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Plate 253. Lekking Black Grouse, Deeside, North-east Scotland, April 2008 © Ed Duthie.

A survey of Black Grouse in north-east Scotland in 2009

I. FRANCIS

Totals of 659 male and 47 female Black Grouse were recorded in a wide-ranging survey of Moray and Aberdeenshire in spring 2009. 595 of the males were in Aberdeenshire and 64 in Moray. 511 birds were within the Cairngorms National Park, and 411 (over 60%) were found on five upper Deeside estates. The evidence suggests, for Aberdeenshire and south Moray, stability in numbers at least and probably an overall increase from 2005 to 2009 (perhaps with higher peak numbers in 2006–07), but in north Moray numbers appear to have declined. Taking account of unsurveyed areas and survey inefficiencies, the estimated total of 700 males in the area would be approximately 20% of the Scottish and 14% of the British population.

Introduction

During spring 2009, efforts were made to undertake a thorough survey and review of the numbers of displaying (lekking) Black Grouse *Tetrao tetrix* in the local authority areas of Moray and Aberdeenshire. This followed a request from Forestry Commission Scotland (FCS) to examine the status of the species on the national forest estate in the area, and the development of a joint project between RSPB and the Cairngorms National Park Authority. At the same time, an RSPB survey project dealing with Black Grouse in Moray, Nairn and parts of Inverness-shire was carried out, and in upper and mid-Deeside, a new Black Grouse Study Group, formed by a group of Deeside estates, undertook a co-ordinated survey in that area. These coincidental events made it possible to try and visit or collate records from every possible Black Grouse lekking area in the area to produce an almost complete census. RSPB staff visited other, more peripheral, lek areas and also contacted estates to obtain their counts.

A previous survey of lekking Black Grouse was undertaken in 2005, in support of the national survey (Francis & Pout 2006, Sim *et al.* 2008). This produced a comprehensive list of lek sites, and together with the distribution maps compiled through the *Breeding Bird Atlas of North-East Scotland* (Figure 1, Francis & Cook in prep.), gave a good idea of all possible target areas for investigation.

Selection of survey areas

Zones in and around all forests managed by FCS that were thought to at least potentially hold Black Grouse were identified. Ordnance Survey 5-km grid squares covering these areas were selected for survey, together with some non-FCS 5-km squares in Moray and within the Moray part of the Cairngorms National Park. Therefore, the 5-km squares shown in Figure 2 covered all 'priority' areas of the national forest estate plus some others (but not all FCS forests were covered, since some were known not to hold the species). Outwith the 5-km squares, information was gleaned from all possible sources including targeted lek counts, in an attempt to cover all Black Grouse areas in the north-east.

Methods

The 5-km square surveys generally followed Gilbert *et al.* (1998), which is the standard method used in previous national Black Grouse surveys, and involves not only counting known leks but searching for new ones. In some cases visit durations had to be shorter, or at different times of day, and many squares could only be visited once - and though efforts were made to visit in good weather conditions, due to conditions in spring 2009 this was not always possible. Effort in some squares was focused on the areas around FCS landholdings, where relevant, and in all cases clearly unsuitable habitat was not searched.

In other areas, single or multiple lek visits were made to known sites, and many records from upper Deeside came from estate staff counting leks. Requests were made to some estates and landowners for count information or records of birds, and most co-operated.

Survey results

All but four of the c. 45 known main lekking areas in north-east Scotland were counted during the survey, or some information was obtained for them. Based on 2005 information or anecdotal evidence, the areas not covered probably accounted for around 25 lekking birds, or some 4% of the likely total for north-east Scotland, though there is some uncertainty about numbers on one

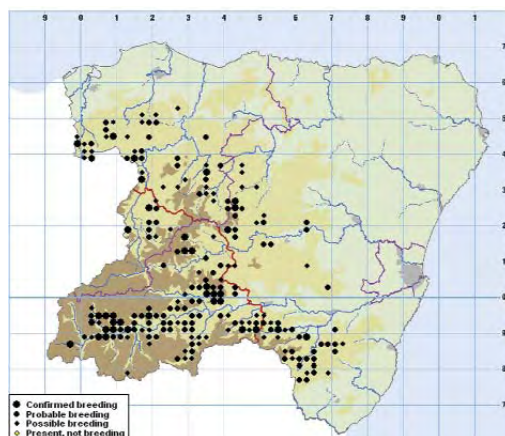


Figure 1. Black Grouse breeding distribution in north-east Scotland in 2002–06 (from *Breeding Bird Atlas of North-East Scotland data*, Francis & Cook, in prep.)

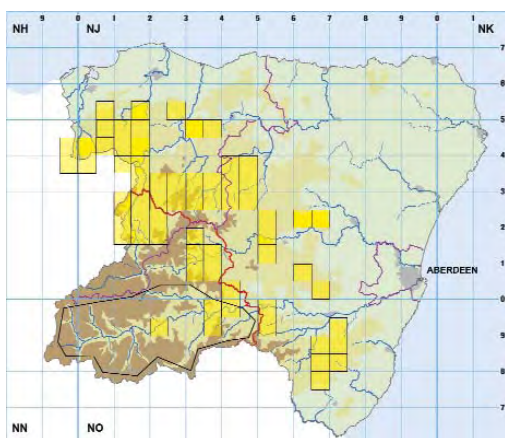


Figure 2. Black Grouse survey coverage in north-east Scotland in 2009. Yellow squares indicate 5-km squares searched around FCS forests; the black line shows the approximate boundary of the Deeside Black Grouse Study Group area. All other parts of the species' range were covered by RSPB survey work or estate records.

or two estates; it is unlikely that more than 50 extra males were unaccounted for by the survey. Detailed results from the survey are held by RSPB Scotland, Scottish Natural Heritage and for relevant areas, Forestry Commission Scotland, Cairngorms National Park Authority and the Deeside Black Grouse Study Group.

Table 1. Numbers of Black Grouse recorded on lek counts in north-east Scotland in 2009

Area	Number of lekking male Black Grouse	Comments
Upper Deeside	417	All areas west of Muir of Dinnet
Mid/Lower Deeside & the Mounth	112	Including the south side of the Mounth/Cairn o' Mount
Donside area	66	Including north to Huntly
South Moray	41	South of Ben Rinnes
North Moray	23	North of Ben Rinnes

In 2009, 659 lekking males and 47 females were counted across all sites in north-east Scotland. Table 1 provides a summary of all counts from broad-scale geographic sub-divisions of the area. A total of 595 of the males were in Aberdeenshire and 64 in Moray, with 511 of these within the Cairngorms National Park. Over 60% of the total lekking males (411) were found on the five main large upper Deeside estates. Individual lek locations are not named in this article because of sensitivity to disturbance.

The largest single lek was of 35 males near Ballater. The largest lek in the Donside area was of 22, and the largest lek in Moray was of 12, near Tomintoul. Single male leks (or probable leks) were recorded in seven places. Most large leks were towards the western or central parts of the breeding distribution; peripheral eastern areas held fewer birds, though 34 birds were recorded on the Mounth at the south-eastern edge of the range.



Plate 254. *Lek area on woodland edge in Moray. The lek stance is on the distant patch of grassland in the centre of the photograph © Ian Francis.*

Discussion and conclusions

Information quality

The information sources used vary in their quality and are prone to various potential flaws. Wide-scale 5-km counts are weather dependent, can vary according to time of day and also timing within the lekking season. New leks may also have been missed, especially if located in habitat that has changed substantially compared with Ordnance Survey maps. Most of these factors would lead to a potential underestimate in lek totals. When collating the data, there may have been a small amount of double-counting due to movement between leks, though this is thought to be rare. In a few cases, sightings of males in an area, especially if near a known lek, were classed as 'lek' counts, on the assumption that lekking probably would occur. This affected only a few individuals. These factors might lead to an overestimate in some areas. Nevertheless, this survey remains the most thorough that has been undertaken in the area so the population estimate has some credibility.

Although many leks were mapped precisely, some on the larger estates were not, since only estate or area totals were available. This means that it was not possible to produce a distribution map which might be compared with the 2002–06 atlas map in Francis & Cook (in prep.). However, the current national BTO/SOC Breeding Bird Atlas (2008–11) will produce an accurate up-to-date distribution at least at a 10-km square resolution.

An estimate of the total number of lekking males in north-east Scotland

It is likely that the number of lekking males in the area is around 700, a little higher than the 659 actually counted. This takes account of the estimated several tens of birds that may be found in areas not covered which are known to have birds, adding additional unsurveyed areas that may have small numbers of birds and taking account of survey inefficiencies.

Population trends

In 2005, Francis & Pout (2006) recorded 506 lekking males in the same count areas, and estimated that perhaps 559 males might be present if gaps in survey coverage were considered and the most recent counts prior to 2005 were summed. Using the highest lek counts in the preceding 10 years gave a total of 645 males for north-east Scotland, with a caveat that even this may not have included all birds in the area. The more intensive survey work in 2009, which produced 659 males, was also not in fact fully complete. It is certainly conceivable then that as many as 700 male Black Grouse may be present in the area.

659 males is a considerable increase on the 2005 total, however calculated, though the 2005 survey was probably an underestimate. Evidence from annual estate lek counts in upper Deeside (which are the main contributors to the area totals) suggests that numbers may have increased from 2005 for perhaps another year or two, then declined again following poor breeding seasons in 2007 and 2008. Therefore, numbers in 2009 are probably still higher than in 2005 but perhaps lower than their peak in 2006–07. It is certain though that numbers in upper Deeside are at least stable, may even have increased in the last four years in the main population areas, and the influence of this means the same is true for the region as a whole. However, anecdotal evidence suggests differing trends across the area. Some leks have decreased, and in more northern Moray sites, numbers and range may be less healthy. Further evidence to support this conclusion is presented in Francis & Cook (in prep.).

The importance of the area in a national context

The most recent national survey estimated 5,078 (range 3,920–6,156) lekking males in Britain and 3,344 (range 2,580–4,171) in Scotland (Sim *et al.* 2008). The estimate of approximately 700 males in north-east Scotland accounts for some 20% of the Scottish and 14% of the British population. The total in our area is similar to that in upper Strathspey and in highland Perthshire.



Plate 255. Lek area on open moorland in Donside, around 1.5 km from the nearest substantial woodland. Lekking takes place on patches of burnt heather in the centre of the photograph © Ian Francis.

Survey and information needs

The establishment of a Black Grouse Study Group in Deeside will lead to more regular and systematic annual lek monitoring. Elsewhere, there is need for individual site-based studies of leks and surveys of the availability of nesting and brood habitat, especially in north Moray, so that appropriate applications for SRDP funding can be made using the Rural Priorities packages within the Rural Development Contracts scheme.

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The RSPB survey work was carried out principally by Kate Brill, Ronan Dugan, Paul Doyle and Clive McKay with additional coverage from Ian Francis and Jim Craib. Other information and help came from Sam Alexander, Mark Ancliff, Bob Booth, Paul Chapman, Martin Cook, Jackie Cumberbirch, Alistair Duncan, Raymond Duncan, Adam Fraser, Stanley Gordon, Torquil Gordon-Duff, Paddy Grant, Ken Hall, Ian Hill, David Jenkins, Chris Jones, Glyn Jones, Colin McClean, Philippa Murphy, Marina Piper, Tim Poole, Shaila Rao, Graham Rebecca, Eva Sparreboom and Jackie Webley. Different aspects of the survey and data gathering were supported by Scottish Natural Heritage, Forestry Commission Scotland and the Cairngorms National Park Authority, and Jeremy Wilson commented on the manuscript. I thank them all for their help.

References

- Francis, I. & Cook, M. (eds) (in prep.). *The Breeding Birds of North-East Scotland*. Scottish Ornithologists' Club, Aberdeen.
- Francis, I. & Pout, A. 2006. Black Grouse in North East Scotland in 2005. *North East Scotland Bird Report* 2005: 116–119. North East Scotland Bird Club, Aberdeen.
- Gilbert, G.G., Gibbons, D.W. & Evans, J. 1998. *Bird Monitoring Methods: a manual of techniques for key UK species*. RSPB, The Lodge, Bedfordshire. 464 pp.
- Sim, I.M.W., Eaton, M.A., Setchfield, R.P., Warren, P.K. & Lindley, P. 2008. Abundance of male Black Grouse *Tetrao tetrix* in Britain in 2005, and change since 1995–96. *Bird Study* 55: 304–313.

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The abundance of Twite wintering in Caithness and Sutherland in 2006/07

N.I. WILKINSON, K. CARMOUCHE & K. GRAHAM

A repeat survey of Twite wintering in Caithness was undertaken in 2006/07 to give a comparable estimate of abundance to that of earlier surveys during 1992–98. To determine winter abundance and distribution more widely, the survey was extended to Sutherland. A comprehensive search for seed-rich habitats favoured by Twite, such as stubbles and weedy brassica crops, was undertaken in Caithness in October 2006. These were then surveyed monthly using co-ordinated, multi-observer counts, between November 2006 and March 2007. The mid-winter count was 311 and 441 birds in December and January, respectively. This is considered a near complete count of the population. Twite were found only in Caithness during the standard monthly surveys, although there was an incidental record of 60 birds in Sutherland in February 2007. Most Twite recorded were using turnip and unharvested crops. Comparisons with earlier surveys of Caithness showed that Twite abundance in December had declined by between 86% and 96% since similar surveys during 1992–98. Concurrent with this, the two main crop types used by Twite - spring oil-seed rape and turnips - declined in Caithness and across the Twite's main winter range in northern Scotland. Reasons for the change in winter abundance are discussed.

Introduction

The Twite *Carduelis flavirostris* is a small, seed-eating finch restricted to north-west Europe and central Asia. In Britain and Ireland, it breeds on open moorland and along sea cliffs, and winters in seed-rich habitats on farmland, and on saltmarshes (Lack 1986, Gibbons *et al.* 1993, Brown & Atkinson 1996, Clark & Sellers 1998a, Hancock & Wilson 2003). The species is Red-listed in the UK due to a long-term decline in population (Eaton *et al.* 2009) and has recently been added to the list of priority species in the UK Biodiversity Action Plan (JNCC 2007). The only systematic survey of the UK population estimated the breeding population as 10,000 pairs (95% confidence limits: 6,300–14,600) in 1999, of which c. 94% were in Scotland (Langston *et al.* 2006).

In Scotland, the Winter Atlas (Lack 1986) showed that most Twite winter near the coast, with notable concentrations in the Northern Isles, Caithness, south-east Sutherland and the Dornoch Firth, the Outer and Inner Hebrides. Surveys of Caithness in the 1990s found typical mid-winter populations of 2,000–3,000 birds, with a peak of up to c. 7,000 birds (Clark & Sellers 1997, 1999). This work highlighted the importance of this area for the species in winter. The Twite is a partial migrant; some populations are resident, while others, especially where winter seed sources are scarce, are migratory (Clark & Sellers 1998b, Raine *et al.* 2006). Data from ringing studies show that Twite wintering in Caithness breed locally, or in the Northern Isles, north-west Highlands, Lewis and Harris (Clark & Sellers 1998b). However, the number of birds recovered or re-sighted is small. The majority of the Scottish winter population occurs on low-altitude cultivated farmland, with birds feeding mainly in weedy turnip *Brassica rapa rapa* crops, oil-seed Rape *B. napus oleifera* and cereal stubbles (Clark & Sellers 1998a, Hancock & Wilson 2003, Mearns 2009). However, in some areas saltmarsh habitats, beaches and the strandline, and herb-rich grassland can be important (Clark & Sellers 1998a, Mearns 2009).

We report on a survey of wintering Twite in Caithness and Sutherland in 2006/07, which repeats surveys of Caithness in the 1990s. Using the same methods as previous surveys, we estimate abundance and determine changes in Caithness since 1992–98. We also quantify changes in crop types in northern Scotland used by Twite in winter, as a proximate measure of feeding habitat availability, to understand better key habitat requirements and potential drivers of population change.

Methods

Bird surveys

For field surveys, we used the same methods as those in the previous surveys of Twite in Caithness (Clark & Sellers 1997, 1999). However, we confined surveys to all suitable seed-rich feeding habitats (e.g. turnip and other fodder brassicas, unharvested or wild bird cover crops, cereal and oil-seed rape stubbles) since these were the main wintering habitats, used by 91–100% of Twite in the earlier surveys (Clark & Sellers 1997, 1999). Information on the distribution of suitable farmland habitat was obtained from the relevant government department (Scottish Government Rural Payments and Inspections Directorate (SGRPID)) and from a pilot survey of Caithness in October. All areas with suitable habitat were checked from public roads and paths or, where necessary (e.g. to allow full view of the field), by walking across the habitat. Twite are usually readily detectable due to their restlessness and soon take flight revealing their presence, although small flocks can be more difficult to detect when feeding, or in strong winds. The size of all Twite flocks was estimated and the habitat being used recorded. Survey visits were made once a month between November 2006 (surveys of Sutherland started in December) and March 2007. These were conducted over two–three consecutive days except in December (when surveys were separated by four days, due to poor weather) to minimise the chance of double counting of birds, and were made between 09:00 and 14:00 GMT. The weather for the surveys was generally good, but windy and showery for some visits. Surveys involved up to 14 observers on each day.

Agricultural land use

We sourced data on the area of land cultivated for those crops recorded being used by wintering Twite (e.g. Clark & Sellers 1998a, Hancock & Wilson 2003) from the government annual June census of agricultural holdings (www.scotland.gov.uk/Topics/farmingrural/Agriculture). Annual land use data were obtained for the main winter range in northern Scotland (Lack 1986) - Shetland, Orkney, Caithness, Highland, north-east Scotland (Aberdeenshire and Moray) and the Outer Hebrides - for the period 1990–2006.

Results

Abundance and distribution

In Caithness, Twite abundance in mid-winter was 311 in December rising to 441 birds in January, although abundance peaked in March with 849 birds (Table 1). The median size of flocks was 45 birds (middle 50% of the range of flock sizes: 29–82), while the largest was 700 birds (estimated between 600–800 birds). The distribution of flock sizes did not differ between early (November–December) and late winter (January–March) (Mann-Whitney *U*-test: $U = 81$, $P > 0.3$). Twite were recorded at 13 sites during the winter, of which four held birds on more than one month. No Twite were recorded in Sutherland during any of the monthly surveys.

Table 1. Numbers of Twite in Caithness in winter 2006/07. * For one flock, 700 was used as the estimate, based on the mid-point of the range given by the observer (600–800 birds).

Survey visit	Number of flocks	Flock size range	Total number of birds
November (11–12th)	4	28–60	168
December (13, 16–17th)	5	1–200	311
January (13–15th)	4	6–300	441
February (10–11th)	3	15–110	165
March (10–11th)	4	35–700*	849*

Feeding distribution

Feeding Twite used a range of habitats including turnips (10 out of 20 flock encounters; 50%), barley stubbles (25%), unharvested crops (15%), leafy fodder brassicas such as kale *Brassica oleracea* and fodder rape (5%), and maritime vegetation such as dunes and saltmarsh (5%), between November and March. Most birds used either turnip or unharvested crops, with the latter used only in December and January (Figure 1). Across all visits, 60% of Twite were found in turnips, 27% in unharvested crops, 11% in cereal stubbles, 1.5% in maritime vegetation and 0.5% in fodder rape and kale.

Comparison with earlier surveys

The number of Twite recorded in Caithness in four December surveys was 6,882 in 1992, 2,136 in 1993, 3,036 in 1994 and 5,927 birds in 1998 (Clark & Sellers 1997, 1999). Comparing abundance in December, numbers of Twite have declined by 95% since 1998 and between 86% and 96% since 1992–94.

Trends in crop type availability

The main turnip crop growing areas were in north-east Scotland and Highland, which held more than 90% of the hectareage of northern Scotland. The total area of turnips and swedes *Brassica napus rapifera* in northern Scotland declined by 70% (Figure 2). Declines were similar across regions (59–82%), although the rate of decline has slowed in north-east Scotland recently.

The growing of spring-sown oil-seed rape in northern Scotland reached a peak of 21,300 ha in 1994, following a rapid increase, before declining to levels lower than those in 1990 (Figure 3). Since 1994, the area of oil-seed rape has declined by more than 90% in north-east Scotland and Highland, and almost disappeared as a crop in Caithness. A small area of spring-sown oil-seed rape was grown in Orkney (peaking at 80 ha in 1996), Shetland and the Outer Hebrides during the period.

