 April 2009	WSW4	108	-
18 May 1993	SSW8	-	1250	6 May 2009	SSW7	255	-
7 May 1997	NNW4	375	-	7 May 2009	SSW9	166	-
18 May 2001	W4	-	166	8 May 2009	NW5	117	-
14 May 2002	SE5-W6	962	-	23 May 2009	S4-W4	-	295
18 May 2002	W5-6	-	161	12 May 2011	W5?	152	-
23 May 2002	SW4-5	465	460	14 May 2011	WNW4-6	288	-
25 May 2002	SW5	625	-	16 May 2011	WSW4	191	-
8 May 2003	W6-7	765	-	24 May 2011	WSW7?	-	296
13 May 2003	NW5	1150	-	28 May 2011	W5?	-	174*
23 May 2003	W4-NW4	132		29 May 2011	WSW4?	-	152**
24 May 2003	NNW4-5	724	-	13 May 2012	SSW8-W7	600	550
18 May 2004	WSW6	-	209	14 May 2012	W4-NW4-6	635	-

Bold figures represent a record day count. * 174 was a single hour's count with 100s reported, true numbers remain unknown! ** The following day 152 Long-tailed passed Rubha Ardvule, though there appeared to be no coverage at Aird an Runair where numbers are usually higher.

little luck is needed as birds need to be out there to be pushed closer to shore, as often apparently perfect winds produce few birds.

The most useful and accurate weather information, in terms of wind direction and timing, is usually to be found on www.xcweather. co.uk/GB/forecast (most fishermen use this one!). For those without internet access, the shipping forecast is broadcast at 05:20hrs, 12:01hrs and 17:54hrs on Long Wave 198, listen for sea area Hebrides, although adjacent areas Bailey, Rockall and Malin may hold a clue to an approaching depression.

It is also worth noting Aird an Rùnair is not just good for passing skuas, with seabirds, divers, waders and wildfowl also regularly moving by. Rarities are also a distinct possibility - on 10 May 2004, while sitting at the point chatting to Brian we saw a drake Bufflehead fly past, heading north!

The main watchpoint is at Aird an Rùnair (grid reference NF692703), accessed from the RSPB reserve at Balranald. Alternative watchpoints on South Uist are Ardivachar Point (NF737456) and Rubha Ardvule (NF710300).

Recent bird news relating to skua movements can often be found on either www.western-isles-wildlife.com or www.curracag-wildlifenews.org.uk. Ferry timetables and fares can be found at www.calmac.co.uk/timetables.

Acknowledgments

This note is dedicated to the late David Davenport (1946–2008), the skua aficionado.

I would also like to thank Brian Rabbitts, who when available continues to record the North Uist skua passage and provided his good company on our May 2012 watches.

Mark Darlaston, Buckfastleigh, Devon Email: mark.darlaston@tiscali.co.uk

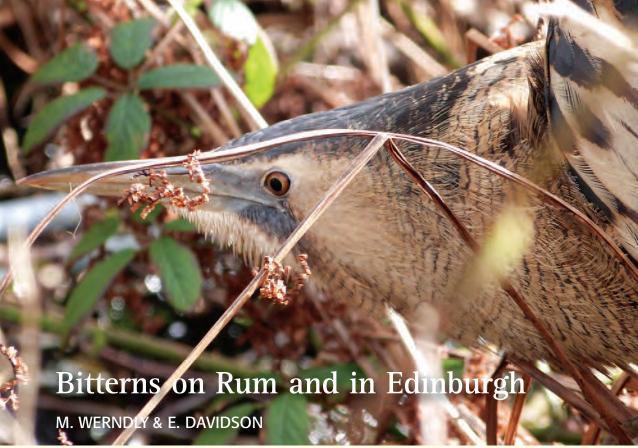


Plate 230. Bittern, Rum, Highland, 18 March 2012. © Mike Werndly



Plate 231. Bittern, Rum, Highland, 18 March 2012. © Mike Werndly

On 18 March 2012, a Bittern was seen landing in the forthcoming wildlife garden in Kinloch village on Rum. At first it stood in full view on the raised bank right next to the Village Hall, and then moved into the boggy area in the wildlife garden for a minute or two before deciding to make its escape. It moved out under a fence and round under the back of the teashop extension and into the wet woodland between the hall and Lea Cottage. It wasn't really bothered by our presence and casually strutted around. It was a rare privilege to study the bird's jerky movements as it moved around on its long powerful legs and large feet. All in all, we watched it for about half an hour (13:00-13:30 hrs) before it finally crept quietly into deeper cover.