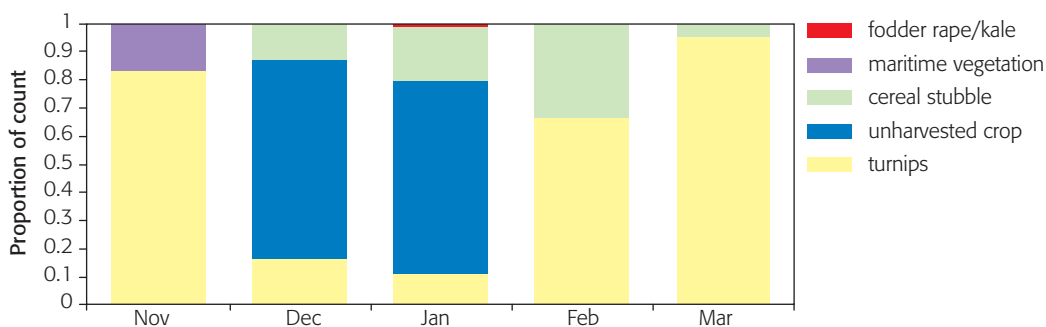


Figure 1. Seasonal distribution of feeding Twite in Caithness in winter 2006/07.

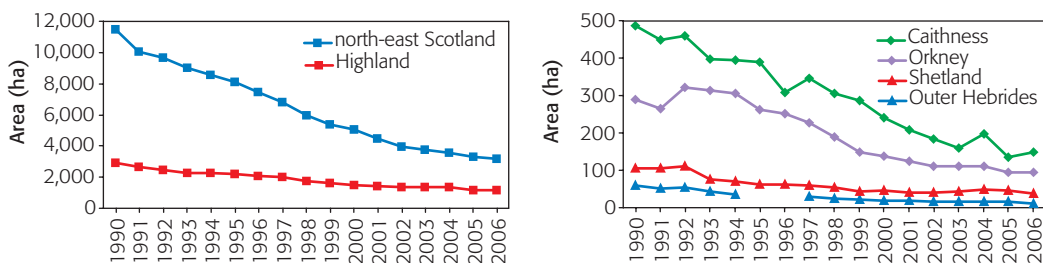


Figure 2 a–b. Area of turnips and swedes grown in northern Scotland, 1990–2006. (a) Major turnip growing areas - north-east Scotland and Highland; (b) other areas - Caithness, Orkney, Shetland and Outer Hebrides (crop present, but area unavailable for Outer Hebrides in 1995–96).

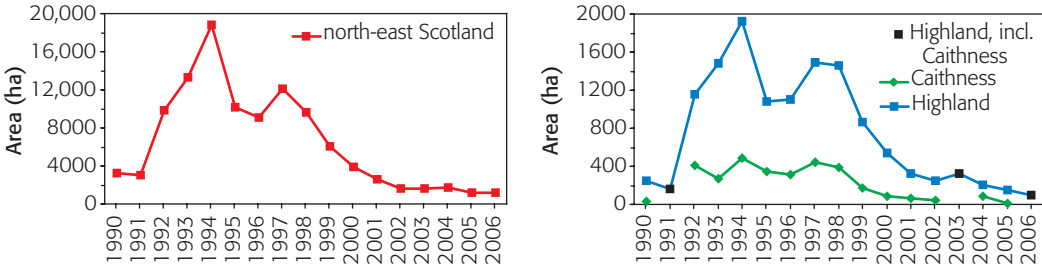


Figure 3 a–b. Area of spring-sown oil-seed rape grown in northern Scotland, 1990–2006. (a) Major rape growing area - north-east Scotland; (b) other areas - Highland and Caithness (data for Highland in 1991, 2003 and 2006 includes Caithness; black squares).

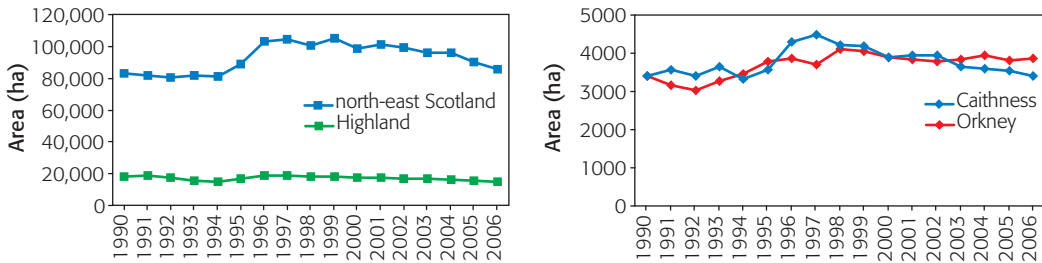


Figure 4 a–b. Area of spring-sown barley grown in northern Scotland, 1990–2006. (a) Major barley growing areas - north-east Scotland and Highland; (b) other areas - Caithness and Orkney.

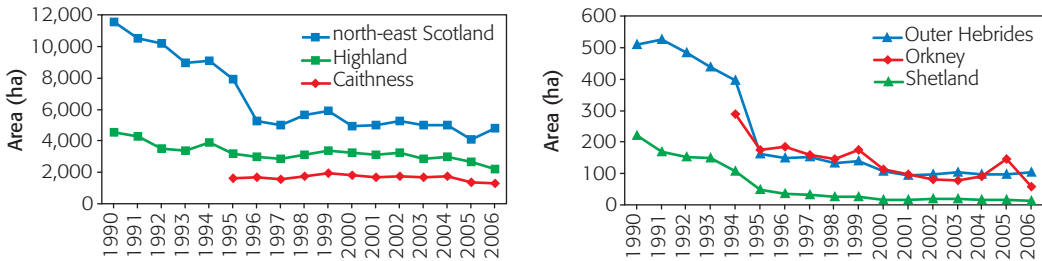


Figure 5 a–b. Area of spring-sown oats grown in northern Scotland, 1990–2006. (a) Major oat growing areas - north-east Scotland, Highland (including Caithness) and Caithness only; (b) other areas - Orkney, Shetland and the Outer Hebrides. Years with no data indicate that the crop was present, but the area was unavailable.

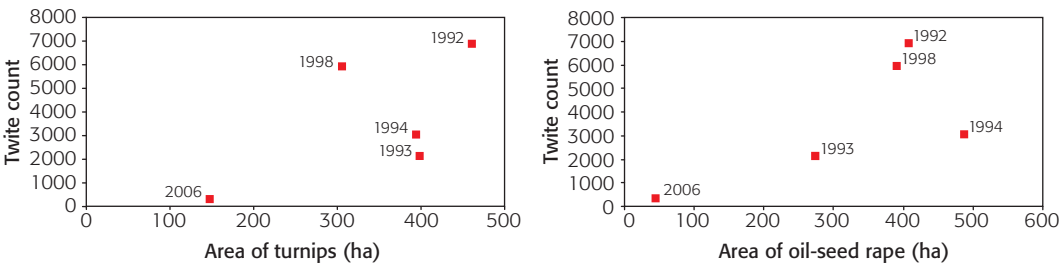


Figure 6 a–b. Twite abundance and availability of their main feeding habitats in Caithness. (a) Turnips; (b) spring-sown oil-seed rape (2006 value shows total spring and winter-sown area, as separate spring-sown area unavailable).

The area of spring-sown barley in northern Scotland has shown little change between 1990 and 2006 (Figure 4). It has increased in Orkney (14%), remained stable in north-east Scotland and Caithness, but declined in Highland (17%). The total area of spring-sown oats in northern Scotland declined by more than 50% between 1990 and 2006 (Figure 5). Declines occurred in all regions and varied between -52% in Highland to -94% in Shetland, but were especially marked during 1990–96.

Discussion

Survey coverage

Considerable effort was made to ensure comprehensive survey coverage of seed-rich arable habitats and it is expected that few areas of suitable habitat will have been missed. However, the fact that no Twite were found in Sutherland, even though there was an incidental record of 60 birds at Durness in February 2007 (Butterfield 2009), suggests that surveys of this much larger area were insufficient to find all large flocks. While Twite may have used habitats not comprehensively covered by the survey, such as saltmarsh, dunes and weedy areas of grassland, these were of minor importance for Twite in the earlier surveys and we do not believe this is likely to have changed substantially in this survey.

Changes in abundance

The mid-winter (December) count of Twite in Caithness was 311 birds. This was at least 86% lower than comparable counts in the early 1990s when 2,000–3,000 birds were found (Clark & Sellers 1997). Over a similar period, the area of the two most important crop types used by wintering Twite - turnips and spring oil-seed rape - has more than halved in Caithness. Using the data from all five surveys of Twite in Caithness shows that Twite abundance (natural log transformed) was strongly positively and significantly correlated with the combined area of spring oil-seed rape and turnips in Caithness, and with spring oil-seed rape itself, but not significantly with turnips (combined: $r = 0.91$, $n = 5$, $P = 0.034$; oil-seed rape: $r = 0.89$, $n = 5$, $P = 0.042$; turnips: $r = 0.82$, $n = 5$, $P = 0.089$; Figure 6). The 1990s surveys of Twite in Caithness occurred at a time when the growing of oil-seed rape was at high levels, while the area of turnips was declining. The decline in turnips is due to its replacement as winter feed for livestock by silage and other fodder crops (Hancock *et al.* 2003). Caithness is near the northern limit of oil-seed rape growing, and its short-term appearance during the 1990s (fuelled by government subsidies) probably helped to buffer Twite populations against the long-term decline in turnips, which were previously their main winter habitat (Clark & Sellers 1997). In particular, initially the subsidy did not require farmers to harvest the crop (though this changed in later years) so many fields in the 1990s were left unharvested resulting in a super-abundance of seed food (Robin Sellers *pers comm.*). Consequently, the introduction of oil-seed rape may have led to much higher Twite numbers wintering in Caithness, than was normal in previous years, when only turnips were available. Data from a repeat 'winter atlas' style survey (Lack 1986, unpublished data from Hancock *et al.* 2009) show that on the seven 10-km squares in Caithness, Twite abundance in 1997–99 was twice that in 1981–84 (mean count per visit: 1981–84 = 36 birds; 1997–99 = 75). However, there was no significant change in Twite counts on a larger sample of 95 squares across Scotland (Hancock *et al.* 2009). Also, at the scale of Caithness only, these data should be treated with caution, since relatively few squares were surveyed meaning that the results would be vulnerable to chance effects of whether particular flocks were detected on particular days. Although there has been no previous systematic survey of wintering Twite in Sutherland, anecdotal records suggest that some sites in east Sutherland traditionally supported large numbers of birds until at least 2002, with flocks of up to 800 birds in a regular weedy turnip field at Ardgay (D. Butterfield *pers comm.*).

Detailed studies have shown that the distribution of seed-eating birds in winter is strongly related to the densities of seed food (Robinson & Sutherland 1999, Moorcroft *et al.* 2002). Consequently, seed-eating species such as Twite tend to be mobile, as they search for seed food resources that maybe patchily distributed and/or depleted over time. A Twite ringed in Sutherland which moved between Brora, Dornoch Point and Golspie before returning to Dornoch Point in the same month, is illustrative of what is possible (Butterfield 2006). Thus, there may have been a redistribution of wintering Twite to

areas of higher seed food availability in south-east Highland, north-east Scotland and Orkney. While there is still a large area of spring oil-seed rape in north-east Scotland, turnips here and in Highland are often grown in an arable rotation with herbicides on the intervening cereal crops and thus tend to support few weeds. The area of unharvested crops in Orkney and Highland has increased greatly through agri-environment schemes (e.g. Rural Stewardship Scheme: 83 ha in 2001 to 469 ha in 2006), thus potentially providing a rich seed resource for Twite. However, in the absence of simultaneous winter surveys across northern Scotland, together with comparable data collected at the time of one of the earlier surveys of Caithness, whether there was a redistribution of birds cannot be established.

Knowledge of Twite population trends in Scotland (which holds 94% of the UK population; Langston *et al.* 2006) is poor since their breeding distribution is too patchy to be monitored by the UK Breeding Bird Survey (BBS; Risely *et al.* 2009). The 1999 national Twite survey recorded range contractions in Lewis, Harris, Shetland and inland mainland Scotland since 1988–91 (Langston *et al.* 2006). While this provides some evidence of recent population decline, differences in survey methods make it difficult to quantify. Many of these areas have also seen reductions in arable cultivation over a similar period (Wilkinson & Wilson 2010). Over a longer period, a repeat winter atlas survey of 95 10-km squares in lowland Scotland found no change in the counts of Twite between 1981–84 and 1997–99 (Hancock *et al.* 2009). However, the latter years of this study included a period when oil-seed rape – a key Twite winter habitat if spring sown – was more widely grown than today.

Habitat use

The main habitats used by Twite in this survey were turnips, unharvested crops and, to a lesser extent, cereal stubbles. The use of turnip crops has been highlighted in previous studies in Caithness, where the main food plant was a common large weed in these crops, Charlock *Sinapsis arvensis* (Clark & Sellers 1997, 1999). Additionally, extensive surveys of farmland across Scotland showed the importance of these crops, with the highest densities of Twite in weedy fodder crops and stubbles (Hancock & Wilson 2003). Twite use of unharvested crops was not recorded in the earlier surveys of Caithness, although this may simply be because it was not grown in Caithness in the 1990s. Such crops have been shown to support good numbers of Twite in Orkney and Islay (RSPB unpublished data), while their use by a range of seed-eating species, including other *Carduelis* spp., has been well documented (e.g. Henderson *et al.* 2004, Perkins *et al.* 2008). The RSPB undertook a small-scale intervention project in winter 2008/09 to provide winter seed food sources in Caithness and Sutherland using unharvested crops and extensively managed turnips, while a similar project using turnips has been ongoing in Shetland. No birds were recorded using oil-seed rape during this study, although this is not surprising given the crop's almost complete absence from the survey area. However, this may remain an important crop for Twite further south.

Conclusions

The observed 85–95% decline in the abundance of Twite wintering in Caithness between the 1990s and 2006/07 coincided with a more than 50% reduction in the main crop types used by Twite. We are unable to determine the main reason for the change in abundance, which may be explained by both a redistribution of Twite wintering outside the survey area and a decline in population size mediated by a reduction in winter seed food. Future winter monitoring would be useful in key areas in the main winter range, using co-ordinated simultaneous counts. This should be in addition to a repeat national breeding survey and/or an increase in the scale of the BBS in order to monitor the status of the important Scottish population.

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References

- Brown, A.F. & Atkinson, P.W. 1996. Habitat associations of coastal wintering passerines. *Bird Study* 43: 188–200.
- Butterfield, D. 2006. *Highland Bird Report 2004*. SOC Highland Branch, Inverness.
- Butterfield, D. 2009. *Highland Bird Report 2007*. SOC Highland Branch, Inverness.
- Clark, H. & Sellers, R.M. 1997. Distribution and abundance of Twites wintering in Caithness. *Scottish Birds* 19: 1–9.
- Clark, H. & Sellers, R.M. 1998a. Winter habitats of Twites in Scotland. *Scottish Birds* 19: 262–269.
- Clark, H. & Sellers, R.M. 1998b. Movements of Twite in Scotland. *Scottish Birds* 19: 270–279.
- Clark, H. & Sellers, R.M. 1999. A further survey of Twites wintering in Caithness. *Scottish Birds* 20: 35–37.
- Eaton, M.A., Brown, A.F., Noble, D.G., Musgrove, A.J., Hearn, R., Aebischer, N.J., Gibbons, D.W., Evans, A. & Gregory, R.D. 2009. Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds* 102: 296–341.
- Gibbons, D.W., Reid, J.B. & Chapman, R.A. 1993. *The New Atlas of Breeding Birds in Britain and Ireland: 1988–91*. T. & A.D. Poyser, London.
- Hancock, M.H., Smith, T., Chamberlain, D.E., Wilson, J.D. & Lack, P.C. 2009. Using repeated winter surveys to estimate changes in abundance of seed-eating passerines. *Bird Study* 56: 65–74.
- Hancock, M.H. & Wilson, J.D. 2003. Winter habitat associations of seed-eating passerines on Scottish farmland. *Bird Study* 50: 116–130.
- Henderson, I.G., Vickery, J.A. & Carter, N. 2004. The use of winter bird crops by farmland birds in lowland England. *Biological Conservation* 118: 21–32.
- JNCC 2007. UK List of Priority Species and Habitats. www.ukbap.org.uk/NewPriorityList.aspx Accessed 5 November 2009.
- Lack, P. 1986. *The Atlas of Wintering Birds in Britain and Ireland*. T. & A.D. Poyser, Calton.
- Langston, R.H.W., Smith, T., Brown, A.F. & Gregory, R.D. 2006. The status of breeding Twite, *Carduelis flavirostris*, in the UK. *Bird Study* 53: 55–63.
- Mearns, R. 2009. Wintering Twite in Dumfries & Galloway. *Scottish Birds* 29: 210–219.
- Moorcroft, D., Whittingham, M.J.W., Bradbury, R.B. & Wilson, J.D. 2002. The selection of stubble fields by wintering granivorous birds reflects vegetation cover and food abundance. *Journal of Applied Ecology* 39: 535–547.
- Perkins, A.J., Maggs, H.E. & Wilson, J.D. 2008. Winter bird use of seed-rich habitats in agri-environment schemes. *Agriculture, Ecosystems and Environment* 126: 189–194.
- Raine A.F., Sowter, D.J., Brown, A.F. & Sutherland, W.J. 2006. Migration patterns of two populations of Twite *Carduelis flavirostris* in Britain. *Ringing & Migration* 23: 45–52.
- Risley, K., Noble, D.G. & Baillie, S.R. 2009. *The Breeding Bird Survey 2008*. BTO Research Report 537. British Trust for Ornithology, Thetford.
- Robinson, R.A. & Sutherland, W.J. 1999. The winter distribution of seed-eating birds: habitat structure, seed density and seasonal depletion. *Ecography* 22: 447–454.
- Wilkinson, N.I. & Wilson, J.D. 2010. Breeding ecology of Twite *Carduelis flavirostris* in a crofting landscape. *Bird Study* 57: 142–155.

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Numbers of breeding birds in old Scots Pine wood at Abernethy Forest, Badenoch & Strathspey, from 1977 to 1987

S. TAYLOR & R.W. SUMMERS

Breeding birds were counted in two compartments of old Scots Pine wood at Abernethy Forest, Badenoch & Strathspey, during 11 springs and summers from 1977 to 1987. Of the 29 species recorded, the most abundant were Chaffinch, Coal Tit and Eurasian Siskin. Eurasian Treecreeper, Winter Wren, Goldcrest, Tree Pipit and Common Redstart were moderately abundant. A downward trend was observed in Western Capercaillie, Crested Tit and Eurasian Treecreeper numbers and upward in Tree Pipit. Winter Wren numbers were lower following cold winters. None was present after the coldest winter (1981/82), but they reappeared the following spring. Comparisons with previous surveys at Abernethy showed some similarities in species composition and density, but the other studies found Goldcrests relatively more abundant. Winter Wrens and Willow Warblers were relatively more abundant in west-coast pinewoods. Scots Pine plantations supported a largely similar species composition but lower density than semi-natural pinewood.

Introduction

The ancient native pinewoods of Scotland comprise some of the oldest semi-natural woods in Scotland (Steven & Carlisle 1959, McVean & Ratcliffe 1962). They are recognised for their high biodiversity and many are protected as National Nature Reserves, Special Protection Areas, Special Areas of Conservation, Caledonian Forest Reserves or as Sites of Special Scientific Interest (Anon 1995, Mason *et al.* 2004). Despite their high nature conservation value, there is still relatively little known about their biodiversity. Even for birds, which are relatively easy to identify compared with, for example, lichens, there are no checklists for most native pinewoods.

Most of the bird surveys in ancient native pinewoods relate to particular species; *e.g.* Western Capercaillie (see Table 1 for the scientific names) (Catt *et al.* 1998, Wilkinson *et al.* 2002, Eaton *et al.* 2007), Crested Tits (Summers *et al.* 1999), Tree Pipits and Redstarts (Taylor & Summers 2009). Where general descriptions have been made of the bird community, most studies have been made in Abernethy Forest in spring and summer. Watson (1969) reported counts of individual birds in a 4 ha area at Loch Garten, Newton & Moss (1977) and Moss (1978a) carried out mapping and transect surveys in an 8.7 ha area, and Hill *et al.* (1990) made point counts at seven plots across the forest (Figure 1). Few other native pinewoods have been surveyed; only Rothiemurchus and Glen More (Yapp 1962), and at Beinn Eighe and Meall a' Ghiubhais in Wester Ross (Williamson 1969). Even at Abernethy Forest, surveys have been of short duration and small in scale. Here, we describe the breeding bird community in two parts of Abernethy Forest, comparing changes over 11 breeding seasons.