According to our records, there has never been a Bittern observed on Rum before.

Mike Werndly, Stable Bothy, Kinloch, Isle of Rum, Inverness-shire PH43 4RR. Email mike.werndly@yahoo.com A fuller account can be read on rangeringonrum.blogspot.co.uk. Eds.



Plate 232. Bittern, Rum, Highland, 18 March 2012. © Mike Werndly

Interestingly, a Bittern flew into Bawsinch with perfect timing. I was deciding what my next painting would be. I studied the bird's habits for a few days and decided to set up my camera trap in a place that I would not disturb any birds, but hopefully catch a frame or two of this lovely bird as it passed through the reeds. When the bird flew to the eastern reedbeds I carefully entered the reeds towards the opposite end and set up the camera at a place that I hoped the Bittern would go to. I was delighted with the results on checking my camera two days later. I now have my subject to paint!

Edward Davidson www.edwarddavidson.co.uk

The Bittern remained at Duddingston Loch (and the adjacent Bawsinch SWT reserve) from 26 January to at least 22 February 2012. One, and sometimes two, Bitterns wintered in exactly the same place between 1990 and 1996/97, and recent scrub management may improve the chances of this or other birds returning to the reedbeds in future winters. Eds.



Plate 233. Bittern, Bawsinch SWT reserve, Edinburgh, 21 February 2012. © Edward Davidson

Black Brants on the Outer Hebrides – 2nd and 3rd Scottish records

S. DUFFIELD, P. STRONACH & H. INSLEY



Plate 234. Black Brant (right) with two Pale-bellied Brent Geese, Aird an Runair, North Uist, Outer Hebrides, 20 April 2012. © Steve Duffield (www.western-isles-wildlife.com)

Two Black Brants Branta bernicla nigricans were seen on the Outer Hebrides in April and May 2012. If accepted, these will be the second and third records for Scotland.

Balranald, North Uist, 20 April 2012

Inspired by the large movements of geese over the islands and the recent Richardson's Canada Goose I had seen with a small flock of Barnacle Geese at Malaclate, North Uist on 15 April, I spent any spare time I had around the northwest of North Uist. Many geese, especially Palebellied Brent Geese and Barnacle Geese pass by or stop over on their way north from their wintering grounds in south-east Ireland or western Scotland.

On 20 April, I headed out to Aird an Runair, the headland famed for its skua passage off Balranald. On arrival, I noticed a small flock of Brent Geese on the shore and as expected five of the six were Pale-bellied Brents, but the sixth bird was immediately and strikingly different. This individual showed much darker, chocolate-brown upper parts compared with the washed out tones of the Pale-bellied Brents. The breast was equally as dark as the mantle and extended onto the lower belly, stretching beyond the legs to meet the under tail coverts. The head and neck although black showed little contrast with the belly and mantle whilst the



Plate 235. Black Brant, Aird an Runair, North Uist, Outer Hebrides, 20 April 2012. © Steve Duffield (www.western-isles-wildlife.com)

flanks appeared strikingly white compared with the rest of the plumage. The white neck markings were very extensive forming a broad, white collar crossed by diagonal black bands. This white band was very broad on the front becoming gradually narrower as it extended around to the rear of the neck where it almost met. Although I have not seen one for many years, there was certainly no doubt that this was a cracking adult Black Brant.

Steve Duffield, North Uist www.western-isles-wildlife.com

Benbecula, 11 May 2012

The second bird was found during a wader ringing visit to Stinky Bay, Benbecula on 11 May 2012. The ringing team was assembled for a morning's catching, but before any catches had taken place a group of five Brent Geese were discovered feeding on the Sea Lettuce *Ulva lactuca* on the foreshore, amongst them one individual stood out.

This goose had a thick white neck collar, extending around the front of the neck, but not meeting at the rear. The relative width of the neck collar varied depending on the position of the bird (Plates 236 and 237). A bright white flank patch was created by the broad white tips of the flank feathers overlying their dark grey bases. The rear flank feathers were entirely dark grey framing this white flank patch; this compared with the dirty white flank patches on the Pale-bellied Brents (Plate 239), which had smudges of light grey created by the lighter-coloured bases to the flank feathers.

There was very little contrast between the black neck and the dark grey upper breast, although the degree of contrast varied depended on light conditions and the angle of the bird (Plates 236 and 237). The very dark lesser, median and greater coverts, scapulars and mantle, and jet black secondaries and primaries, were much darker than those of Pale-bellied Brents (Plate



Plate 236. Black Brant, Stinky Bay, Benbecula, Outer Hebrides, 11 May 2012. © Peter Stronach



Plate 237. Black Brant, Stinky Bay, Benbecula, Outer Hebrides, 11 May 2012. Showing the apparent paleness of the plumage due to strong sunlight behind the observers. © Peter Stronach

239). The bird was aged as an adult on the basis of the lack of white-tipped median and greater coverts and secondaries. The uppertail and undertail coverts as well as the vent were gleaming white. The bird had a stocky head and neck, seemingly thicker-necked than the adjacent Pale-bellied Brents. The head was almost flat on top (Plates 236 and 239), compared to the round-headed Pale-bellieds.

Discussion

Black Brant is a regular vagrant to Britain and Ireland, but to date it is an exceptionally rare bird in Scotland. These records follow the first accepted record, an adult at Loch Gruinart, Islay found on 20 October 1989, which overwintered till the 17 May 1990 (Rogers *et al.* 1994).

The apparent rarity of Black Brants in Scotland compared to the rest of Britain is probably down to a number of factors. The wintering population of the carrier subspecies, Pale-bellied Brent *B.b. bernicla* and Dark-bellied Brent *B.b. hrota*, is comparatively very low in Scotland with respect to the rest of Great Britain. The current British wintering population of Dark-bellied Brent is 81,120, Canadian Pale-bellied is 1,076 and Svalbard Pale-bellied is 4,979 (Holt *et al.* 2011). Of these, in Scotland, there are only 60–150 Pale-bellied Brent Geese wintering and only one to 30 Dark-bellied (Forrester *et al.* 2007); an obvious disadvantage in terms of numbers.



Plate 238. A flock of Canadian Pale-bellied Brent Geese migrating south past Rubha Ardvule, South Uist, Outer Hebrides, 13 September 2010. © Peter Stronach

The flocks of Pale-bellied Brent which make up the largest Scottish wintering populations on the Inner Moray/Inverness Firth area and the Eden Estuary are of Svalbard origin; an unlikely location to attract any Black Brants into their ranks. The areas that hold the highest potential for Black Brants being found in Scotland also have some of the lowest densities of observers another key factor.

For anybody keen to add to the existing Scottish records, the following situations are likely to offer the best chances. A seawatch in May or September to catch a Black Brant flying amongst migrating Brent flocks. The most likely locations would be Aird an Runair or Rubha Ardvule on the Uists and either Balevulin or Hynish on Tiree for Black Brants flying amongst Canadian Pale-bellied Brents. Take a digital camera with a big lens and a lucky piece of heather!

As well as those birds actively migrating, the best chance surely of finding a Black Brant would be



Plate 239. Black Brant (behind) with two first-winter Palebellied Brent Geese, Stinky Bay, Benbecula, Outer Hebrides, 11 May 2012. Comparison of head shape and plumage characters. © Peter Stronach

an individual amongst a resting passage flock. In Scotland passage birds can number between 1,000 and 5,000 for Canadian and Svalbard Pale-bellieds and 20–200 Dark-bellieds (Forrester *et al.* 2007). Most likely locations would be the Outer Hebrides, Islay or Loch Ryan in Dumfries & Galloway. Conditions when passage birds would peak in these areas would be headwinds and associated bad weather during the migration periods.

An overwintering individual amongst the 20–50 Canadian Pale-bellied Brents in Loch Ryan or Luce Bay, Dumfries & Galloway, is another possibility; although with the numbers involved, this is the least likely option!