Methods

The study was carried out in parts of compartment 13 (13.25 ha) and compartment 7 (10.5 ha) both within the western part of Abernethy Forest (Figure 1). The woodland habitat comprised old semi-natural, or native, pinewood in compartment 13, and high crown pines planted in the 1880s, with a scatter of older pines in compartment 7 (Plates 256-257). There were also younger trees at the



Plate 256. Scots Pine woodland in compartment 7, Abernethy Forest, Badenoch & Strathspey © Stewart Taylor.



Plate 257. Scots Pine woodland in compartment 13, Abernethy Forest, Badenoch & Strathspey © Stewart Taylor.

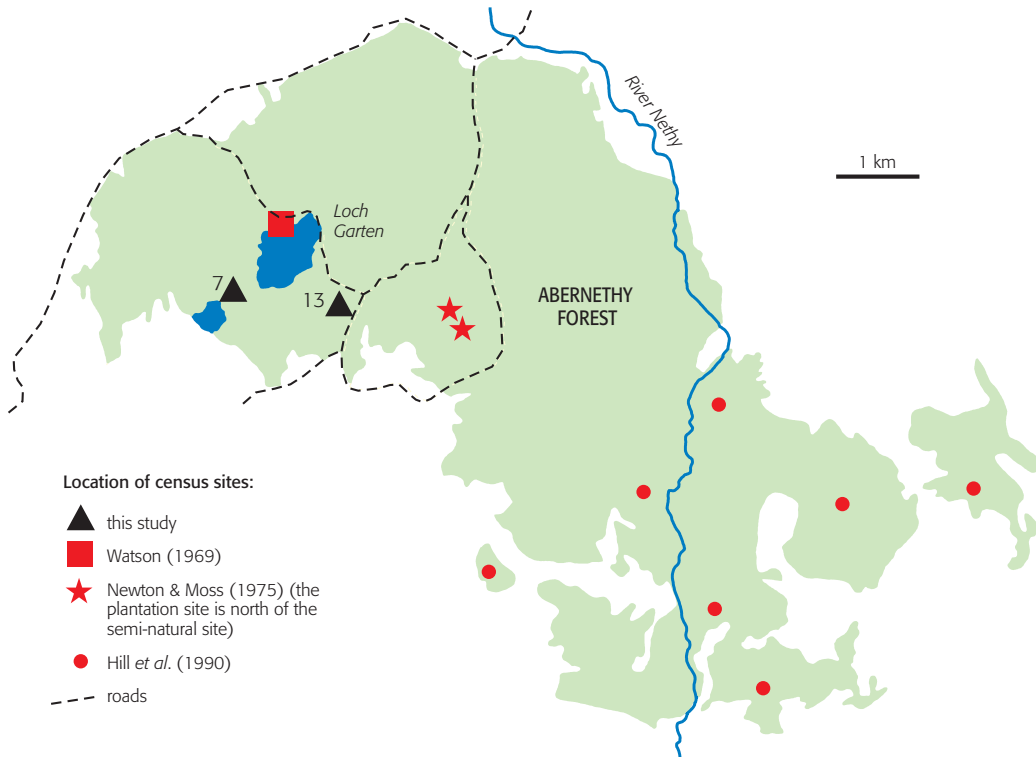


Figure 1. The location of study areas at Abernethy Forest.

northern end of compartment 7, planted in 1970 (Dunlop 1988), and a small area of bog pine in compartment 13. The shrub layer comprised a mixture of Heather *Calluna vulgaris*, Blaeberry *Vaccinium myrtillus* and Cowberry *V. vitis-idaea* growing over mosses. During the period of the survey, there was no woodland management or blown down trees that would cause changes to the forest structure.

Both compartments were surveyed from 1977 to 1987, with 5–13 visits to each compartment each spring and summer. All surveys were by ST, thereby eliminating between-observer differences. Visits were started about 6:30 am, and lasted about two hours or longer to locate nesting sites of Crested Tits. Bad weather was avoided (O'Connor & Hicks 1980). Singing males and sightings of other species were mapped following Common Bird Census methods, and later interpreted to determine the number of pairs (Bailey 1967, Williamson 1970). For Crested Tits, the numbers of nests found helped to confirm the estimates of numbers of territories. Permanent grids comprising trees marked at 50 m intervals were installed in each compartment prior to the surveys, thereby aiding the mapping. For some species, Western Capercaillie, Eurasian Woodcock and Tawny Owl, counts refer to number of individuals of both sexes. Trends in numbers were analysed using Spearman Rank Correlations. We considered those to be of biological importance only if similar trends occurred at both compartments and there were high correlation coefficients.

The number of days when the maximum temperature was less than 0°C in December, January and February was obtained from meteorological data each winter at Grianan (57° 13' 40"N, 3° 42' 09"W), on the western edge of Abernethy Forest. These were classed as 'frost' days. There were no data for December 1976, so data from Glenmore Lodge were used. The relationship between the number of pairs (averaged for the two compartments) of resident

passerines and number of frost days in the previous winter was tested in linear regressions. Some birds in one year are likely to be present in the following year, so the data in each year will not be fully independent, thus leading to possible autocorrelation. Therefore, the results from the standard linear regression model were compared against those obtained by fitting a linear regression model with first-order autoregressive (AR(1)) normal errors using the AUTOREG procedure in SAS (SAS Institute 2000).

Table 1. The mean density (number per km²) and range (in brackets) for each species at the two study compartments at Abernethy Forest during 1977–1987. For all species except Western Capercaillie, Eurasian Woodcock and Tawny Owl, the numbers refer to number of pairs.

Bird species	Compartment 13	Compartment 7
Mallard <i>Anas platyrhynchos</i>	1.4 (0–8)	1.7 (0–10)
Goldeneye <i>Bucephala clangula</i>	0.7 (0–8)	0 (-)
Western Capercaillie <i>Tetrao urogallus</i>	7.5 (0–15)	5.2 (0–19)
Eurasian Woodcock <i>Scolopax rusticola</i>	0.7 (0–8)	0 (-)
Common Wood Pigeon <i>Columba palumbus</i>	5.5 (0–15)	4.3 (0–10)
Common Cuckoo <i>Cuculus canorus</i>	1.4 (0–8)	1.7 (0–10)
Tawny Owl <i>Strix aluco</i>	0.7 (0–8)	0 (-)
Tree Pipit <i>Anthus trivialis</i>	25.4 (8–53)	12.1 (0–29)
Winter Wren <i>Troglodytes troglodytes</i>	19.9 (0–45)	16.5 (0–29)
Hedge Accentor <i>Prunella modularis</i>	2.7 (0–8)	0 (-)
European Robin <i>Erithacus rubecula</i>	5.5 (0–8)	7.8 (0–10)
Common Redstart <i>Phoenicurus phoenicurus</i>	22.6 (15–30)	19.9 (10–38)
Mistle Thrush <i>Turdus viscivorus</i>	5.5 (0–8)	2.6 (0–10)
Common Blackbird <i>Turdus merula</i>	0.7 (0–8)	0 (-)
Willow Warbler <i>Phylloscopus trochilus</i>	6.9 (0–30)	15.6 (0–38)
Wood Warbler <i>Phylloscopus sibilatrix</i>	0.7 (0–8)	0 (-)
Spotted Flycatcher <i>Muscicapa striata</i>	16.5 (0–38)	7.8 (0–19)
Goldcrest <i>Regulus regulus</i>	21.3 (0–45)	27.7 (10–48)
Coal Tit <i>Parus ater</i>	43.2 (23–68)	39.0 (29–76)
Crested Tit <i>Parus cristatus</i>	23.3 (15–30)	19.0 (10–38)
Blue Tit <i>Parus caeruleus</i>	4.1 (0–15)	0 (-)
Great Tit <i>Parus major</i>	4.8 (0–15)	0 (-)
Eurasian Treecreeper <i>Certhia familiaris</i>	20.6 (8–30)	19.0 (0–38)
Eurasian Jackdaw <i>Corvus monedula</i>	0.7 (0–8)	0 (-)
Carrion Crow <i>Corvus corone</i>	2.7 (0–8)	0 (-)
Chaffinch <i>Fringilla coelebs</i>	72.7 (53–98)	81.4 (38–133)
European Greenfinch <i>Carduelis chloris</i>	0.7 (0–8)	0 (-)
Eurasian Siskin <i>Carduelis spinus</i>	35.0 (23–60)	35.5 (19–76)
Crossbill <i>Loxia</i> sp.	15.8 (0–30)	7.8 (0–19)
Total (pairs and individuals)	369.2 (309–483)	324.6 (229–495)
Total (individuals)	730	644

Table 2. Estimated numbers of territories of Crested Tits and numbers of nests found in the two study compartments at Abernethy Forest.

Year	Number of territories		Number of nests	
	Compartment 7	Compartment 13	Compartment 7	Compartment 13
1977	3	4	0	0
1978	4	4	0	3
1979	2	4	1	3
1980	2	3	0	3
1981	1	4	0	3
1982	1	3	1	3
1983	3	3	3	2
1984	1	2	0	2
1985	2	3	1	3
1986	2	2	0	2
1987	1	2	1	2

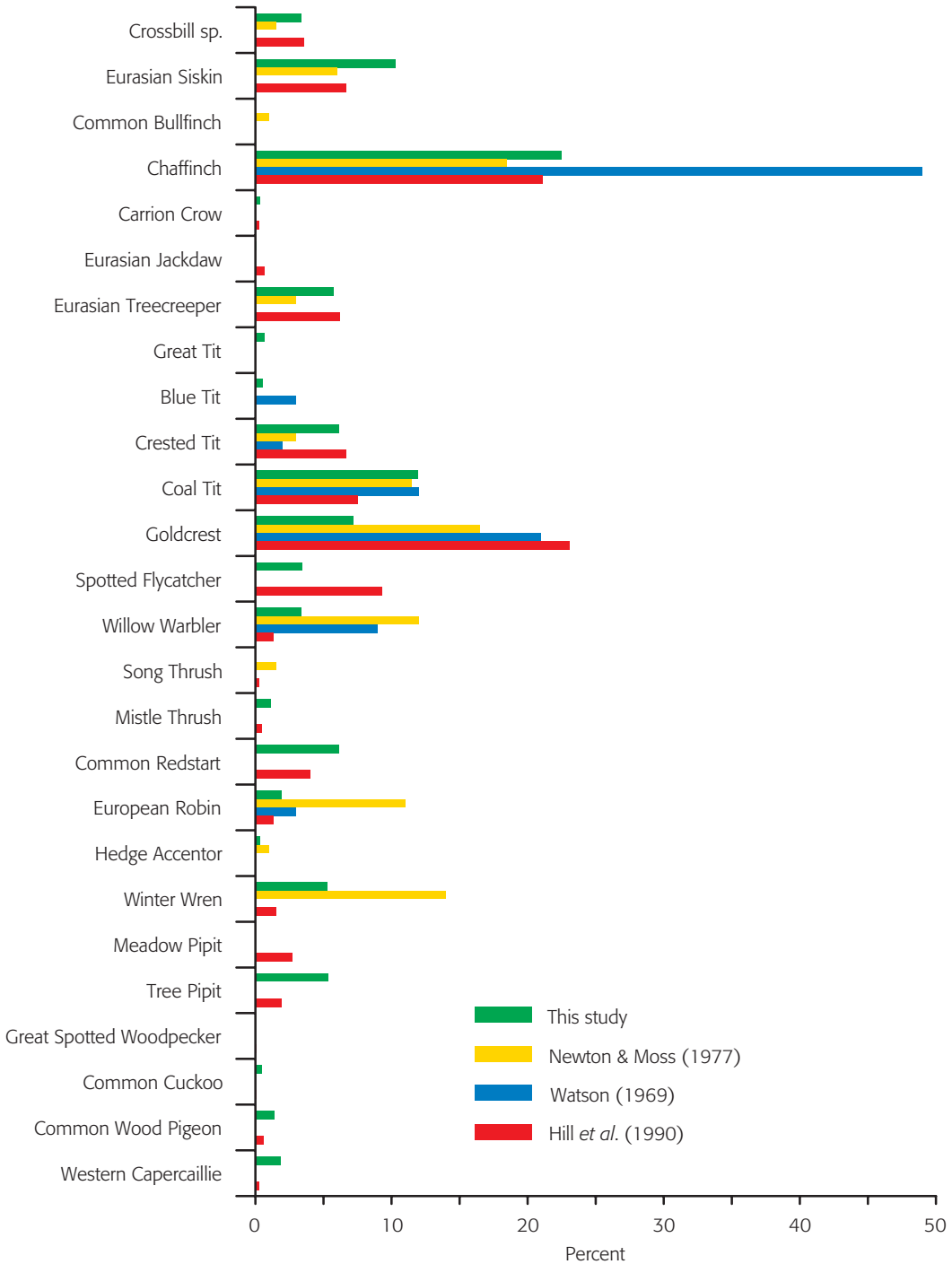


Figure 2. Species composition (percentages) of the breeding bird community in stands of old Scots Pine woodland at Abernethy Forest, as described by Watson (1969), Newton & Moss (1977), Hill et al. (1990) and this study (average percentage for the two sites). Ducks and those species that comprised 0.1% of the birds in our study (Eurasian Woodcock, Tawny Owl, Common Blackbird, Wood Warbler and European Greenfinch) are not included.

Results

Twenty-nine species were recorded, of which seven were non-passerines. At both sites, the species with highest average density were Chaffinch, Coal Tit and Eurasian Siskin (Table 1, Figure 2). Those species that were moderately abundant included the Eurasian Treecreeper, Winter Wren, Goldcrest, Tree Pipit and Common Redstart. Several species had zero counts in some years, reflecting the small plots sizes as well as annual variation. The number of Crested Tit nests found was either the same as the estimated number of territories, or smaller. Given that it was difficult to find all nests, the comparison suggests reasonable accuracy in the mapping of territories (Table 2). The overall average density of breeding birds was 369 pairs and individuals (equivalent to 730 individuals) per km² for compartment 13 (351 pairs of passerines) and 325 pairs and individuals (equivalent to 644 individuals) per km² for compartment 7 (312 pairs of passerines).

The only species that showed significant trends in numbers in both compartments was the Tree Pipit (increases at both sites) (Figure 3). However, there was a significant decline in one compartment and a strong indication of decline in the other for the Western Capercaillie, Eurasian Treecreeper and Crested Tit (Figure 3).

There was a particularly cold winter in 1981/82, with 20 frost days. The median for all years was eight frost days. No Winter Wrens were present in either compartment in the spring and summer that followed the winter of 1981/82, but they were as numerous in the following year as they had

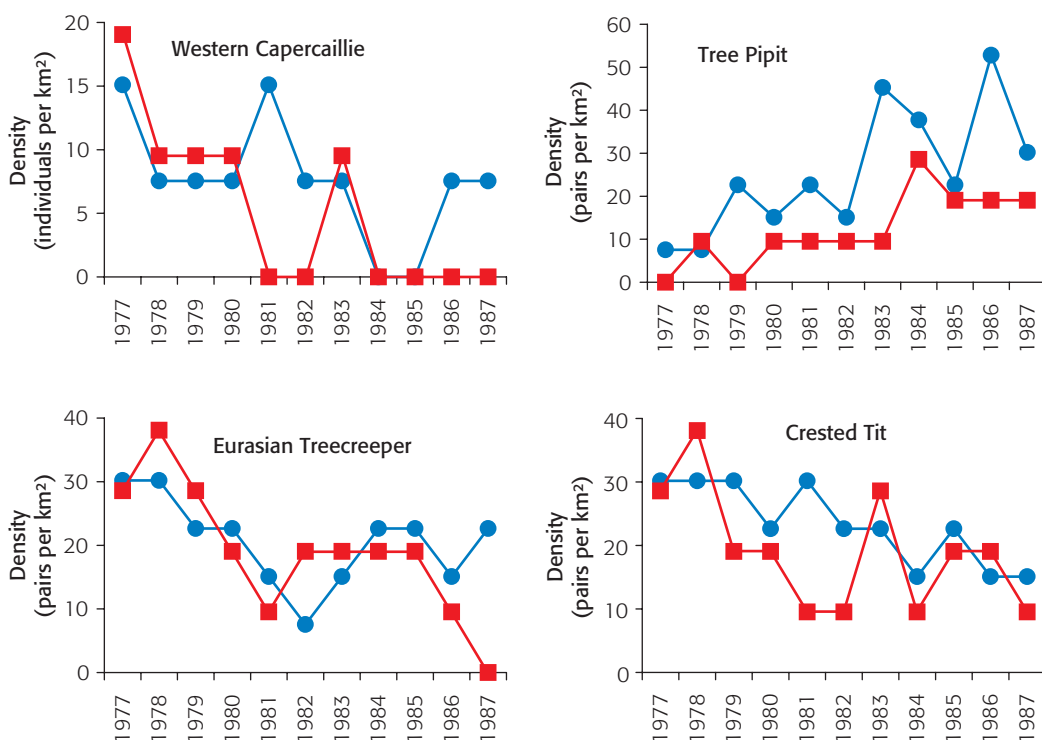
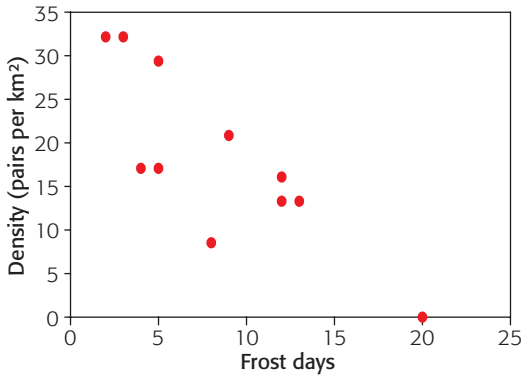


Figure 3. Trends in the densities (number of individuals or pairs per km²) of Western Capercaillies (Spearman rank correlation coefficients of -0.52 and -0.79 for compartments 13 (●) and 7 (■) respectively), Tree Pipits (0.79 and 0.85), Eurasian Treecreepers (-0.46 and -0.80) and Crested Tits (-0.87 and -0.52) at Abernethy Forest. Correlation coefficients over 0.62 or less than -0.62 are statistically significant.

been prior to the cold winter. There was a significant negative relationship between Winter Wren numbers and the number of frost days during the previous December, January and February (Figure 4). In the autoregressive analysis, the significant negative relationship between Winter Wren numbers and the number of frost days remained ($P = 0.006$), confirming this relationship. There were also negative relationships between numbers of pairs and frost days for Coal Tit, Chaffinch, Goldcrest, Eurasian Treecreeper and Crested Tit, but only the relationship for Goldcrest came close to being statistically significant.



Discussion

The species composition of breeding birds at Abernethy Forest in our study was similar to other studies, although the order of species abundance varied (Figure 2). Watson (1969) reported Chaffinch and Goldcrest the most abundant, with Coal Tit and Willow Warbler next. Newton & Moss (1977) found Chaffinch, Goldcrest and Winter Wren the most common, with Coal Tit, European Robin and Willow Warbler the next abundant. Similarly, Hill *et al.* (1990) observed Goldcrest and Chaffinch as most abundant, with Spotted Flycatcher, Coal Tit, Crested Tit and Eurasian Siskin next. Thus, the main difference between our study and others was that Goldcrests were more abundant relative to other species in the other studies.

Figure 4. The relationship between density of pairs of Winter Wrens (averages of both compartments) and the number of frost days in the previous December, January and February. The Pearson correlation coefficient was -0.82 ($P = 0.002$).



Plate 258. Chaffinch, Glen Affric, Highland, March 2009 © Ron Summers.

Several methods have been used to find densities of birds in pinewoods, each with possible biases (Bibby *et al.* 1992). The Common Bird Census relies on the skill of interpreting mapped positions of birds over several visits to define territories. There is also the problem of counting territories that fall only partly in the defined study area. Usually, they receive a half score. The similarity of the estimated number of territories of Crested Tits and nests found in some years indicates reasonably accurate mapping, for this species at least. Point counts require accurate assessment of distances that birds occur from the sample point. This can be difficult when a bird is heard and not seen. For transect surveys, conspicuous species are probably more likely to be noticed (Watson 1969).