Acknowledgements

PS and HI thank James McCallum for commenting on the photographs of the Benbecula individual and the text of this article.

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Peter Stronach, Highland Hugh Insley, Inverness

BIRDGUIDES REVIEW

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S. MENZIE

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The following abbreviations for the respective recording areas are used within the text: Ang - Angus & Dundee; Arg - Argyll; Ayrs - Ayrshire; Bord - Borders; Caith - Caithness; D&G - Dumfries & Galloway; High - Highland; Loth - Lothian; M&N - Moray & Nairn; NES - North-east Scotland; Ork - Orkney; OH - Outer Hebrides; P&K - Perth & Kinross; Shet - Shetland; UF - Upper Forth.

A flock of six **Snow Geese** flew north past Mire Loch (Bord) on 21 April, appearing on 23 April at Wasbister (Ork) — one of the flock was ringed and preliminary investigations suggested it had come



Plate 240. Blue-winged Teal, Loch Leven, Perth & Kinross, April 2012. © John Nadin

from a feral population in Germany. Single white-morphs were at Douglas Water (Clyde) on 1 & 3 April, Loch Leven (P&K) on 22 April, and Point of Ayre (Ork) on 23 May. Adult **Ross's Geese** were at Rattray Head (NES) on 1 & 2 April, and with Pink-footed Geese at Forres (M&N) on 24–28 August.

There were three **Red-breasted** Geese reported during the period; a first-winter with Pink-footed Geese at Brora (High) from 24-28 April, a first-winter with Barnacle Geese at Loaningfoot (D&G) lingering from March until 1 May, and a bird of unknown origin with Greylag Geese at Loch Riddon (Arg) on 5 & 7 June. Presumed wild Canada Geese consisted of a Todd's-type Canada Goose at Redkirk Point (D&G) on 8 April and Richardson's-type Canada Geese on Islay from 11-17 April and North Uist on 15 & 21 April.

A drake Blue-winged Teal was at Gilmourton (Clyde) from 1–16 April; a drake was at Loch Leven (P&K) on 22 & 23 April. There were five American Wigeon seen over the period, four of which were drakes (one at Castle Loch (D&G) from March until 5 April, one at North Ronaldsay from 14-16 May, and one at Loch of Strathbeg RSPB on 17-26 June); a male and female were together on Unst (Shet) on 24 May with the drake lingering to 26 May. There were at least five records of Green-winged Teal, all drakes; two were at Caerlaverock on 4 April with at least one remaining to 18 April. Other individuals were at Loch of Strethbeg RSPB (NES), on Tiree and Islay (both Arg), and on Fair Isle.

A drake Lesser Scaup was at St John's Loch (High) on 10 & 11 May. There were at least five Ringnecked Ducks in the region over

the period; two drakes together at Loch of Skene (NES) on 28 April may well have been the same two that were seen at Loch Kinord (NES) on 7 April. On the Outer Hebrides, a female was on Benbecula on 19 April and a drake was on North Uist on 30 April; another drake was on Islay (Arg) on 12 & 19 June.

A first-summer drake Black Scoter was off Blackdog (NES) from 14 June onwards; it shared the site with several Surf Scoters, the peak count being six (three adult drakes, a firstssummer drake and two females) on 27 June. Other Surf Scoters included singles at Largo Bay (Forth), Loch Gairloch (High), Port Seton (Loth), and Burray (Ork). Two drakes were off Barra (OH) on 15 May. The drake King Eider remained on Ythan Estuary (NES) until 21 May with a drake off Blackdog/Murcar from 28 May to 29 June presumably relating to the same individual. The only other report of the species involved a female present for just one day off South Uist (OH) on 1 May. Drake Northern Eiders (ssp. borealis) were off Embo (High) on 4 April, Tiree (Arg) on 7 April, and Dornoch (High) on 27 June.

Three White-billed Divers were off Port Skirgersta, Lewis (OH) on 23–26 March, with at least two birds seen intermittently in the area until 23 April. Two were off Rerwick Head (Ork) on 29 April with two off North Ronaldsay (Ork) the next day. Singles included birds off Burghead (M&N), Sumburgh and Fetlar (Shet), and Portsoy (NES).

A **Leach's Petrel** flew past Findhorn Bay (M&N) on 4 April; one flew past Saltcoats (Ayrs) on 14 May. Two **Great Shearwaters** were reported off Longa Island (High) on 23 April.

A Great White Egret was present at Munlochy Bay (High) on 24 April. Five Glossy Ibis were seen at three locations; an adult was present on North Uist lingering from March until 26 April; three were together at Donmouth (NES) on 29 & 30 April before moving for Loch of Strathbeg RSPB (NES) on 2 May, with a report of three birds flying over Newburgh on 5 May presumably relating to the same birds; a single bird was at Dundonald Camp (Ayrs) on 5 May. A White Stork was at Lochwinnoch RSPB (Clyde) on 26 May; other reports consisted of one at Cromlix (P&K) on 8 April, one flying over West Calder (Loth) on 5 April, and a ringed bird of unknown origin at Banchory (NES) on 9 & 10 April.

Sightings of a **Black Kite** at various sites on Shetland for the entire period likely related to the same wandering individual. Other singles were seen at Faseny



Plate 241. Glossy Ibis, North Uist, Outer Hebrides, April 2012. © Steve Duffield (www.western-isles-wildlife.com)



Plate 242. Greater Sand Plover, Benbecula, Outer Hebrides, June 2012. © Steve Duffield (www.western-isles-wildlife.com)

Bridge (Loth) on 4 June and St John's Loch (High) on 19 June. An out-of-range White-tailed Eagle was on Mainland (Orkney) on 1 and 4 May. There were two reports of migrant Honey Buzzards during the period, one at Reston (Bord) on 31 May and one at Reiss (High) on 26 June. Four Rough-legged Buzzards were seen, with the latest bird on Unst (Shet) on 10 May; others were at Graven (Shet) on 2 April, Stenness (Ork) on 25 April, and on South Uist on 5 May.

A female **Red-footed Falcon** was at Dull (P&K) from 31 May to 1 June, with perhaps the same bird being seen at Kinpurney Hill (Ang) on 11 June. A report of a possible **Booted Eagle** at Boddam (Shet) on 28 April was never confirmed, nor was a report of a white morph **Gyr Falcon** on South Uist (OH) on 6 April.

The only reports of migrant Spotted Crakes came from Shetland with one on Fair Isle on 18 May and one on Fetlar on 23 May. There were a number of widespread Common Crane sightings throughout the period. The highest count was of four birds at Inverness Airport (High) on 22 April; other notable reports included three flying over Musselburgh Lagoons (Loth) on

9 April, three at Loch of Strathbeg RSPB (NES) on 14 April, two on Unst (Shet) at the start of May, and a bird on Orkney staying into late June

A female **Great Sand Plover** was on Benbecula (OH) on 8 & 9 June - if accepted, this bird represents only the sixth record of the species for Scotland. A **Blackwinged Stilt** was present on Isle of May from 30 April to 4 May. The **Long-billed Dowitcher** at Wigtown (D&G) remained until 9 April. A **Buff-breasted Sandpiper** was at Butt of Lewis (OH) on 27 May; another was at Tyninghame Bay (Loth) on 5 June.

The **Greater Yellowlegs** at Loch Strathbeg RSPB (NES) continued its stay, briefly moving to the Ythan Estuary from 5–12 May before moving back to Loch of Strathbeg RSPB until 27 May; what we likely the same bird was seen at Loch of Mev (High) on 28 May. Three Temminck's Stints were on North Ronaldsay on 25 & 26 May; single birds were at Kingston (M&N) on 18 May and on Fetlar (Shet) on 31 May. Two Pectoral Sandpipers were at Butt of Lewis on 16 May; other single birds were reported from Fetlar (Shet), The Shunan (Ork), and Tiree (Arg). The firstwinter bird at Dundonald Camp (Ayrs) continued its stay from March to 18 April. A female **Grey Phalarope** at St John's Loch (Caith) from 14–24 June was in full breeding plumage, living up to the species' alternative name of Red Phalarope.