In terms of the overall density of breeding birds, our values of 369 and 325 pairs and individuals per km² (equivalent to 730 and 644 individuals per km²) (Table 1) were smaller than those of Watson (1969) who reported an equivalent of 1650–1825 individuals per km² (c. 870 pairs per km²) but similar to Newton & Moss (1977) and Moss (1978a) who estimated 385 and 471 pairs per km² (equivalent to 770 and 942 individuals per km²). Differences could be due to variation in the vegetation structure of the different stands (e.g. amount of Juniper *Juniperus communis*), as well as random variation. By contrast, the density obtained by Hill *et al.* (1990) was very much larger, at 2990 individuals per km². This study was based on point counts (a novel method at the time), and there may have been errors in assigning birds to distance bands (A. Amphlett pers. comm.).

In comparison with other semi-natural pinewoods in Scotland, Yapp (1962) found that the Chaffinch was the most numerous, followed closely by the Willow Warbler at Rothiemurchus and Glen More. By contrast, in Wester Ross, Williamson (1969) reported the Willow Warbler and Winter Wren were the most abundant. The densities in Wester Ross were 217 and 444 pairs per km², respectively (Williamson 1969), below and above the values in our study.

In comparison with Scots Pine plantations in Scotland, there is little information. At three mature Scots Pine, Norway Spruce *Picea abies* and Larch *Larix decidua* woods (Morven, Glen Ey and Corndavon) and a mixed species pinewood (Culbin), Watson (1969) found that the Chaffinch was the most abundant at three of the woods, and Goldcrest the most abundant at Corndavon. Coal Tit, European Robin and Crested Tit (at Culbin) were the next most abundant. Moss (1978a) counted birds in a Scots Pine plantation at Abernethy Forest (Figure 1). The species composition was similar to the native pinewood in Abernethy. Chaffinch, Goldcrest and Coal Tit were the most abundant, but the density was lower, at 151 and 215 pairs per km² (Moss 1978a). Further work is needed to see if low densities are typical of plantations.

The decline in numbers of Western Capercaillies reflects a general decline throughout Scotland, starting from the 1970s (Moss 1994). In addition, it is possible that the declines in compartments 7 and 13 were partly due to increased human disturbance. This part of Abernethy Forest has received increasing numbers of visitors after the RSPB purchase of the reserve in 1975 by those who wished to view breeding Ospreys *Pandion haliaetus*. There is evidence that Western Capercaillies avoid woodland close to tracks used by people (Summers *et al.* 2007).

There were also indications of declines in numbers of Eurasian Treecreepers and Crested Tits (Figure 3). Neither has been known to be the subject of national decline, so these changes may be localised. Likewise, the increase in Tree Pipit numbers (Figure 3) was not part of a national trend. Rather, the Tree Pipit has declined in Britain (Fuller, in Gibbons *et al.* 1993), so it is not clear why there was an increase in these compartments.

The Winter Wren is well known as a species that is adversely affected by cold winters (Cramp 1988), so the absence of Winter Wrens in 1982 after the cold winter of 1981/82 can be explained. There was an indication that other species were also adversely affected by cold winters, but the effect was not as strong as with Winter Wrens.



Plate 259. Coal Tit, Abernethy Forest, Badenoch & Strathspey, May 2006 © Ron Summers.

Our study has shown that numbers of breeding birds vary annually in old-growth pinewood. For example, some species may decline after a cold winter. In addition, the numbers of those species that feed largely on conifer seeds (Eurasian Siskin and crossbills) track the considerable annual fluctuations in the seed crop (Watson *et al.* 2009). Therefore, single season counts may not be representative of the general bird numbers of all species. A minimum of three years is required to cover the variation in Scots Pine cone cropping (Summers & Proctor 2005).

There have been few other studies of breeding bird communities in other Scots Pine woods in Scotland with which to compare with Abernethy. Likewise, there are few studies referring to other commonly planted conifer species, such as Sitka Spruce *Picea sitchensis* (Moss 1978b, Moss *et al.* 1979, Patterson *et al.* 1995). Given the large extent of planted conifers in Scotland, and the high nature conservation value of the semi-natural pinewoods, more effort should be made to assess the composition of their breeding bird communities and the factors that determine the dispersion and numbers of different species.

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Adam Watson, Dorian Moss and Ian Newton provided further information on their surveys and commented on the draft along with Jeremy Wilson.

References

- Anon. 1995. *Biodiversity: the UK Steering Group Report. Vol. 2: Action Plans*. HMSO, London.
- Bailey, R.S. 1967. An index of bird population changes on farmland. *Bird Study* 14: 195–209.
- Bibby, C.J., Burgess, N.D. & Hill, D.A. 1992. *Bird Census Techniques*. Academic Press, London.
- Catt, D.C., Baines, D., Picozzi, N., Moss R. & Summers R.W. 1998. Abundance and distribution of Capercaillie *Tetrao urogallus* in Scotland 1992–1994. *Biological Conservation* 85: 257–267.
- Cramp, S. (ed.) 1988. *The Birds of the Western Palearctic, Vol. 5*. Oxford University Press, Oxford.
- Dunlop, B.M.S. 1988. Native Pinewood Survey - Abernethy Forest SSSI North & South sections.

- Survey report for NCC.
- Eaton, M.A., Marshall, K.B. & Gregory, R.D. 2007. Status of Capercaillie *Tetrao urogallus* in Scotland during winter 2003/04. *Bird Study* 54: 145–153.
- Gibbons, D.W., Reid, J.B. & Chapman, R.A. 1993. *The New Atlas of Breeding Birds in Britain and Ireland: 1988–1991*. T. & A.D. Poyser, London.
- Hill, D., Taylor, S., Thaxton, R., Amphlet, A. & Horn, W. 1990. Breeding bird communities of native pine forest, Scotland. *Bird Study* 37: 133–141.
- McVean, D.N. & Ratcliffe, D.A. 1962. *Plant Communities of the Scottish Highlands*. Nature Conservancy Monographs No. 1. HMSO, London.
- Mason, W.L., Hampson, A., Edwards, C. (eds) 2004. *Managing the Pinewoods of Scotland*. Forestry Commission, Edinburgh.
- Moss, D. 1978a. Song-bird populations in forestry plantations. *Quarterly Journal of Forestry* 75: 5–14.
- Moss, D. 1978b. Diversity of woodland song-bird populations. *Journal of Animal Ecology* 47: 521–527.
- Moss, D., Taylor, P.N. & Easterbee, N. 1979. The effects on song-bird populations of upland afforestation with spruce. *Forestry* 52: 129–150.
- Moss, R. 1994. Decline of Capercaillie (*Tetrao urogallus*) in Scotland. *Gibier Faune Sauvage* 11 (special number): 217–222.
- Newton, I. & Moss, D. 1977. Breeding birds of Scottish pinewoods. In: Bunce, R.G.H. & Jeffers, J.N.R. (eds). *Native Pinewoods of Scotland*. pp 26–34. ITE, Cambridge.
- O'Connor, R.J. & Hicks, R.K. 1980. The influence of weather conditions on the detection of birds during Common Birds Census fieldwork. *Bird Study* 27: 137–151.
- Patterson, I.J., Ollason, J.G. & Doyle, P. 1995. Bird populations in upland spruce plantations in northern Britain. *Forest Ecology and Management* 79: 107–131.
- SAS Institute. 2000. *SAS/STAT Users' Guide, Version 8*. SAS Institute, Cary. (www.sas.com).
- Steven, H.M. & Carlisle, A. 1959. *The Native Pinewoods of Scotland*. Oliver & Boyd, Edinburgh.
- Summers, R.W., Mavor, R.A., Buckland, S.T. & MacLennan, A.M. 1999. Winter population size and habitat selection of Crested Tits *Parus cristatus* in Scotland. *Bird Study* 46: 230–242.
- Summers, R.W., McFarlane, J. & Pearce-Higgins, J.W. 2007. Measuring avoidance by Capercaillies *Tetrao urogallus* of woodland close to tracks. *Wildlife Biology* 13: 19–27.
- Summers, R.W. & Proctor, R. 2005. Timing of shedding seeds and cones, and production in different stands of Scots Pines at Abernethy Forest, Scotland. *Forestry* 78: 541–549.
- Taylor, S.D. & Summers, R.W. 2009. Breeding numbers and stand type preferences of Redstarts *Phoenicurus phoenicurus* and Tree Pipits *Anthus trivialis* in a Scots Pine wood. *Bird Study* 56: 120–126.
- Watson, A. 1969. Preliminary counts of birds in central Highland pine woods. *Bird Study* 16: 158–163.
- Watson, A., Marquiss, M. & Summers, R. 2009. Abundance of crossbills, Siskins and cone-crops. *Ornis Fennica* 86: 38–40.
- Wilkinson, N.I., Langston, R.H.W., Gregory, R.D., Gibbons, D.W. & Marquiss, M. 2002. Capercaillie *Tetrao urogallus* abundance and habitat use in Scotland, in winter 1998–99. *Bird Study* 49: 177–185.
- Williamson, K. 1969. Bird communities in woodland habitats in Wester Ross, Scotland. *Quarterly Journal of Forestry* 63: 305–328.
- Williamson, K. 1970. The Common Birds Census as a device for monitoring population levels. *Bulletin of Ecological Research Communication* 9: 9–13.
- Yapp, W.B. 1962. *Birds and Woods*. Oxford University Press, London.

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Revised ms accepted August 2010



Plate 260. Fledged Wood Nuthatch, Courance, Dumfries and Galloway, July 2009 © Brian D. Henderson.

Notes on Wood Nuthatches breeding in a garden in Dumfries and Galloway

B.D. HENDERSON

I first saw a Wood Nuthatch *Sitta europaea* feeding at the bird table in the garden of Over Courance Lodge on 6 April 2003. The garden borders the northbound lane of the A701 Dumfries to Moffat road and has a variety of ornamental trees, shrubs and mixed borders. The estate at Over Courance has many mature trees including an avenue of 120 Beech trees.

Seven nest boxes were constructed from multi-layer plywood, with a felted lid and a 25 mm diameter entrance hole (Table 1). These were sited in the garden so that they were shaded to avoid overheating in the summer. On 19 April 2003, I was delighted to see a Nuthatch plastering small pellets of mud near the entrance hole by rapid thrusts of the bill.

Table 1. Details of nest boxes at Courance, Dumfries & Galloway, 2003–09.

Box	Tree species	Height (m)	Compass direction that box faces	Distance from road (m)
A	Beech (<i>Fagus sylvatica</i>)	2.45	NNW	4.55
B	Cypress (<i>Chamaecyparis lawsoniana</i>)	3.25	ESE	15.75
C	Laurel (<i>Laurus nobilis</i>)	2.75	WNW	1.50
D	Lime (<i>Tilia platyphyllos</i>)	5.00	N	2.75
E	Scots Pine (<i>Pinus sylvestris</i>)	6.15	N	18.00
F	Horse Chestnut (<i>Aesculus hippocastanum</i>)	7.25	SSW	26.50
G	Beech (<i>Fagus sylvatica</i>)	1.50	WSW	1.25

During the first year (2003) boxes A, B & C were plastered up. Box A had the most extensive plastering. As well as reducing the size of the entrance hole, the inside of the lid (back & front) and the outside of the lid (back) were also plastered. It was noted that the majority of the plastering was undertaken during the latter part of the morning and early afternoon. Boxes B and C were plastered to a lesser extent. Both B and C had the entrance holes reduced whilst C had some plastering to the inner lid. All three entrance hole perches (a small length of ribbed dowel) were whittled down by the female bird. The perch on box A was reduced to almost half of its original length (40 mm to 23 mm). Since 2003, all entrance hole perches on boxes A, B, and C have succumbed to the Nuthatches whittling behaviour and are now non-existent except for box C.

In 2003, box A was lined. None of the others was lined. The primary lining used was Beech leaves (70%) with smaller quantities of oak (5%) and birch (5%). Small pieces of bark (20%) were used, primarily on the floor of the box.

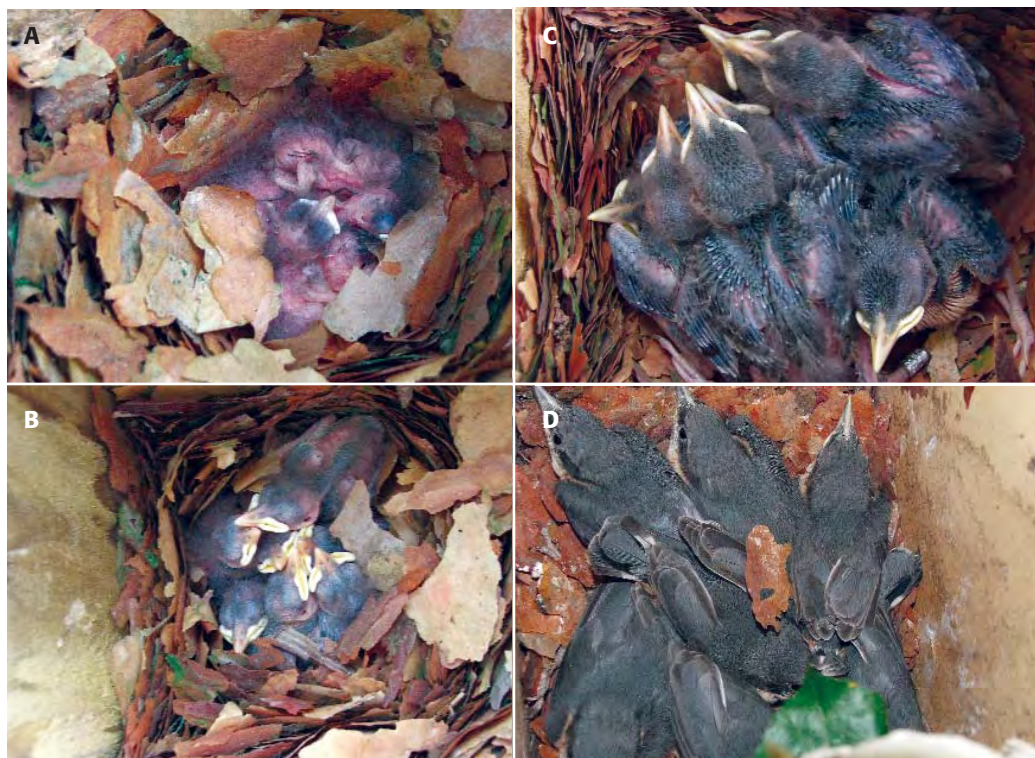


Plate 261 A–D. One-, eight-, 12- and 21-day-old Wood Nuthatch nestlings, Courance, Dumfries and Galloway, May–June 2005 © Brian D. Henderson.

In 2007, box B was lined. The nest material was placed concentrically around a nest cup. This arrangement was always disturbed once the nestlings started moving around. The nest lining comprised similar materials and quantities to that of box A in 2003. Nesting material lining composition for years 2004–06 and 2008–09 was not identified as the female cleaned out the box prior to and between periods of plastering.

Box A has been the preferred box choice, having been used five times over the seven year period. The female alone has always done the plastering (confirmed since the female was ringed in 2005). The number of days spent plastering has been variable.

During one particularly hot spell during 2005 the female Nuthatch ceased plastering and commenced again at a later date after some overnight rain. In between spells of plastering, the female brought lining materials to the nest box. During 2008, box B was lined and an egg laid. Following an overnight storm the lid was dislodged, the female then spent the next few days lining box A. The lid was replaced on box B, the female returned to box B and resumed laying again. All eggs hatched successfully.

Table 2. Key dates and statistics for Wood Nuthatches breeding at Courance, Dumfries & Galloway, 2003–09.

Year	Box	First plastering date	First egg laying date	No. of eggs laid	Incubation period (days)	First hatching date	No. of eggs hatched	Period to fledging (days)	Nest leaving date
2003	A	14 April	3 May	7	16	25 May	7	24	19 June
2004	A	16 April	29 April	6	15	18 May	6	22	12 June
2005	A	9 April	26 April	7	14	17 May	7	24	10 June
2006	A	10 April	20 April	8	14	13 May	7	22	5 June
2007	B	12 April	19 April	8	15	18 May	7	22	10 June
2008	B	7 April	4 May	7	15	28 May	7	26	21 June
2009	A	4 April	26 April	7	14	17 May	7	23	11 June
Mean				7.1	14.7		6.9	23.2	

The female always carried out the incubation. No attempt was made to incubate the eggs until the last of the clutch had been laid. Eggs were laid daily. When the female left the nest, the eggs were always covered by leaf litter. There were no attempts at a second brood. No aberrant coloured eggs or any abnormally sized eggs were found. There were no brood losses due to predation or adverse weather conditions. The two eggs that failed to hatch during 2006 and 2007 were not found after the nestlings had flown the nest. The female may have removed them at some stage.

During incubation the male frequently brought food to the female but did not enter the nest box. Both parent birds fed the youngsters, with the male doing all or most of the feeding during the first 1–4 days after the eggs hatched. Food provisioning rates decreased gradually throughout the day. Both parents often brought several prey items to the box on a feeding visit. The young were fed initially with insects but, nearing fledgling, the adults made frequent visits to the bird feeders and fed peanuts to the young. Up until the fourth or fifth day the parents consumed the faecal sacs. Thereafter they were smeared on branches high in the canopy of nearby mature Beech trees. On no occasion did the adult birds drop the faecal sacs at random.

Shortly after the first egg hatched during 2009 the male Nuthatch went missing - presumed to have been the victim of predation. No body was found despite an extensive search of the surrounding area. The female successfully fledged all seven chicks herself. It was noted that during this demanding period, frequent visits were made to the artificial food source situated nearby. No attempt was made to sex the nestling Nuthatches. Since 2005, 35 nestlings have been ringed, but to date there have been no ringing recoveries.

Table 3. Fledging timescale for Wood Nuthatches breeding at Courance, Dumfries & Galloway, 2003–09.

Year	Number of fledglings	Number of fledglings leaving nest box on day 1		Number of fledglings leaving nest box on day 2		Time period taken for all fledglings to leave the nest box
		am	pm	am	pm	
2003	7		7			1.30 pm–7.15 pm
2004	6		3	3		7.00 pm–6.45 am
2005	7		5	2		6.15 pm–9.15 am
2006	7		4	3		8.00 pm–6.30 am
2007	7	5	2			8.45 am–2.00 pm
2008	7		5	2		7.30 pm–7.15 am
2009	7	4	3			11.15 am–13.00 pm

The shortest time taken for all the fledglings to leave a nest box was just under two hours in 2009 (Table 3). In other years the fledglings were observed leaving their box over two days. The first bird was seen leaving in the late afternoon or early evening and was then followed by at least one sibling early the next morning. After fledging had taken place, all the youngsters were observed sitting high in the canopy, begging to be fed for the first day or two. Thereafter they were seen roaming over a much larger area and then they disappeared from the natal territory. Each year after a further seven to ten days they returned to their natal area then disappeared again. On their return it was noted that the brood sizes were always somewhat smaller suggesting that some juvenile mortality had occurred.

During the first two years after the Nuthatches had plastered up all the boxes no attempts were made by other species to use the vacant boxes. It has been suggested (Bussmann 1946) that Eurasian Nuthatches use some sort of resinous substances as a deterrent when plastering up boxes. I did on one occasion break up some hard plaster and found traces of unidentified invertebrate remains, perhaps beetle wing cases, mixed through it.

These observations on Nuthatch breeding behaviour, in particular that of the role of the female, are in accord with what has been recorded in England (Cramp & Perrins 1993). All laying dates, incubation and fledging times were within the ranges quoted.

The whittling behaviour may have been done to make it more difficult for rivals and predators to enter the box. I have been unable to find any reference to this behaviour elsewhere. Nor have I found any reference to nest box abandonment and subsequent return to commence breeding.

Acknowledgement

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References

- Bussman, J. 1946. Beitrag zur Kenntnis der Brutbiologie des Kleibers, *Sitta europaea caesia*. *Der Ornithologische Beobachter* 43: 1–5.
- Cramp, S. & Perrins, C.M. 1993. *The Birds of the Western Palearctic*. Vol. VII: *Flycatchers to Shrikes*, p. 307. Oxford University Press, Oxford.