The annual passage of Longtailed Skuas during the second week of May peaked with 550 passing Aird an Runair (OH) on 13 May. Away from the west coast, 23 passed Birsay (Ork) on 14 May, 36 passed Wats Ness (Shet) on 16 May, and three passed John O' Groats (Caith) on 17 May; an adult passed Dunbar (Loth) on 11 June. The peak count of Pomarine Skuas also came from Aird an Runair with 600 birds recorded passing on 13 May and a further 635 passing on 14 May.

An adult **Bonaparte's Gull** was at Loch of Tingwall (Shet) on 30 May. A first-winter Caspian Gull was a Luthrie on 12 April, the first record for Fife if accepted. An adult Yellow-legged Gull was at Shewalton Pit (Ayrs) from 27-31 May. The only confirmed Sabine's sighting involved individual off Nairn Harbour (M&N) on 15 May. A secondwinter Ring-billed Gull was at Lochgilphead (Arg) from 2-21 April, while first-summer birds were on Fair Isle on 4 & 5 June and at West Kilbride (Ayrs) on 25 June.

Following the exceptional winter influx of Iceland Gulls, numbers remained higher than average. The highest count was of 20 at Lerwick (Shet) on 5 April, where at least nine lingered until 27 April. Individuals seen in late June included birds at several locations in Argyll, at Wick (Caith), and at Skinflats Lagoon (Forth) and the Isle of May. Virtually all reports of Glaucous Gulls concerned single birds; individuals lingering to the end of June included birds at Troon (Arys), Feltar (Shet) and South Uist (OH). Single

Kumlien's Gulls were seen at Moine Mhor NNR (Arg) and Loch Spynie (M&N) on 2 April, and at Wick (High) on 7 April.

A **Caspian Tern** flew south past Kinnaird Head (NES) on 27 May.

A male **Snowy Owl** was on North Uist (OH) from 14 May to 11 June.

A **Bee-eater** was at Carnoustie (Ang) on 2 June. **Hoopoes** were seen on Fair Isle on 20 & 21 May and at Banchory (NES) on 10 May. The bulk of **Wryneck** records came from Shetland, including up to five on Fair Isle in early May; smaller numbers were reported from Orkney. Away from the Northern Isles, birds were at Girdle Ness (NES) on 26 & 27 April, Isle of May on 12–17 May, Barns Ness (Loth) from 28 April to 2 May, and at Loch Skipport (OH) on 23 May.

There were about 30 reports of Red-backed Shrike with three birds together at Quendale (Shet) on 27 May, and two together on both South Ronaldsay (Ork) and Out Skerries (Shrt) on 23 May and 24 May respectively. A possible **Lesser Grey Shrike** reported from Forest of Birse (NES) on 2 June was not seen again and remained unconfirmed. There was a scattering of Great Grey Shrike throughout the period. The wintering bird at Montreathmont Forest (Ang) remained until 15 April. Other birds seen included one at Gullane Point (Loth), one at Bridge of Don and one at Loch of Strathbeg RSPB (NES), one at Coldingham (Bord), and one on South Ronaldsay (Ork). The bulk of reports came from Shetland, including two on Whalsay in late April. A male Woodchat Shrike was at Skirza (High) on 13 June.

Two **Greater Short-toed Larks** were on Shetland; one on Fair Isle on 21 May and one on Unst on 31 May. Two **Red-rumped**

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Swallows were on Unst on 25 May with singles seen at Castletown (High) on 9 April, Inchgarth (NES) on 14 May, and Fair Isle on 22 & 23 May.

Two Greenish Warblers were on the Isle of May on 6 June with one present to 10th. An Arctic Warbler was on Whalsay (Shet) on 27 June. A possible Iberian Chiffchaff was reported singing at Eildon Hall (Bord) on 24 May.

A **Subalpine Warbler** was trapped and ringed at Mire Loch (Bord) on 20 May. Two records of male birds were both assigned to the eastern subspecies (*albistriata*), one on Whalsay (Shet) on 21 May and one on Tiree (Arg) on 28 May. Females of undetermined race, all on Shetland, were at Pool of Virkie on 22 May, Fair Isle on 26 May, and Quendale on 1 & 2 June.