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The status and distribution of the Lesser Whitethroat in Clyde and Ayrshire from 1983 to 2005

T. BYARS

The distribution and status of the Lesser Whitethroat breeding population in the Clyde and Ayrshire recording areas was studied over a 23-year period from 1983 to 2005. Twenty-nine occupied sites were located with an annual mean of 8.5 territories from a range of 3–16. Suitable breeding habitat formed distinct scrub islands. Habitat sites were described as long-term occupancy (LTO), holding breeding territories over five seasons or more, or short-term occupancy (STO), where territories lasted 1–3 seasons only. 76% of the breeding territories were confined to just 10 LTO habitat sites within the region. LTO sites contained on average 3.16 ha of suitable habitat compared with 0.83 ha for STO sites. LTO sites seem to sustain long-term breeding populations through habitat longevity and choice of territorial location. Population declines in STO sites were attributed to natural succession which altered plant species composition and vegetation structure. Twelve newly occupied habitat sites were discovered, indicating Lesser Whitethroat expansion into new sites since 1983–90. A localised spring influx into Renfrewshire occurred in 1996 and another influx in Ayrshire during 2002 resulted in a large increase in the number of breeding territories recorded in core and peripheral sites. The small breeding population in Lanarkshire remained stable during the study period. Proactive management plans have been initiated to try to safeguard Lesser Whitethroat breeding habitats.

Introduction

The Lesser Whitethroat *Sylvia curruca* breeding population in the Clyde and Ayrshire recording areas has been monitored every year since 1983 during a period when the species was undergoing range expansion throughout southern Scotland (Byars *et al.* 1991). We have previously suggested that, if the Clyde/Ayrshire breeding population was to increase in numbers, then the species would have to colonise marginal habitats, as prime areas of suitable breeding habitat are very scarce (Byars *et al.* 1991). By checking all habitat sites previously mapped during the last survey from 1983 to 1990, we could establish if that has happened. This paper summarizes the frequency and distribution of all occupied territories within Clyde and Ayrshire during 1983–2005.



Plate 262. Portrait of a male Lesser Whitethroat ringed at the Heads of Ayr, Ayrshire, May 2005 © Tom Byars.

Study areas

The study area covers the three council areas of Ayrshire (East Ayrshire, North Ayrshire and South Ayrshire) and most of the Clyde recording area (East Dunbartonshire, North Lanarkshire, East Renfrewshire, Inverclyde and Renfrewshire) (Figure 1). Previous survey work had identified 10 core breeding sites. A core site indicates regular occupancy of two or more territories within the habitat island over a five-year period and proved



Plate 263. Renfrewshire's answer to chalk downland scrub. Brownside Braes, a major breeding site for Lesser Whitethroats in Renfrewshire, Clyde. Note the extensive amount of open Hawthorn scrub, May 1996 © Tom Byars.

breeding on at least two occasions. Single territories outside the core sites were also monitored during the breeding season. In the study area, Lesser Whitethroat breeding habitat consists of open areas of mature Hawthorn *Crataegus monogyna* and/or Blackthorn *Prunus spinosa* scrub with a dense understorey of bramble *Rubus* sp, Gorse *Ulex europaeus*, Dog Rose *Rosa canina* and willow *Salix* sp. These scrubby areas usually formed habitat islands which were surrounded by pastoral farmland.

Methods

As the study area covers such a large area, searching for suitable habitat was conducted during a 30–35 day period between May and June annually over the past 23 years. All areas of suitable breeding habitat, which had been identified during previous survey work, were annually checked for occupancy. New territories discovered in the 15 years following the last survey in 1983–90 or identified from local bird reports or reported by other observers, were also annually checked for occupancy. All breeding territories identified that year were then checked every 1–2 days during that 30–35 day period.

In the study area, male Lesser Whitethroats normally return to their breeding territories during the last week in April through to the first fortnight of May. Some Lesser Whitethroats can be easily located by song as they patrol along territorial boundaries, vociferously singing from the scrub canopy (Byars *et al.* 1991). Evidence of occupied territories was defined by the presence of a singing male holding territory within suitable breeding habitat site over three or more consecutive days. Some passage Lesser Whitethroats sing for several days in sites which contain unsuitable breeding habitat and so were excluded from this survey as they usually remained unmated and eventually moved on. Lesser Whitethroats have an extremely short song period compared to other *Sylvia*

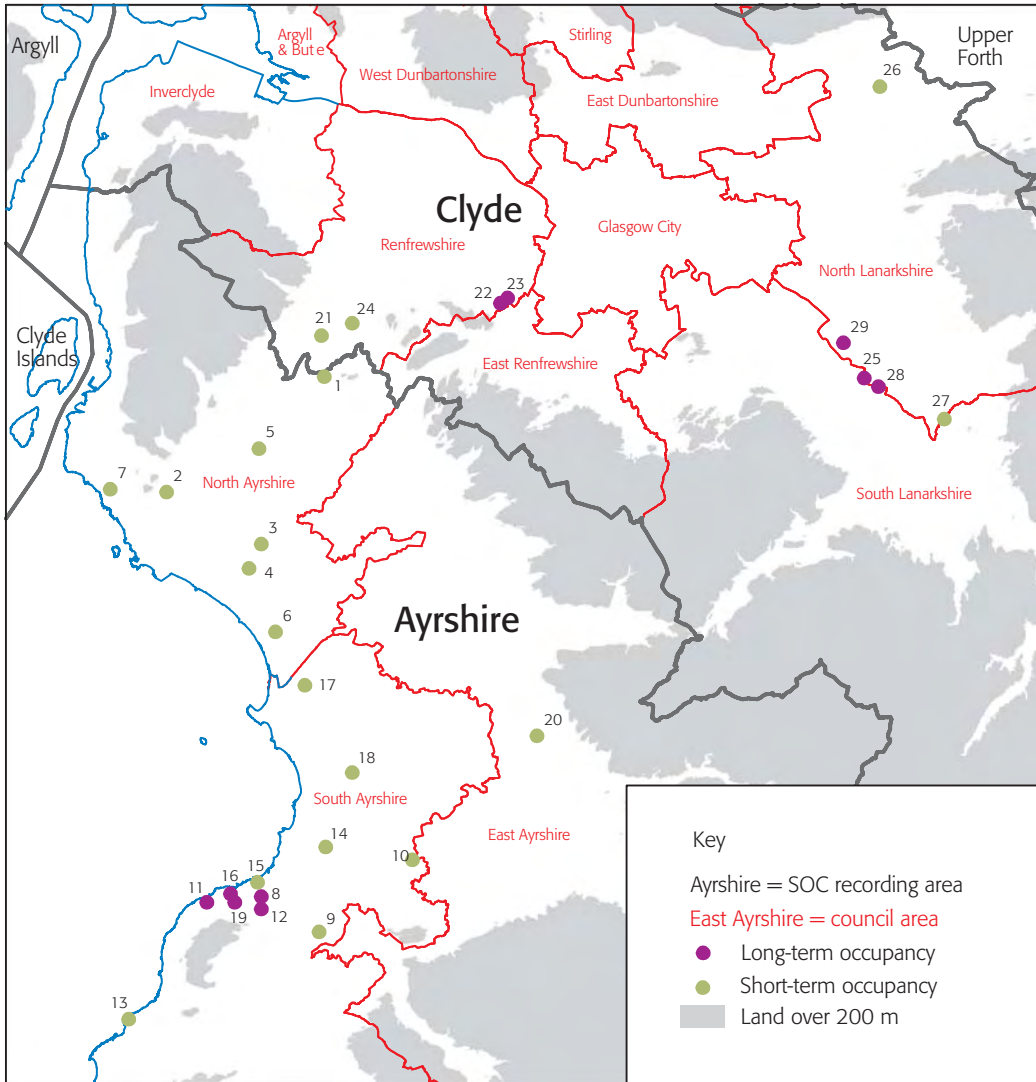


Figure 1. Location of all habitat sites of Lesser Whitethroat in the Clyde and Ayrshire recording areas in 1983–2005.

species and some individual breeding males have ceased singing within four days of arrival (pers. obs.). This short song period is linked with the arrival date of females into the territory and successful pair bond initiation (Byars & Curtis 1998). The appearance of females into the territory can result in distinctive behaviour. Males become very active when wandering females first appear, chasing and harassing them with bouts of close proximity display (pers. obs.). In every year during the 1983–2005 survey period, all known territories and habitat sites in Clyde and Ayrshire were checked for singing males between late April and early May. Not all territorial males sing however and in order to confirm total number of territories from any given site, a tape lure was played for ten minutes to elicit a response. Studies in Denmark have shown that males stop singing once females appear fertile, thereby reducing the threat of being cuckolded by other males (Klit 1999). Areas of suitable breeding habitat (habitat islands) were estimated in hectares (Table 1) and occupied territories were then mapped using previous methodology (Byars *et al.* 1998).

Nests were located in 58% of the habitat sites. Intensive mist-netting was also conducted at some sites and 11 birds were individually colour-ringed between 1996 and 2005 to study site fidelity and territoriality. Studies in Lincolnshire revealed that CBC census counts did not account for all singing males as numbers of breeding males caught by mist-netting far exceeded the singing totals (Boddy 1994). Repeat visits to all territories during June were made to determine breeding success which was defined by the presence of young in the nest, or hearing the contact call given by food carrying adults approaching the nest, or locating recently fledged young in noisy family parties (Byars *et al.* 1998).

Results

Occupied territories

All occupied territories in Clyde and Ayrshire from 1983 to 2005 are listed in Table 1.

Table 1. List of all habitat sites of Lesser Whitethroat in the Clyde and Ayrshire recording areas, with details of occupied territories.

County: Site number/Site (see Figure 1)	Grid reference	Altitude (m)	Habitat area (ha)	Number of years of recorded occupancy	Long- or short-term occupancy
NORTH AYRSHIRE					
1 Bigholm	NS 361 552	95	0.18	1	STO
2 Coal Hill	NS 248 470	140	1.68	2	STO
3 Eglinton Country Park	NS 316 433	25	0.15	1	STO
4 Garnock Floods	NS 307 416	2	0.54	2	STO
5 Kerslochmuir	NS 314 501	85	0.68	2	STO
6 Shewalton Pits	NS 326 371	10	0.13	3	STO
7 Tarbert Hill	NS 208 472	85	1.87	2	STO
SOUTH AYRSHIRE					
8 Alloway	NS 316 183	30	2.49	7	LTO
9 Balsarroch	NS 357 158	90	0.77	1	STO
10 Barquhey	NS 424 209	60	0.60	3	STO
11 Bracken Bay	NS 277 179	61	0.72	9	LTO
12 Burton Farm	NS 316 174	80	0.43	5	LTO
13 Culzean Country Park	NS 221 096	25	0.13	1	STO
14 Dalmillig golf course	NS 362 218	15	0.19	1	STO
15 Greenan	NS 313 193	10	0.19	2	STO
16 Heads of Ayr	NS 294 185	15	5.07	23	LTO
17 Hillhouse Quarry	NS 347 333	50	2.44	2	STO
18 Ladykirk	NS 381 271	30	1.63	1	STO
19 Laigh Kyleston	NS 297 179	55	0.68	5	LTO
EAST AYRSHIRE					
20 Auchmillan	NS 513 297	140	0.60	1	STO
RENFREWSHIRE					
21 Aird Meadow	NS 359 581	30	0.19	1	STO
22 Brownsie Braes	NS 487 604	90	12.18	13	LTO
23 Dykebar	NS 492 608	50	2.10	9	LTO
24 Gavin Braes	NS 381 590	65	2.52	1	STO
NORTH LANARKSHIRE					
25 Baron's Haugh	NS 747 551	27	1.34	13	LTO
26 Carrickstone	NS 758 758	110	1.02	3	STO
27 Garrion Gill	NS 804 522	105	0.39	1	STO
28 Merryton	NS 757 545	25	1.25	5	LTO
29 Strathclyde Country Park	NS 732 576	40	5.37	8	LTO

North Ayrshire

1. *Bigholm*. Close to the Renfrewshire border, this new habitat site lies 1 km north-east of Beith. The sloped site is predominately mature Blackthorn scrub, interspersed with a few mature Hawthorns and a dense bramble, Gorse and Dog Rose understorey. A single territory was located in 1996 during the spring influx into Renfrewshire.

2. *Coal Hill*. Located 3 km north of Ardrossan on a steep east-facing hill slope, this new habitat site was originally kept as a fox covert. An extensive area of Blackthorn/Hawthorn scrub contains a mixed understorey of bramble, privet *Ligustrum* sp., Dog Rose and Gorse. This site had a breeding pair which fledged two young in 2003. Two territories were recorded in 2004.

3. *Eglington Country Park*. This site is on the north-west boundary of Eglington Country Park, south-east of Kilwinning and is situated on a raised coal shale spoil heap. The site is covered in mature Hawthorn scrub with a sparse understorey of bramble and Dog Rose. One territory was found in 1984. Deciduous trees have rapidly colonised this site and completely dominate the vegetation profile.

4. *Garnock Floods SWT*. A new site located on the eastern edge of the SWT reserve, 1 km south of Kilwinning, this small linear shaped area of dense Hawthorn/Blackthorn has a dense understorey of bramble, Gorse and Dog Rose scrub. Single territories were recorded during 1999 and 2000.

5. *Kerslochmuir*. A new site located in a coal shale spoil heap, 2 km east of Dalry, this is an extensive area of mature Hawthorn scrub with a dense understorey of bramble, Dog Rose and Gorse. One territory was recorded in 2002 and 2003.

6. *Shewalton Pits NR*. An SWT reserve just south of Irvine, this habitat site contains a very small area of sparse Hawthorn scrub, with small open pockets of Gorse, Dog Rose, Common Broom *Cytisus scoparius* and willow. Single territories were located in 1988, 1989 and 1992.

7. *Tarbert Hill*. A new site located at the southern end of West Kilbride, Tarbert Hill has dense extensive Hawthorn/Blackthorn scrub with a dense understorey of mature Gorse, bramble and Dog Rose on the steep west-facing slope. One territory was held in 2002 but two pairs bred successfully in 2003.

South Ayrshire

8. *Alloway*. Located on a section of the disused railway track west of Alloway, Ayr. This is a small open area of regenerating Hawthorn scrub, with a sparse bramble understorey. Lesser Whitethroats first appeared here in 1983 with two territories being recorded and then single territories in 1986, 1987, 1988, 1989, 1991 and 1992. Breeding was confirmed in 1987 and 1991. The last territory to be recorded here was in 1992.

9. *Balsarroch*. This new site lies 1 km north of Dalrymple. A linear shaped habitat site on two railway embankments with widely spaced mature Hawthorns and a dense understorey of Gorse and bramble. A pair was seen food carrying at this site in 1993.

10. *Barquhey*. This small habitat site is situated 2 km north-east of Coylton and has a small patch of mature Hawthorn scrub, with a very sparse understorey of bramble. One territory was located in 1984, 1985 and 1986

11. *Bracken Bay*. This coastal site is located on the scrub covered disused railway embankments east of Bracken Bay just west from the Heads of Ayr. Mature open Hawthorn/Blackthorn scrub, with a dense understorey of Gorse, bramble and Dog Rose. Single territories were recorded in 1986, 1989, 1994, 1995, 1996, 2000, 2001, 2002 and two territories in 2004. Breeding may have taken place in 1989.

12. *Burton Farm*. Situated 2 km east of Heads of Ayr and 500 m south from Burton Farm, this habitat site is situated on a north-facing slope. A small area of regenerating Hawthorn/willow scrub, it has an understorey of dense bramble, Gorse and Dog Rose. Unfortunately willow is starting to totally dominate this site quite rapidly. A single territory was recorded in 1989 and 1992. In 1993 and 1995, a pair bred and fledged three young. An adult was seen food carrying in 2005.

13. *Culzean Country Park*. This new habitat site has a tiny scrap of dense Blackthorn scrub, close to the coastal path in the south-west corner of Culzean Country Park. A territory was found here in 1995.

14. *Dalmling golf course*. Situated within the golf course, east of Ayr, this habitat site has a small area of mature Hawthorn scrub with a dense understorey of bramble, Dog Rose and Gorse. A pair bred in 1986, rearing three young.

15. *Greenan*. This habitat site is right on the beach, east side of Greenan castle, south of Ayr. Although a regular haunt for Lesser Whitethroats during spring passage, a few males do linger on and hold territory. This coastal site has a small linear patch of Blackthorn scrub with bramble and a few mature Hawthorns at the west end. Single territories were noted during 1990 and 2002.

16. *Heads of Ayr*. Situated on a coastal headland, 4 km south-west of Ayr, this core site is the only place in Ayrshire, which has annually held Lesser Whitethroat territories since 1983. Fledged young have been recorded from 1984–87, 1989–95, 1997 and 2000–03. The Heads of Ayr also holds the most extensive amount of suitable breeding habitat in the county, amounting to 5.07 ha in extent. On average, 2–3 territories are normally located in the 2.44 ha of Blackthorn found in the south-east corner of the study site during most years. During the influx of 2002, a minimum of six territories were located in open mature Hawthorn scrub with a dense mosaic of bramble, Dog Rose and Gorse understorey

17. *Hillhouse Quarry*. Located just 2 km west from Dundonald, this new site is located on the southern edge of Hillhouse Quarry. The habitat consists of dense Gorse with a few mature Hawthorns. In 1996, a pair bred and fledged three young. One territory was located there in 2002.

18. *Ladykirk*. Situated on the east side of Prestwick Airport, this new site is in a small area of mature Hawthorn scrub with a dense understorey of Gorse, bramble and Dog Rose. A pair was reported feeding a juvenile in 1999.

19. *Laigh Kyleston quarry*. This new site is close to the Heads of Ayr, located in a small disused quarry opposite Laigh Kyleston Farm. The site is overgrown with mature Hawthorn and has a dense understorey of Gorse, bramble and Dog Rose. Single territories were recorded in 1992, 1996, 2002, 2003 and 2004.

East Ayrshire

20. *Auchmillan*. An inland site which is situated 3 km north-east of Mauchline. This small habitat site has dense Hawthorn and a sparse understorey of bramble, Dog Rose and Gorse. A pair bred here in 1984.

Renfrewshire

21. *Aird Meadow RSPB*. A very small area of open Hawthorn scrub near the RSPB visitor centre at Lochwinnoch held a territory in 1990.



Plate 264. Lesser Whitethroat breeding habitat at Dykebar, Paisley, Clyde, note the amount of emerging young willow scrub, June 1986 © Tom Byars.



Plate 265. Same site photographed in June 2005. Note how the willow and birch canopy dramatically transforms the vegetation profile of this core site © Tom Byars.

22. *Brownside Braes*. This major site for breeding Lesser Whitethroats in Renfrewshire is located south of Paisley on the north-facing slopes of Brownside Braes. The extensive area of mature Hawthorn scrub with a dense mosaic understorey of bramble, Dog Rose and Gorse is 12.18 ha in extent. A pair was first recorded here in 1985 and one territory was held in 1987. A pair bred in 1988 and a pair was again present in 1989. One territory was located in 1991, 1993 and 1995. Three territories were located in 1996 (spring influx) with one pair raising four young. In 1997 there were again three territories, with one pair raising two young. Two territories were located in 1998 and three in 1999. One territory was found in 2002 and 2003.

23. *Dykebar*. The other core site in Renfrewshire is found just north from Brownside Braes on two sections of disused railway track close to the B774 road, south of Paisley. The railway embankments are overgrown with Hawthorn scrub and have a dense understorey of bramble, Dog Rose and Gorse. Two territories were first found here in 1983 and again in 1984. One territory was located in 1985. Breeding was confirmed in 1986 when a pair was seen feeding one fledgling. One pair was located in 1987 and a pair fledged four young in 1988. One pair fledged two young in 1989. A pair attempted to nest in 1995 but failed due to the nest tipping over. Two territories were last located in 1996 during the spring influx into Renfrewshire.

24. *Gavin Braes*. This new site is situated 2 km south-west from Howwood and is on a north-west facing hill slope covered in extensive Hawthorn/Blackthorn scrub with a good understorey of Gorse, bramble and Dog Rose. One territory was located in 1996, the year of the spring influx into Renfrewshire.

North Lanarkshire

25. *Baron's Haugh RSPB*. This habitat site is located in the RSPB reserve, which is 2 km south-east of Motherwell. The raised embankment at Baron's Haugh contains mature Hawthorn scrub with a dense understorey of bramble, Dog Rose, Gorse and broom. One territory was first located here in 1987 and then again in 1988. Single territories were found in 1995 and 1996. Breeding was first proved in 1997, when one pair raised three young. One pair fledged two young in 1998. Two territories were recorded in 1999 and 2000. One territory was noted in 2001. One pair bred and fledged young in 2002, 2003 and 2004. A single territory was recorded in 2005.

26. *Carrickstone*. Located close to the A80, north of Cumbernauld. This new site is located on a south-east facing hill slope covered in dense mature Hawthorn scrub with a sparse understorey of bramble, Dog Rose and Gorse. One pair bred and fledged three young in 1991. Two pairs bred and fledged young were seen in 1992. Two territories were recorded in 1993, with a pair seen nest building.

27. *Garrion Gill SWT*. Garrion Gill is found 3 km south of Wishaw. The habitat site is a small area of sparse Hawthorn scrub located on a steep valley of the SWT reserve. One territory was recorded in 1990.

28. *Merryton*. This habitat site is located 1 km east of Baron's Haugh. It has a small area of mature Hawthorn scrub, with a sparse understorey of bramble, Dog Rose and Gorse. Breeding was first noted in 1990, as one bird was seen carrying food. One territory was located in 1996. One pair was found in 1998 but with no evidence of breeding. A pair bred in 2004 and a pair fledged two young in 2005.

29. *Strathclyde Park*. Situated on the north-east side of Strathclyde Loch, this habitat site contains an extensive amount of mature Hawthorn scrub with a dense understorey of bramble, Dog Rose and Gorse. One territory was first recorded in 1987 with a pair seen. One territory was noted in 1988 and a pair recorded in 1992. Two territories were noted in 1997 and one pair raised two young. Three pairs were recorded in 1998. A pair nested unsuccessfully in 1999, the male of which was originally ringed in 1997, retrapped in 1998 and 1999. One territory was noted in 2000 and two recently fledged juveniles were trapped in 2001, indicating breeding must have taken place.

Discussion

A total of 29 habitat sites (20 in Ayrshire and 9 in Clyde) were discovered in the study area, 12 of which were new additions since the last survey in 1983–90. Lesser Whitethroats do appear to be expanding into new sites. These studies have shown that habitat sites can be divided into two distinct categories: short-term occupancy (STO) and long-term occupancy (LTO).

Short-term occupancy

Most habitat sites ($n=19$) were short-term sites, where Lesser Whitethroats held territories for 1–3 seasons only, probably with the same territorial male, judging from the territorial boundaries we mapped. Male Lesser Whitethroats exhibit strong site fidelity. Ringing studies in north-east England have shown that site occupancy is largely linked to the return of the previous year's breeding males. (Norman 1992). Another important factor appears to be the amount of suitable breeding habitat within a site. The 19 short-term occupancy sites had an average of only 0.83 ha of breeding habitat, ($sd = 0.78$, range 0.13–2.52 ha). Small pockets of quality breeding habitat are prone to rapid changes in vegetation structure, density and natural succession. Such changes could result in the loss of suitable habitat relatively quickly. The vegetation structure of some old sites such as Barquhey, Dalmilling, Eglington and Shewalton Pits has visibly altered quite dramatically over a short period of time.

Long-term occupancy

Long-term sites, which maintained breeding territories for five seasons or more, were located in areas where the quality and area of breeding habitat was far greater. These 10 sites had 3.16 ha of breeding habitat on average, ($sd = 3.43$, range 0.43–12.18 ha) but, they also ensured habitat longevity in two ways. Sites such as Brownside Braes and Strathclyde Park have large areas of emergent Hawthorn scrub around the periphery and so provide more succession levels over a longer timescale. Colour-ringed birds at Brownside Braes in 1996 and 1997 held territories in different locations during 1999, suggesting that large sites can offer

Lesser Whitethroats a wider choice of territories. Coastal sites such as the Heads of Ayr and Bracken Bay also contain extensive banks of Blackthorn which provide additional habitat. These sites are less prone to natural succession by other plant species which could alter the habitat composition and structure through time. There has been, however, a notable decline in territories recorded in the Renfrewshire core sites, particularly in Dykebar, where the last recorded territory was in 1996. The breeding habitat was confined to two disused railway embankments, where the scrub had no scope for new growth around the periphery. Fence removal by the farmer allowed cattle access into one of the embankments and grazing has denuded the understorey. In the study area, it seems a dense mosaic of scrub at the 0–1 metre level is an important nesting requirement for Lesser Whitethroats (Byars *et al.* 1991). At the other embankment, colonisation by willow and birch has altered the understorey with the loss of bramble, Dog Rose and Gorse, rendering it unsuitable for Lesser Whitethroats. In North Lanarkshire, territories were last recorded at Strathclyde Park in 2001 and 2005 at Baron’s Haugh and Merryton. The longevity of tenure is quite remarkable at Baron’s Haugh, considering the limited amount of available breeding habitat. Although comparable in size and shape to Dykebar, the quality of habitat at Baron’s Haugh has not suffered the degradation encountered there.

Between 1983 and 2005, Lesser Whitethroats have been recorded at 29 habitat sites. The number of territories ranged from three territories in 1994 (a poor breeding season in Scotland; Murray 1996) to 16 in 2002 (Figure 2) giving an annual average of 8.5 territories. The number of territories in Clyde and Ayrshire can be boosted by localised spring influxes. In 1996, an influx occurred in Renfrewshire which more than doubled the number of breeding territories there. During 2002, there was an extremely localised influx into Ayrshire. The Heads of Ayr, which normally supports 1–3 territories, had six that year, suggesting this site could potentially hold many more territories than previously thought. It is interesting to note that numbers of Lesser Whitethroat territories remain relatively high in subsequent years following an influx in a particular area, possibly due to the same territorial males returning. This was

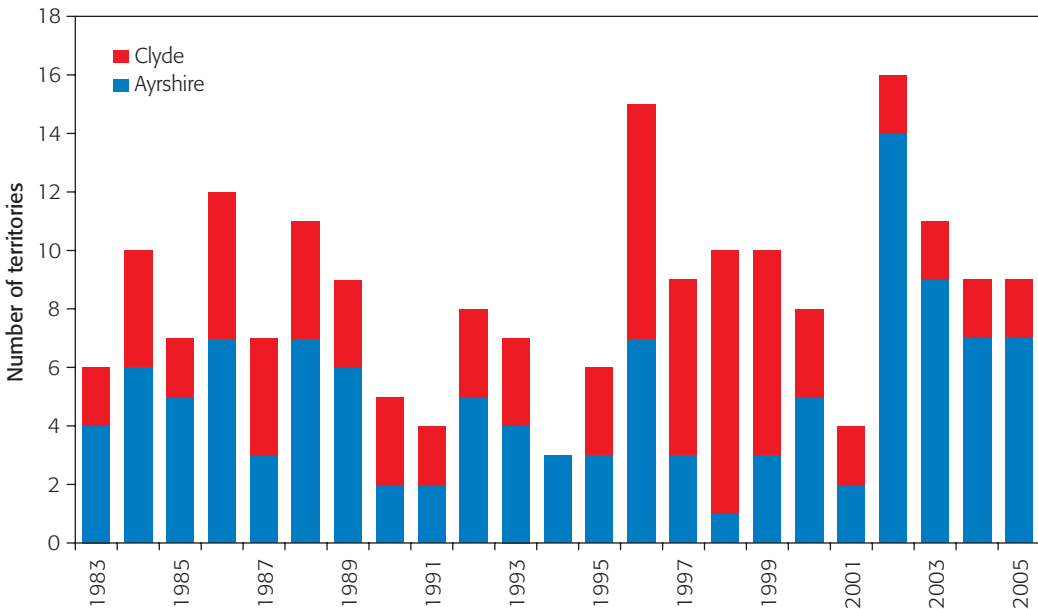


Figure 2. Number of Lesser Whitethroat territories in the Clyde and Ayrshire recording areas in 1983–2005.

observed at Brownside Braes where individual colour-ringed birds marked in 1996 and 1997 returned in 1999. A male colour-ringed in 2004 at the Heads of Ayr, returned in 2005 and at Strathclyde Park where a male ringed in 1997 was retrapped in 1998 and 1999 (I. Livingstone pers. comm.). The increase in territory numbers that occurred locally in 1996 and 2002 was not reflected nationally in the Common Bird Census (CBC)/Breeding Bird Survey (BBS). The CBC index for Lesser Whitethroat was at its lowest level during that period (Baillie *et al.* 2005). 76% of the Clyde/Ayrshire breeding population was confined to just 10 habitat sites.

Both Ayrshire and Renfrewshire local authorities were advised to designate Species Action Plans (SAP) for both the Lesser Whitethroat and its breeding habitat within their Local Biodiversity Action Plans. Lesser Whitethroat SAPs were implemented in 2001 in Ayrshire and 2004 in Renfrewshire. It is hoped that proactive habitat management plans now in place will ensure the long-term viability of this scarce species in the area. However the Lesser Whitethroat is on the edge of its range in Scotland and could be affected by adverse conditions on wintering grounds in Africa or on migration. Atlas fieldwork in Lothian indicates a marked reduction in the numbers of breeding Lesser Whitethroats there between 1988–94 and 2008–10 (Murray *et al.* 1989, I.J. Andrews pers. comm.).

Acknowledgements

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References

- Baillie, S.R., Marchant, J.H., Crick, H.Q.P., Noble, D.G., Balmer, D.E., Beaven, L.P., Coombes, R.H., Downie, I.S., Freeman, S.N., Joys, A.C., Leech, D.I., Raven, M.J., Robinson, R.A. & Thewlis, R.M. 2005. *Breeding Birds in the Wider Countryside: their conservation status 2004*. BTO Research Report 385. BTO, Thetford.
- Boddy, M. 1994. Survival/return rates and juvenile dispersal in an increasing population of Lesser Whitethroats *Sylvia curruca*. *Ringing & Migration* 15: 65–78.
- Byars, T. & Curtis, D.J. 1998. Feeding studies of the Lesser Whitethroat in Strathclyde. *Scottish Birds* 19: 223–230.
- Byars, T., Curtis, D.J. & McDonald, I. 1991. The breeding distribution and habitat requirements of the Lesser Whitethroat in Strathclyde. *Scottish Birds* 16: 66–76.
- Klit, I. 1999. The function of song forms in the Lesser Whitethroat *Sylvia curruca*. *Bioacoustics* 10: 31–45.
- Murray, R., Holling, M., Dott, H.E.M. & Vandome, P. (eds) 1989. *The Breeding Birds of South-east Scotland*. The Scottish Ornithologists' Club, Edinburgh.
- Murray, R. (ed.) 1996. *Scottish Bird Report 1994*. The Scottish Ornithologists' Club, Edinburgh.
- Norman, S.C. 1992. Dispersal and site fidelity in Lesser Whitethroats *Sylvia curruca*. *Ringing & Migration* 13: 167–174.

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Successful breeding of Little Plover in Midlothian in 2010

The breeding status of Little Plover *Charadrius dubius* in Scotland up to 2004 has been described in detail by Forrester *et al.* (2007), with numbers increasing in southern and eastern areas since the 1990s. In Lothian, two pairs nested in 2003, one at a restored opencast site, the other at an inland reservoir (Maxwell 2003, Andrews 2004), but since then none have been reported.

A Little Plover was noticed at a landfill site in Midlothian in May 2009 during an Atlas visit by KI. The bird was not seen again during June and July. On 19 May 2010, KI again visited the site, but found no evidence of any Little Plovers. KI returned on 2 June to find that two Little Plovers were present. Even from some distance, male and female birds could be distinguished through a telescope by their different face patterns. As the birds showed agitated behaviour alternately running very quickly then standing motionless, he left the area. A 'broken wing' distraction display was never observed.

On 22 June, KI returned and observed a single bird approach its nest site to take over incubation from the other. The nest was a simple scrape with four eggs located in bare, pebble-covered ground. On 27 June, KI and NC located



Plate 267. Female Little Plover at a landfill site in Midlothian, June 2010 © K. Ingleby.

four chicks moving rapidly around the nesting area, often 'disappearing', but mostly remaining close to, and being brooded by the female bird. On 6 July, the chicks strayed further from the female, foraging independently around the edges of the pools. At this time they would have been 10–13 days old. The male bird, although still present and foraging around the pools, seemed to have little involvement in protecting or feeding the chicks. The possibility that this was a second male bird was considered, but there was no evidence to support this.

NC made two further visits: the first on 18 July showed that the chicks were fully feathered, the second on 22 July found both adults and juveniles very mobile. At this stage, the juvenile birds were certainly flying. On 6 August, KI and NC made a final visit, when no evidence of any birds was found.

During all six visits to the site in June and July, there was no evidence that the adult birds were flying in or leaving the site. This suggested that food was plentiful at the site and that, unlike the birds that bred in the Clyde area in 2003 (Maxwell 2003), there was no need for them to forage further afield.

These observations suggest that the birds may not have arrived at the site until after 19 May, in which case the period between their arrival and egg-laying i.e. the courtship and mating



Plate 266. Male Little Plover at a landfill site in Midlothian, June 2010 © K. Ingleby.

period, was no more than 12 days. The eggs hatched between 23rd and 26 June, indicating that the incubation period was between 21 and 25 days. The chicks became fully feathered 22–25 days after hatching, and were flying on 22 July, no more than 29 days after hatching. These dates and times are similar to those reported for the pair that bred successfully at the opencast site in 2003 (Andrews 2004): birds were first seen on 28 May, egg laying occurred by 31 May, very young chicks were first observed on 27 June, and a juvenile bird was seen flying on 28 July. Similar dates and times are also reported for successful breeding by Little Plover at various sites in Fife in 1989, 2003, 2004 and 2006 (Oliver 1990, 2008). However, earlier breeding was reported at sites in Fife on two occasions: one in 1997 when the first chicks were seen on 14 June and a juvenile was seen flying on 7 July, the other in 2005 when a clutch was observed on 10 May and a chick seen on 31 May (Oliver 2008).

Midlothian has many industrial or post-industrial sites that provide suitable nesting habitat for Little Plover, but only in the short term. Successful breeding attempts in Scotland have invariably been followed by the site being rendered unusable through further human activity. This landfill site will be fully operational by 2011 and, if the birds return to breed, it is

extremely unlikely that any suitable nesting area will remain. In areas where breeding has been successful, land owners and managers could be approached and asked to set aside and manage parts of their land in order to provide long-term breeding areas for this species.

References

- Forrester, R.W., Andrews, I.J., McInerney, C.J., Murray, R.D., McGowan, R.Y., Zonfrillo, B., Betts, M.W., Jardine, D.C. & Grundy, D.S. (eds) 2007. *The Birds of Scotland*. The Scottish Ornithologists' Club, Aberlady.
- Andrews, I.J. (ed.) 2004. *Lothian Bird Report 2003*. Lothian Branch, SOC.
- Maxwell, J. 2003. Little Ringed Plovers in Scotland. *Scottish Bird News* 70: 10–11.
- Oliver, D.W. 1990. Little Ringed Plovers breeding in Fife. *Scottish Birds* 16: 42–43.
- Oliver, D.W. 2008. Changes in the breeding status of Little Ringed and Ringed Plovers in North Fife. *Scottish Birds* 28: 42–43.

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Piratical attack by two Great Black-backed Gulls on a Great Skua

Piratical attacks by large seabirds such as Great Black-backed Gulls *Larus marinus* and skuas on smaller gulls like Black-legged Kittiwakes *Rissa tridactyla*, terns and auks are commonplace. Attacks on larger birds are much less frequent. Great Black-backed Gulls will occasionally attack Great Cormorants *Phalacrocorax carbo* whilst they are on the water trying to swallow a fish, for example, but I can find no record of aerial attacks on large seabirds and it seems worth putting on record the following incident in which two Great Black-backed Gulls working together forced a Great Skua *Stercorarius skua* to disgorge its last meal. It took place over a field between Papigoe and Staxigoe, near Wick, Caithness, some 80 m from the sea, on 1 July

2010. I did not see the events that led up to this encounter, and when I first saw the birds one Great Black-backed Gull was trying to take hold of the tip of the skua's right wing, whilst the other was attempting to get a purchase on its tail. The skua was clearly not getting the best of the encounter and within a few seconds disgorged its last meal, a fish roughly 10 cm long, which was retrieved by one of the gulls just after it hit the ground.

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Professor R.W. Furness has commented:

In Orkney and Shetland, Great Skuas and Great Black-backed Gulls have an uneasy relationship. I've often seen Great Black-backed Gulls stealing large haddock and whiting fishery discards that Great Skuas have tried to pick up, but have found too big to swallow easily. Great Black-backed Gulls can swallow larger prey than the Great Skuas can as they are quite a bit larger. However, it is not unknown for Great Skuas to attack and kill Great Black-backed Gulls, and especially their chicks and fledglings. That was one reason for the disappearance of the formerly very large Great Black-backed Gull colony on Hoy, where neighbouring Great Skuas

killed many gull chicks and fledglings and the occasional adult. Yet on Foula there was a single pair of Great Black-backed Gulls that nested fairly successfully right in the middle of the Great Skua colony on Ovráfandal for many years and another in the Daal, both pairs aggressively driving off any skua that came near the chicks. So the outcome of interactions between these two species seems to vary depending on the nature of individual birds involved. However, I have never seen Great Black-backed Gulls successfully make a Great Skua regurgitate. In recent years, both species have been hard pushed to find food in Scotland due to shortages of sandeels and fishery discards.



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SOC Annual Conference - The Nightlife of Scotland's Birds

Plate 268. *The Windlestrae Hotel* © Jimmy Maxwell.

For one more occasion, the Windlestrae Hotel, Kinross, was the venue for our Annual Conference on 29–31 October. Its pleasant, leafy surroundings and comfortable foyer welcomed the 132 delegates on what must have been the sunniest weekend for many years.

Friday evening kicked off with the first lecture on this year's nocturnal theme.

Adaptation in Birds for Night Life - Dr Rob Thomas

A most illuminating opening lecture examining the adaptations for birds' vision to cope with low light levels and the response of some species to the artificial light of the human-built environment. The data presented in this talk was largely generated by Dr Thomas' research group of paid students, but some of the techniques of observation and measurement Dr Thomas suggested could be used by less academically-trained enthusiasts to engage in similar studies. A pair of binoculars, notebook, a stopwatch and an enquiring mind are sufficient equipment to study the nocturnal behaviour of common garden and town passerines such as



Plate 269. *Dr Rob Thomas* © Jimmy Maxwell.

Robin and Blackbird singing at dusk or before dawn and indeed during the night.

A Russian scientist in 1943 described birds as 'a wing guided by an eye'. So important is vision to birds that adaptations to the structure and size of eyes in various species have evolved to enable different routines of behaviour: singing, foraging, sleeping etc. Dr Thomas illustrated these matters with very clear diagrams of avian eyes. The wider range of birds' visible spectrum includes the ultraviolet. He also showed the graphs which had resulted from a range of studies. Following a piece of video featuring Alan Titchmarsh following a piece of video in a London nightscape, Rob revealed that the Robin singing was actually provided by PhD students at Cardiff University - a long way from Chelsea! At the end of the presentation, Dr Thomas recommended 'Birds by Night' by Graeme Martin (Poyser) for further reading.

Duncan Watt

This year's quiz was organised and led by Clive McKay. Although his presentation on computer had risked electronic melt-down minutes before delivery, his characteristic light-hearted manner soon got the audience involved in some really teasing birdy issues. As expected, Atlas breeding codes and vis-mig identification dominated the questions and President David Jardine's group triumphed in the sweetie prizes.



Plate 270. Feeding technique © David Merrie.



Plate 271. Waxwing flock © Jimmy Maxwell.

Saturday morning saw Clive again in action. This time conducting a Workshop session which helped participants to get a better understanding of the BirdTrack software - but in order to do this Clive and Ken Shaw led a super trip to Burleigh Sands on the north shore of Loch Leven where they went to get some 'data' - finding Tree Sparrows, over 90 Goosanders, and a leucistic Greylag Goose, before nipping round to Ken's housing estate to watch a flock of over 70 Waxwings! Other members took the chance to drive over to Vane Farm RSPB reserve - a most active establishment with interesting displays, excellent food and great wildfowl out on the loch.

Lectures continued in the afternoon.