A River Warbler was present on Fair Isle from 11 June to at least the month's end. The peak count of Icterine Warblers came from Fair Isle on 25 May when ten were logged. Away from Shetland, up to two were present on North Ronaldsay (Ork) and upto four on the Isle of May between 29 May and 10 June. A Melodious Warbler was trapped and ringed on Isle of May on 7 June; another was seen on Coll (Arg) on 8 June. A Paddyfield Warbler on Fair Isle was present from 30 June onwards. Another Paddyfield Warbler was on North Ronaldsay (Ork) on 9 & 10 June. All Marsh Warbler reports came from the north and east, except for one singing on Tiree (Arg) on 28 May. Peak counts were two on North Ronaldsay on 7 June and two on Fair Isle on 9 June. Other birds included singles on the Isle of May on 22-23 May and 29 May-2 June, one, one at Auchmithie (Ang) on 27 & 28 May, and singles at Collieston and Balmedie Country Park (NES) both on 9 June. A Great

Reed Warbler was at Boddam (Shet) on 28 June.

Two Thrush Nightingales were on the Isle of May: one on 19 May and one 29 May-2 June, with another individual on Fair Isle from 20-25 May. Common Nightingales were seen on Isle of May on 30 April-1 May and Fair Isle on 21 May. There were about a dozen Bluethroats seen over the period, all on Shetland including three on Fair Isle on 12 May - except for seven on Isle of May between 3rd and 30 May. On Lewis (OH), the first-winter Red-flanked Bluetail lingered from March until 7 April.

Female-type Red-breasted Flycatchers were on Yell (Shet) on 21 May, at Collieston (NES) on 22 & 23 May, and on Isle of May on 24 May.

Two Grey-headed Wagtails (Yellow Wagtail ssp. thunbergi) were at Loch of Hillwell (Shet) on 9 May, with one at Scatness on the same day and a female on Fair Isle on 22 June. Away from Shetland, one was on North Uist (OH) on 9 May. A summerplumaged Red-throated Pipit was at Scourie (High) on 18 May. The only report of Water Pipit was of a single bird at Dunglass Burn (Bord) on 7 April.

A White-throated Sparrow was briefly in a garden on Skye (High) on 20 May. All reports of Ortolan Buntings came from Shetland in May with individuals on Whalsay, Fair Isle, and at Wester Quarff. A male Rustic Bunting was on North Ronaldsay on 23 May; on males Shetland, were Sumburgh on 24-27 May and Scousburgh on 26 May; and on Mingulay (OH), one was present on 4 June. A male **Black-headed** Bunting was on Yell (Shet) from 29 May to 1 June; a female was on North Uist on 19 June.

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Plate 243. On 16 April 2012, I was working on remote moorland about three miles inland from Siader, a village located between Barvas and Ness on the west coast of the Isle of Lewis. The day was bright, dry and breezy - white clouds racing across a deep blue sky. At around 11.30 am, a familiar croak had me looking upwards and I watched as three Ravens flew overhead. I heard another call a couple of minutes later and this time a pair sped past. When this happened again after a matter of seconds, I realised that something strange was going on. Within five minutes, a great many Ravens had arrived overhead and were circling and soaring on the thermals rising from the hot dry vegetation. Birds were still flying purposely in from all directions and as I watched, the huge column of black birds, now over 200 strong, began to drift slowly towards the coast. As it passed, I observed many birds breaking away from the mass, in pairs, shadow-flying, as Ravens do when bonding.

All the Ravens that I know of throughout Lewis were breeding at this time and I doubt if these birds would have deserted their nests and travelled from all corners of the island to attend this unusual event. My guess is that the flock I witnessed was a mix of birds not yet sexually mature and individuals without mates, or territory, or both. Could it have been a kind of social gathering for unattached Ravens?

Anyway, it did not end there. On the following day (same area) the weather had taken a turn for the worse, cold dull and wet, and the Ravens were nowhere to be seen and I thought that was that. However, the good weather then returned and I was treated to the same spectacle on the next three days at roughly the same time and in the same place.

Equipment used: Canon IXUS 200IS compact camera with 21 mm lens, 1/320sec, f5.9 and ISO 80.

Frank Stark



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