Boom or Bust - Insights into the Life of Tawny Owls - Steve Petty

Tawny Owl, the most abundant owl in Scotland, is a nocturnal hunter and locates prey mainly by sound. It is highly territorial and sedentary. Small mammals, especially Field Voles, are the main prey. In the Forestry Commission's Kielder Forest, straddling the border with England, there are 180 km² of mainly spruce plantations dating from the 1930s onwards. Harvesting by clear-felling has created a patchwork of stands of different age, but good vole habitat is limited to the first 15 years after felling when grass invades the forest floor. In the 1980s, nest boxes were installed and after four years all Tawnies in the study area chose boxes rather than natural sites. A total of 40 to 60 pairs were monitored annually, with territories up to 60 ha in size. Although adults rarely moved out of their territory, natal dispersal up to 5 km was usual.

Breeding success of Tawny Owls was dependent on variation in the number of Field Voles. During the period 1984–98, the vole population fluctuated on a three- or four-year cycle. During high vole years, 80% of the owls bred and each pair produced two fledglings, whereas low vole years averaged only 0.5 fledglings per pair. In decreasing vole years very few chicks were recruited into the breeding population. The amount of annual moulting of wing feathers varied conversely with breeding activity, being highest when breeding was poorest.

The number of territories was not affected by nest boxes, but was dependent on the total area of vole habitat. Goshawks were not thought to limit the number of Tawnies; indeed, the survival rates of first-year or adult birds did not vary over the period of the project. In the last decade, the multi-year fluctuation in the population was replaced by an annual fluctuation.

Graham Pyatt



Plate 272. Steve Petty and Geoff Sheppard © Jimmy Maxwell.

Hatched, Matched and Despatched - the lives of Barn Owls - Geoff Sheppard

The amount of information that Geoff, a total Barn Owl enthusiast, poured into the short length of time that he had was amazing. We were shown the study area, the Rhins of Galloway, and introduced to the necessary rough habitat these birds require for foraging in that area. 'Matching' was explained first with detail regarding the adults lives together. Apart from ensuring that the female has a large supply of voles, the male takes no further interest when his offspring appear; indeed he is rather promiscuous, mating with as many females as possible. The female is also prone to taking an interest in any other males that happen to be around. It is little wonder that they are generally short-lived.

The nest sites chosen by the adults were surprising, ranging from old ruined cottages where they still exist, to a farmyard barn where black plastic had been slung across the roof windows to shade the area from strong sunlight and the owls had nested there. This last site was considered to be suitable only for 'cooking' the owlets, and the nest was moved to a more traditional box site, the brood eventually fledging successfully. In his project, rectangular boxes were fitted across the barn rafters. Apparently Barn Owls are quite happy to share their accommodation with some very unlikely neighbours such as Feral Pigeons, Kestrels and Jackdaws, or as Geoff calls them, 'neighbours from hell!'

Geoff showed photographs of young Barn Owls describing among other things the gradual development of the characteristic facial discs. He detailed all the problems they faced in their first winter including the frequent deaths due to night traffic. A most enjoyable talk and I can recommend Geoff as a good candidate for Branch meeting talks.

Frances Gatens

A break for coffee allowed delegates a look in to Subbuteo and Second Nature book displays and SOC books and merchandise. Viking Optical Ltd also tempted with the latest scopes and binoculars. Lectures resumed...



Plate 273. Bob Swann says "Sign up NOW" © Jimmy Maxwell.

Bird Atlas 2007–11 update - Bob Swann

Bob's full Atlas update can already be seen on page 340–342 of this issue. For this audience, he highlighted the distribution of birds more apparent at night - the owls, crakes, Woodcock, Grasshopper Warbler, etc. His commitment to this project is obvious, having himself surveyed over 300 tetrads. His message in this final year comes over loud and clear - '*Atlas needs YOU*'.



Plate 274. Chris Rollie © Jimmy Maxwell.

Nightjars in Scotland: an update - Chris Rollie

Amid great hilarity, the audience was treated to the recorded song, calls and wing-clapping of *Caprimulgus europaeus*. Ever alert to birds in their historical and literary context, Chris listed and explained many of the old names: Nightchurr, Goatsucker (caprimulgus means just that!), Jennyspinner (the sound of a spinning wheel), Flying Toad (from the frog-like gaping mouth), Nighthawk, Fern Owl, Fern Hawk, Moth Owl, Litchfowl (litch being Old English for 'corpse') - all very descriptive; but last on his list was Puckeridge, after the pagan night sprite Puck, who got the blame for all sorts of nocturnal mischief from souring milk to pregnant lassies! From Act One, Scene One of Shakespeare's 'A Midsummer Night's Dream', Chris quoted the Bard of Avon at length with gusto, yet ending with Burnsian comment, 'What rubbish!'

The statistical and atlas records showed the pattern of changing distribution of Nightjars, most notably featuring the decline in Scotland. Focusing on the forest management in Galloway, Chris explained the collaborative work between the Forestry Commission, RSPB and SNH which is attempting to create a landscape more suitable for the Nightjar to feed, display and successfully reproduce. We will await a further update in the future from the ever-bullient and entertaining Mr Rollie!

Duncan Watt

SOC 74th AGM

David Jardine referred to Matters Arising from the 73rd AGM which had since prompted actions in the following - Library usage recording, the digitising of *Scottish Birds*, updating of Databases and establishing links with independent bird clubs.

His Annual Report started with thanks to SOC Council and all the Committees and a warm appreciation of the legacies lately received. Although membership was up, our main focus should remain on recruitment and that linked with active field work and the kind of recording embodied within Birdtrack and links with BTO. He thanked the Editorial team for their continuing excellent work on *Scottish Birds*. In

closing he complimented the organisers, who included SOC members, of the Raptor Research Foundation Conference at Pitlochry, for keeping Scotland in the international limelight, like the early days of the SOC - he wished the International Wader Study Group in Strathpeffer in 2011 a similar success.

Alan Fox, Treasurer, took us through the Accounts. Assets for 2009–10 were up by £29,000, the main asset being Waterston House - he noted that this building is depreciated at 1% per annum. Investments had risen, membership was increasing, Waterston House sales were up, but *Scottish Birds* was now costing more in its new combined format. This in part was paid from the *Birds of Scotland* Fund. More recently, Waterston House sales had been lower, but legacies were on the rise.

The accounts were accepted with grateful thanks to Alan. A proposal that Sandy Scotland continued to carry out the 'independent financial examination' was proposed and seconded.

David Jardine now introduced the 'Creative Executive' - a group comprising Patrick Baird, Mike Martin, Willie Prest and Duncan Watt, which is looking in depth at our Club membership and its recruitment. Each spoke to the meeting about their work and deliberations under the following headings: membership research, branch development and educational resources, and many in the audience made helpful comments, particularly regarding the importance of human contact, the SOC image in the field and the important role of branches in attracting new members.

The office bearers were able and willing to continue in office and the President thanked retiring member Norman Elkins for his contribution over the years. Stuart Rivers was proposed and seconded as the new member of Council. Under AOB, Willie Prest raised the issue of Government cutbacks in England to the Forestry Commission and other conservation bodies. Supplementary comments by Jeremy Greenwood indicated that the conservation movement was facing a difficult time and future cuts could also affect Scotland.

Before Dinner, a presentation on the 2nd edition of *The Golden Eagle*, by the late Jeff Watson, was made by his wife, Vanessa Hallhead, and Helen Riley and Des Thompson, who had all worked tirelessly to complete the book, which includes a lot of new material, following Jeff's death in 2008.

Following the book launch came the Conference Dinner, where the guest speaker was Fiona Barclay, manager of BirdGuides. She spoke of mutually beneficial links forming between her company and the SOC, mainly regarding publicity. Her address then followed our 'night-time' theme by quoting amusing and intriguing little snippets from her i-Pad version of *British Birds*, which kept the company suitably entertained.

The Orwell Ceilidh Band from Milnathort supplied the excellent music and convivial atmosphere for the informal dancing after dinner. Wendy Hicks and Stephen Hunter charmed us with a sinewy Bachata demonstration and followed this with a general invitation for everyone to join in. Great fun and some really good latin music. Heather Woodbridge, here with her family all the way from the observatory in North Ronaldsay, joined the band with her fiddle to complete the informal ceilidh atmosphere - a great night!



Plate 275. Roger Hissett and Morag Maxwell at the Club's stand © Jimmy Maxwell.

Sunday was again sun-lit and the lectures soon got underway...

Current Issues in Woodcock Conservation - Dr Andrew Hoodless

Introduced as 'Mr Woodcock', Andrew gave a splendid and clear account of Woodcock biology and the current status of the species in Britain and Europe. He highlighted the declines that had taken place in Britain and compared this with other countries where populations seem to be stable. This cryptic nocturnal creature is brilliantly designed to feed at night by touch while also watching for predators. It is the displaying males that must be monitored to show population size and changes. With the aid of sonagrams, Andrew's studies found that each individual male has a distinctive call when 'roding'. However, the number of individuals displaying overhead could not be counted with any certainty in the field, necessitating the design of the methodology used in the 2003 Woodcock survey, which censused 800 woodland sites across Britain. This showed that the UK population is rather greater than originally thought, with 54% in Scotland. Young birch woodland is very important, although densities



Plate 277. Dr Andrew Hoodless © Jimmy Maxwell.

are normally quite low and birds frequently feed in fields during darkness. Migrants from northern Europe supplement our birds in winter normally between mid-October to mid-April, but severe weather can reduce populations markedly. The most recent technology, in the form of satellite-tracking and stable isotope studies have also shown that most winter visitors in the UK are from Russia, with Scandinavian birds most likely in Scotland. Andrew is now awaiting geolocator results to reveal even greater detail of the migratory journeys of this enigmatic species.

Norman Elkins

Shearwaters - Trolls in the Night - Chris Laurie

For the past three years Chris has been working on Rum and Canna monitoring the effects of Brown Rats on Manx Shearwaters. A lot of his work involved nights spent on Askival and other mountains on Rum where the shearwaters would fly in late at night to visit their nesting burrows. His vivid, animated description of this reminded us of what has been for many a life-enhancing birdwatching experience. He recalled that the birds' weird unearthly calls as they came in were regarded by previous early inhabitants as the terrifying cries of Trolls.



Plate 276. Chris Laurie © Jimmy Maxwell.

Many interesting points came to light regarding 'Manxies'. For instance, I was not aware that many of the birds used the Great Glen as a convenient 'highway' between the North Sea and the Western Isles. Apparently this route is not without its dangers, as some of the remains found in the local Peregrine nests will testify. Chris also informed the audience that migrating birds did not as previously believed, head south into the southern oceans, but turn west off North Africa and across the Atlantic to the east coast of South America to where many birds have been tracked and located. In his work, he has guided many interested visitors to the 'greens', the fertile grassy flats which are interspersed between the rocky slopes of these craggy mountains. There the work of ringing the shearwater chicks is demonstrated and the daily lifestyle of the birds, from sea flotillas to nocturnal chick-carers, explained. A very informative and interesting talk about this enigmatic bird.

Frances Gatens

The Ups and Downs of the Scottish Corncrake - John Bowler

Corncrake is a summer migrant, wintering in Africa south of the equator. Its prime need in Scotland is for dense green vegetation at least 25 cm tall in which to feed and breed. Loss of this habitat due to agricultural change has resulted in the Corncrake being now largely confined to the crofting islands. Determined conservation effort in these islands has raised the population from 500 calling males in 1990 to about 1,200 in 2010. Tiree and Coll together hold about half of the population.

When the males arrive in April, they often use Yellow Flag Iris because pasture is not yet tall enough. This early cover is important if they are to avoid predation. Nettles, willow scrub or Cow Parsley are also used. The males call mainly at night, especially between midnight and 3 am. The male has more blue-grey colour around the face than the female and is bigger. The Corncrake is a surprisingly short-lived bird



Plate 278. Stephen Hunter setting up with John Bowler © Jimmy Maxwell.

(typically two years) but can breed prolifically. A clutch can be as large as 12 eggs although usually only five or six fledglings succeed. Two or even three broods are possible. When the young are only 35 days old they depart for Africa leaving their parents to breed again. In fact adults often form new partnerships for later broods.

Conservation measures are aimed to delay cutting for silage or hay until at least 1 August and to cut the grass in a way that allows the birds to escape. The last adults depart on migration in October. Domestic cats and road traffic are the main threats to Corncrakes while in Scotland.

Corncrakes do not disperse widely and major extension of the range might require translocations. Geolocators may be used next year to track birds on migration, as the routes used are not yet well known.

Graham Pyatt

Breeding Habitat of the Grasshopper Warbler in the UK - Gillian Gilbert

The speaker has been involved in work on several species in the past such as Bitterns and Stone Curlews and in this talk the subject was another rather shy bird. Although the commonest *Locustella* warbler in Europe, it is unobtrusive, often only revealed by its song which is difficult for some to hear. Early migrants to this country are especially secretive. Generally numbers have declined over the past 20–30 years by about 24% in the UK but actually in Scotland have risen, especially in the West. Possible reasons for lower numbers were agricultural, the effects of forestry on its breeding areas and drought in its migratory and wintering locations. Studies were carried out in two quite different breeding sites, one at Minsmere in Suffolk, a fairly obvious habitat, and the other near Paisley in more or less waste ground shared with abandoned household goods.

The optimum requirements for this species are difficult to specify but would normally be an area with soft soil, low vegetation, some high song perches and the rushy tussocks especially favoured by early arrivals. In these localities numbers of breeding pairs can be quite high and in a good season 2–3 broods may be



Plate 279. Gillian Gilbert © Jimmy Maxwell.

reared. However site fidelity is inconsistent in some areas making census work more difficult. Due to changing land use such as drainage, predicting breeding areas is difficult, but set aside land if available may be utilised. This fascinating talk revealed the amount of time and patience put in on this undoubtedly tricky bird.

Keith MacGregor

After all our speakers were duly thanked, the Summing Up firstly included the 200 Club draw - we were delighted to hear that Daphne Peirse-Duncombe, the organiser, was now regaining her health and to realise that in its 22nd year, the 200 Club had now raised £39,500 for SOC funds - new members were still cordially invited. Alan and Susan Sidaway won the little competition regarding a wine bottle bird emblem, and the Prize Raffle was ably conducted by Wendy Hicks and Kathryn Cox making £308 for club funds.

Our President thanked Stephen Hunter for his usual painstaking technical work and of course all the staff and volunteers who made the Conference such a smooth-running success. He warmly invited all members, along with those they had recruited to join the club, to next year's Special 75th Anniversary Conference which will be held in Carnoustie on 28–30 October.

In this account of the Conference, I am once more extremely grateful to those SOC members who agreed to write up summaries of the main lectures.

Jimmy Maxwell

NEWS AND NOTICES

New SOC members

We welcome the following new members to the Club: **Ayrshire:** Mr S. Martin, **Borders:** Mr J.S. Barton, Mr & Mrs J. Harris, Dr P. Maguire, **Central Scotland:** Mr E. Cameron, Mrs J. Laing, Mr C. Nisbet, **Clyde:** Mr W. Little, Mr J. McKillop, **Dumfries:** Mr & Mrs D. Davidson, **England, Wales & NI:** Mr P. Johnson, Miss C. Mellor, **Fife:** Mr H. Baillie, Mr J. Blasco, Mr W. Roxburgh, **Grampian:** Ms H. Grist, Mr M. Snowden & Ms H. Smith, **Lothian:** Ms L. Anzer, Mrs M. Chase, Ms S. Dunlop, Mr T. Galligan, Ms I. German, Mr & Mrs B. Grant, Ms M. Hayward, Professor J.W. Ironside, Mr J.P. Kendall, Mr A.K. McClintock, Mrs S. Milne, Mr D. Pattle, Ms W. Rimmington & Mr R. Lungley, **Stewartry:** Mr R. Baxter, **Tayside:** Mr J. Hodson, **West Galloway:** Ms L. Hooper.

200 Club

The latest prizewinners are: **August: 1st** £30 Mrs G. Hartland, **2nd** £20 Mrs E. McGregor, **3rd** £10 M.B. Ross. **September: 1st** £30 Sinclair Manson, **2nd** £20 Mrs K. Millar, **3rd** £10 Ray Murray. **October: 1st** £30 Brian Turner, **2nd** £20 E.S. Smith, **3rd** £10 Mrs V. McLellan.

New members are always welcome. They must be over 18 and SOC members. Please contact: Daphne Peirse-Duncombe, Rosebank, Gattonside, Melrose TD6 9NH.

Conferences/lectures

BTO/SOC Birdwatchers' Conference, Saturday 19 March 2011, Marine Macdonald Hotel, North Berwick (programme/booking form enclosed).

SOC 75th Anniversary - Celebrity Lecture, The Club is delighted to announce that Chris Packham has agreed to give a public lecture as part of our 75th birthday celebrations. Saturday 24 September 2011, 2 pm, Queens Hall, Edinburgh. Further details to be announced via the SOC website, at branch meetings and in the March issue of *Scottish Birds*.

SOC Annual Conference, 28–30 October 2011, The Carnoustie Golf Hotel.

SOC Council members as at

1 November 2010 are as follows:

Office bearers: David Jardine (President), Ken Shaw (Vice President), Alan Fox (Treasurer) and Mike Martin (Secretary).

Elected members (with date of election): Jeremy Wilson (October 2008), Dr Christopher McInerny (October 2009) and Dr Stuart Rivers (October 2010).

Branch representatives: Patric Baird (Highland), John Campbell (Tayside), Graham Cooper (Grampian), Colin Corse (Orkney), Iain Gibson (Clyde), Roger Gooch (Central), Stan Laybourne (Caithness), James Main (Lothian), Ray Murray (Borders), Geoff Packard (Stewartry), Gordon Riddle (Ayrshire), Geoff Sheppard (West Galloway), Brian Smith (Dumfries) and Paul Taylor (Fife).

Research Grants

Applications for research grants from the SOC Endowment Fund are welcomed by 31 January. Please contact HQ for details, or visit www.the-soc.org.uk/endowment-fund.htm

Local Recorder changes

Fife: Malcolm Ware has taken over from Rab Shand. Malcolm Ware, 15a King Street, Inverkeithing, Fife KY11 1NB. Mobile No: 07733 991030. Email: mw160598@hotmail.co.uk

Lothian: Stephen Welch will take over from David Kelly on 1 January 2011. Stephen Welch, 25 Douglas Road, Longniddry, EH32 0LQ. Phone 01875 852802, 07931 524963. E-mail: lothianrecorder@the-soc.org.uk

Highland: Hugh Insley has taken over from Kevin Davis. Hugh Insley, 1 Drummond Place, Inverness IV2 4JT. Mobile No. 07831 479804. Email: hugh.insley@btinternet.com

Fair Isle: Deryk Shaw will be handing over to new FIBO warden, David Parnaby, in January 2011.

We would like to thank all the outgoing Local Recorders for their enormously valuable contributions to this important aspect of Scottish birdwatching.

All change at SBRC

November 2010 has seen some changes to the membership of SBRC with Angus Hogg stepping down after five years as Secretary. His place will be taken by Dr Chris McInerny, who relinquishes his post as a voting member of the committee to take on the job of Secretary. His contact details are Chris.McInerny@gla.ac.uk and 10 Athole Gardens, Glasgow G12 9AZ. In turn, his membership vacancy will be filled by John Bowler from Tiree. John's credentials as a rarity finder took a major step forward recently with his discovery of a Parula Warbler on Tiree. His work as RSPB warden on Tiree has brought him many such rewards over the years, and he will surely prove to be a really valuable member of SBRC. A word of thanks is also due to Chris who, during his term of office, has been responsible for undertaking and producing identification guidelines on Yellow-legged and Caspian Gulls - a hard act to follow!

Angus Hogg

Thanks are also due to Angus, who has been Secretary of SBRC since April 2005, during which time he has efficiently processed several hundred descriptions. Eds

Brian Cartwright

It was with great sadness that we learned of Brian Cartwright's death in August. Brian of course was one of the new team of co-editors of *Scottish Bird News* in 2003, so we feel it is fitting that this note comes within that part of *Scottish Birds*. I remember with great affection Brian's contribution to these first issues, considering that in the beginning we all had little idea as to who would do what and how everything would work out. The December 2003 *SBN* 70, however, was at last completed and we had started. Brian was full of creative ideas, which would interest and inform the membership and always strove for the highest professional standards - we became good friends and co-operated well together. Unfortunately, he was all too soon overtaken with an incurable type of leukaemia, which gradually reduced his efforts and eventually ceased his work on the production. Everyone who knew Brian witnessed the immense struggle he had with the disease over the years and the incredibly brave and cheerful presence he maintained

throughout. His wife Sylvia is grateful for the support of friends and intends to keep contact with SOC affairs and possibly attend the conferences which Brian and she so enjoyed. We will miss his commitment and friendship.

Jimmy Maxwell

The Scottish List

In September, the SBRC's Scottish List Subcommittee unanimously agreed to change the *Scottish List* to show the two-tier system for English names now used by the BOU for the *British List* i.e. vernacular names and international English names (see www.bou.org.uk/recbrlst1.html). The changes to the order of the species will also be implemented. A paper for *Scottish Birds* is in preparation, as is a new version of the *Scottish List* for the SOC website.

Ron Forrester

At a subsequent meeting of the Editorial Committee, it was decided that the vernacular English names would be used in *Scottish Birds* starting with the March 2011 issue. *Eds*

Upcoming events at Waterston House

Art Exhibitions:

- Paintings by Michael Warren, showing until 19 January.
- John Busby 22 January to 23 February.
- 'Artists for Nature in India' by Keith Brockie, Darren Woodhead, John Threlfall, John Busby and John & Jane Paige 26 February to 30 March.

Spring Optics Demo day:

Sunday 15 May 2011, 10 am to 4 pm.

Request for sightings -

Yellowhammers

Over 100 Yellowhammers have been colour-ringed over the last year at various sites in Ayrshire as part of an ongoing PhD project investigating Yellowhammer ecology in pastoral-dominated farming landscapes. Birds have a BTO metal ring and a colour ring on one leg, and two colours on the other. Please report any sightings of these birds, even partial combinations of colour rings, to:

Dawn.Thomson@sac.ac.uk.



Plate 280. Re-trapped first-year male Yellowhammer, originally colour-ringed as a nestling © Dawn Thomson.

Request for sightings - Purple Sandpipers with lime-green leg- flags from Svalbard, Arctic Norway

This summer 1,274 Purple Sandpipers were ringed in Longyearbyen (78° N) by the local bird club (Longyearbyen field biologist association www.loff.biz). Lime-green leg-flags with three black letters were used in 2010 (Plate 281). There was an unexpectedly early re-sighting in Holland on 19 September. This was followed by one on the Baltic island of Gotland on 24 October and another on the east coast of Scotland on 5 October.

In 2009, we attached orange leg-flags to 660 birds caught on Sørkappøya, the southernmost point on the Spitsbergen archipelago. So far, c. 20 re-sightings from several unexpected areas, like the Finnish SW coast and others from Sweden, Denmark, Germany and Holland.

Please report any sightings to Kjell Mork Soot at kjellmorksoot@fugler.com or read more on the splendid site www.cr-birding.be



Plate 281. Purple Sandpiper with 2010 leg-flag, Longyearbyen, Svalbard © Kjell Mork Soot.

Bird Atlas 2007–11



- the final months of the final winter

Plate 282. As the mighty Atlas project reaches the end of its voyage, make sure you are on board by submitting your bird records. Pink-footed Geese and Shelduck, Aberlady Bay, Lothian, September 2010 © Ian Andrews.

As I write this, the final winter of fieldwork is about to start for the Bird Atlas project. Progress has been excellent, and 93% of the minimum required number of tetrads in Scotland have had at least one winter visit. However, 450 tetrads still need two visits and another 323 a single visit. In addition, lots more tetrads need to be done in regions undertaking local atlas projects. Hopefully by the New Year we will be on course to get all these tetrads covered. If you have an allocated tetrad that you have not covered, please try and cover it during January or February with a single two hour visit, keeping a separate tally count of all birds seen and heard for both hours. If you know you will be unable to cover it, please inform your local organiser or the Scottish organiser as soon as possible, so that it can be re-allocated.

Last winter, a lot of volunteers got caught out by the severe winter weather in January and February. This meant that many late visits to tetrads could not be completed. If you were affected in this way, please try and complete the

missing late visits in the next two months. Again, if you cannot manage this please let your local organiser know as soon as possible so that we can arrange for another volunteer to conduct the survey. If you have completed all your allocated tetrads, it would be well worthwhile contacting your local organiser to see if there are any tetrads that require late winter visits, as these are not very easy to spot from the information on the website.

The other way to assist is by providing Roving Records. By clicking on the **Any Square Summary** button on your home page (Figure 1) you can get a list of all species recorded so far in each 10-km



Figure 1. Homepage.

square or tetrad. This is very useful way to double check which species have been recorded. You can print a list off and take it with you when you are out birding and annotate it to add missing species, for subsequent submission as roving records.

A new button called **Priority Squares** is also extremely helpful. You can click on this for winter or breeding season records. It initially takes you to your home square and compares the birds recorded in it with those recorded in the surrounding neighbouring squares. This immediately highlights obvious gaps in the species lists.

I checked one of my local squares, NH77 in Easter Ross (Figure 2). This square, which contains Nigg Bay, a large nature reserve, is well watched and according to the species richness data was well covered in winter with 99% of previous winter atlas species having been recorded so far. I was therefore astonished to find that amongst the missing species were Black-headed and Great Black-backed Gull, both

common in winter in the area; Golden Plover and Lapwing which winter in small numbers in the bay; Reed Bunting and Skylark both common passerines in the local stubbles in winter plus another five or six other likely missing species. It would appear that as many of these species are so common, observers assumed they would have been listed and therefore did not even consider adding them as Roving Records.

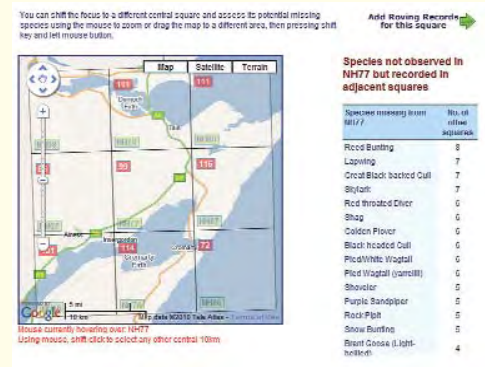


Plate 283. Goldcrest © Brian Henderson.

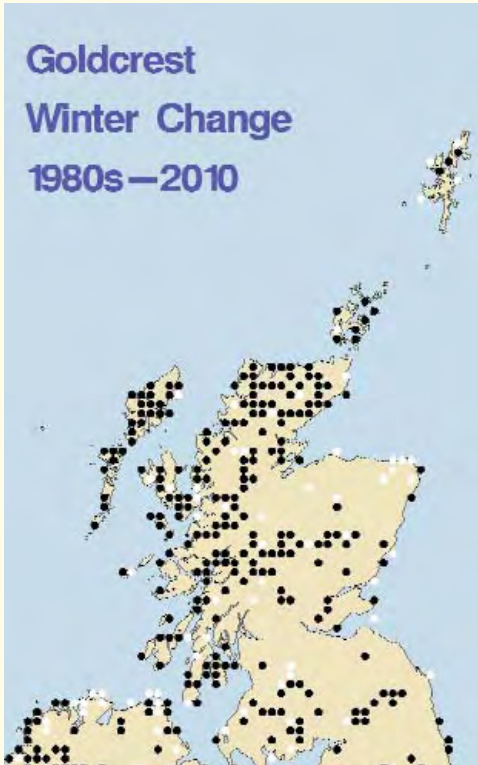


Figure 3. Black dot = Gain, White dot = Loss

I therefore urge all of you with internet access to use this facility on the www.birdatlas.net website. Check your home square and squares where you regularly go birding. To move from one square to another you need to use the computer mouse to zoom or drag the map to a different area, then press the shift key and left mouse button and it will focus on a different central square.

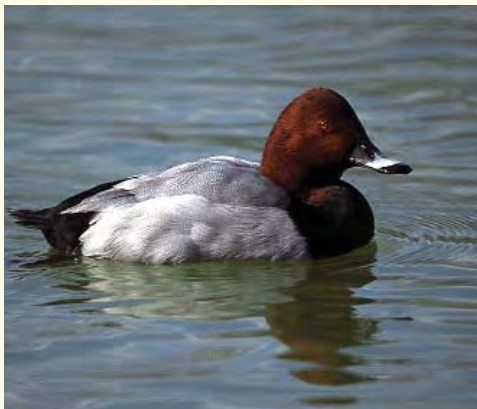


Plate 284. Pochard © Jill Pakenham.

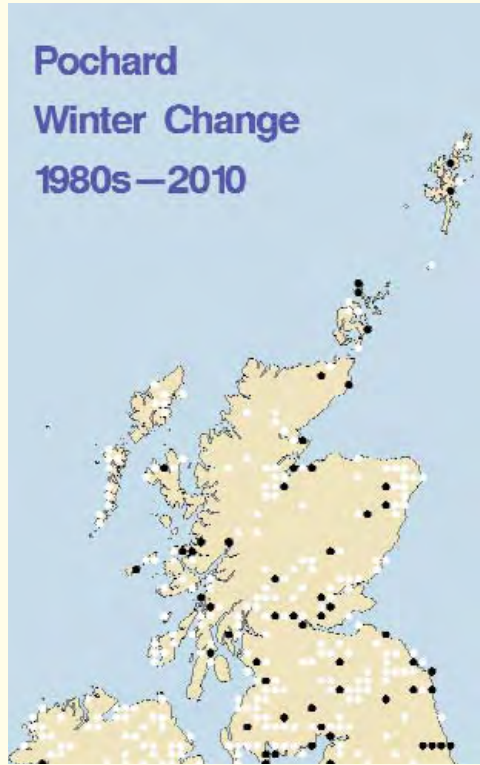


Figure 4. Black dot = Gain, White dot = Loss

Now three quarters of the way through the project we are already seeing major changes in the current distribution of many common species in Scotland. Figure 3 shows the winter change map for Goldcrest. It shows an increase in range since the early 1980s, with many 10-km squares throughout Scotland gaining this species and very few losing them. Conversely the winter change map for Pochard (Figure 4) shows a marked decline, with far more 10-km squares losing rather than gaining this species. Are all these losses correct? Perhaps a bit of fieldwork and a few more Roving Records could remove some of these “losses” from the map.

In the final year of the project your bird records can help make the atlas maps more accurate. Please help out by taking a bit of time to help either by submitting roving records or surveying a tetrad.

*Bob Swann,
Scottish Organiser Bird Atlas 2007–11
Email: bob.swann@bto.org*

NOTES AND COMMENT

Aberdeen winter visitors 2009/10

By the time this issue of *Scottish Birds* appears, it may be that snow and cold conditions have arrived, with most long-range weather forecasts suggesting there will be a colder than average winter from 2010 into 2011. Last winter, of course, was one of the hardest in recent years

(see *Scottish Birds* 30: 35–40). Below, Sam Alexander's photographs show a few birds that came to feed in his garden in Aberdeen during that cold spell. Please send any observations of hard weather behaviour in 2010/11 to the SOC, so we can include a selection in a forthcoming *Scottish Birds*.



Plate 285. This juvenile male Sparrowhawk that perched on the clothes line close to our feeders on 2 January 2010 must have been starving © Sam Alexander.



Plate 286. The Brambling that arrived on 8 February 2010 was only the second we have seen in our garden in the 35 years we have lived here. It visited daily until the 11th. On the 24th another turned up © Sam Alexander.



Plate 287. Small groups of Rooks came in most days and cleaned up under the feeders and bird tables. One bird discovered it could haul up my hanging fat-filled coconut with its foot to get at the contents. A Carrion Crow also tried the same trick © Sam Alexander.

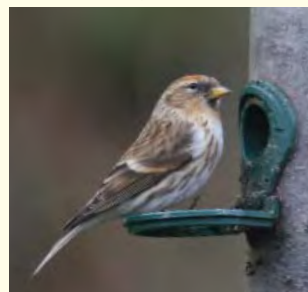


Plate 288. A garden first was a Lesser Redpoll on 12 March. Then single birds came to our seed feeders every day until 4 April 2010 © Sam Alexander.

Additional Nuthatch updates

Due to an error in editorial correspondence, the following Nuthatch records for Angus & Dundee were omitted from the last edition:

1807: Tannadice woods (Gray, R. 1871. *The Birds of the West of Scotland*, but doubted by Baxter & Rintoul 1953)

1974: 7 March, Invergowrie (*Scottish Bird Report*, BS3)

1981: Early April, Montrose garden (*Angus Wildlife Review*)

1987: 9 March, Glen Isla (*Scottish Bird Report*)

2001: 3 January, Craigmill Den (*Local Birds*

Rarities Committee)

2005: 10 June, heard, Lunan (BirdTrack)

2007: 21–22 April, Greystone (*Angus & Dundee Bird Report*)

2008: 8 April, by Meigle (BirdTrack)

2010: May, Glamis garden

Jon Cook

Also, Harry Scott sent us details of the first Nuthatch record for North-east Scotland - it was photographed visiting a feeder in a garden near Netherley on 28–29 August 2010.



Plate 289. Bar-tailed Godwit, Balcomie Bay, Fife, September 2010 © John Anderson.

BIRDSPOT

Bar-tailed or Black-tailed?

In Scotland, only the Eden Estuary, Fife, and Skinflats, Upper Forth, hold substantial numbers of Black-tailed Godwits in winter, whilst Bar-tailed Godwits are far more common and widespread. It is the identification of singles or small groups of Black-tailed Godwits amongst flocks of their superficially similar relatives that is the challenge that will be covered here.

In flight, this species pair give up their identities far more easily. The bold black and white tail and very broad white wing bars make the Black-tailed Godwit instantly recognisable. In fact, if in doubt, waiting for a bird to fly or stretch its wings or tail is a good way to confirm which species it is.

But there are a few key features to check out in a winter bird that refuses to fly: upperpart colour, leg length, supercilium, bill length and shape and the bird's overall impression.



Plate 290. Bar-tailed Godwit, Balcomie Bay, Fife, September 2010 © John Anderson.

The upperparts of Bar-tailed Godwit are always patterned with dark streaking (like a Curlew), whereas in winter-plumaged Black-tailed the brown-grey upperparts are effectively a uniform, flat colour (with faint darker shafts and thin pale fringes visible at very close range).



Plate 291. *Black-tailed Godwit*, Eden Estuary, Fife, February 2007 © John Anderson.



Plate 292. *First-winter Black-tailed Godwit*, Tayport, Fife, February 2008 © John Anderson.

There is always a caveat, and in this case it is that early in the winter (or late autumn) first-winter Black-tailed can still retain all or some of its juvenile wing coverts, which are boldly patterned with black spots (but not streaks).

Leg length is also a good feature. The Black-tailed Godwit has distinctly longer legs (the lower part, the tibia, to be precise).

Another feature is that in Bar-tailed Godwit the supercilium is long and is distinct in front and behind the eye, whereas in Black-tailed it is only clear cut between the eye and the bill. In fact, in Black-tailed it can be limited to just a spot in front of the eye.

Bill length and shape can help too. If it is long and effectively straight, that points to Black-tailed; being shorter and slightly upcurved is good for Bar-tailed. But bear in mind that in both species the bill of the female is longer than that of the male. But, there is an overlap between long-billed, female Bar-tailed and short-billed, male Black-tailed; so beware.

Overall size can be difficult to judge in a lone bird, but the longer legs and bill combine to give an impression of a tall, more elegant bird



Plate 293. Bar-tailed Godwits, Balcomie Bay, Fife, September 2010 © John Anderson.



Plate 294. First-winter Black-tailed Godwit, Eden Estuary, Fife, November, 2010 © John Anderson.

in Black-tailed Godwit. Bar-tailed is shorter-necked and stockier in comparison.

Of course, flight identification is easy, but these pointers should help identify a feeding or roosting bird. The standard field guides all

present good illustrations of this plumage in both species, and the new *Advanced Bird ID Guide* offers the same information in quick-reference, bullet-point format.

Ian Andrews

BOOK REVIEWS

The Status of Birds in Britain & Ireland. David T. Parkin & Alan G. Knox, 2010. Christopher Helm, ISBN 978-1-4081-2500-7, 440 pages, hardback, £50.00.



This 'scholarly and authoritative volume' is the update to the BOU Checklist of the Birds of Britain and Ireland published in 1971. It is intended to summarise the changes in the distribution and abundance of the region's birds, including new accounts for all the additional vagrants, and to provide details of the changes in taxonomy arising from the dramatic impact of DNA studies.

There are 440 pages of text plus 32 pages of colour photos. The introduction covers geography and climate, flora and vegetation, geographic divisions and habitats, the structure of ornithology in Great Britain and Ireland, evolution and taxonomy, migration and movement, biogeographical affinities, and conservation. The individual species accounts (over 580) run to 252 pages, while Appendix 1 contains species lists for Great Britain, Republic of Ireland, Northern Ireland and the Isle of Man, with each species and subspecies entry accompanied by its status categorisation, and Appendix 2 contains details of all Category D species, and is followed by 20 pages of references and a five-page index.

The main section deals with the individual species under the headings Taxonomy, Distribution

and Status. The taxonomy entries are the real strength of this book, bringing together for the first time information about the DNA studies that underpin the current defined relationships at both species level and higher groupings. Distribution is covered at the global level, but the information relating to Great Britain and Ireland is somewhat generalised. The status comments are specific to Great Britain and Ireland and vary in length - extreme rarities have all records listed, lesser rarities are only summarised, while commoner species are dealt with more extensively. Information is derived from sources as recent as 2008, and is well referenced, but unfortunately several entries contain out-of-date or inaccurate statements, and often the differences in status between Scotland and England/Wales are not included. Examples include: under Canvasback 'six records (all of males)' when the first Scottish record (June 2000) related to a female; under Arctic Redpoll the number of *hornemanni* records is given as about 30 and c. 40 in the same account. For such an authoritative work these errors and contradictions are extremely disappointing. However, the most glaring error occurs on page 21 under the topic of Molecular Analysis, where it describes the four bases found in DNA - guanine, cytosine, thymine and adenine, and goes on to state that guanine only binds to thymine and cytosine only binds to adenine - as any Higher Biology student knows G pairs with C and A with T.

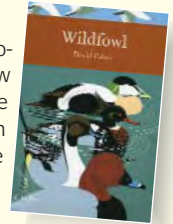
The order of species and English names used are those recommended by the BOU; presumably the 2007–11 Bird Atlas will follow this sequence, but

how soon many report editors bite the bullet, or field guides adopt this, remains to be seen.

This is something of a specialist publication, and given its price will probably not feature on many birders' bookshelves. For anyone interested in the taxonomy of British and Irish birds this is an essential purchase and, despite a few errors and omissions, will remain a definitive reference for years to come.

Stuart L. Rivers

Wildfowl. David Cabot, 2009. Collins, ISBN 978-0-00-714659-8, softback, 460 pages, £30.00.



The latest ornithological New Naturalist (volume 110) provides an overview of the wildfowl of Britain and Ireland.

There are seven chapters. Following the introductory chapter, chapter 2 is an essay on the historical and cultural relationships, including domestication.

Chapter 3, accounting for half of the volume, is a review of the status and distribution of the 56 species of swan, geese and duck native or naturalised in Britain & Ireland. Spread over 220 pages, these mini species accounts are arranged taxonomically. They are well illustrated and contain tables of key sites, using data from WeBS/I-WeBS. Unfortunately, there is not a single distribution map within the entire chapter, so you will need to read this with an atlas/gazetteer. Even the most studied species get no more than eight pages, and most less than half of this. These are useful, but

selective, summaries. Despite extensively using data from 2006/07 (published in 2008), there is unfortunately no reference to *The Birds of Scotland* (published in 2007).

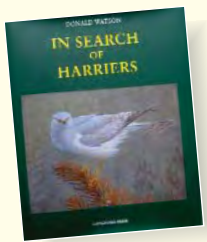
The remaining four chapters take an ecological approach, summarising social behaviour, food and feeding ecology, population dynamics and wildfowl conservation. These are well written and I found them a more interesting read than the species accounts. Given the author's broad knowledge and enthusiasm for wildfowl ecology, I wonder why he did not take this approach to the whole volume, to produce an ideal companion to Bill Hale's *Waders* New Naturalist 65.

I found the strong Irish dimension to this volume refreshing, but was a little perturbed to see one of my Eider study sites on the Clyde labelled as *Gare Lough*.

This is a useful summary of wildfowl in Britain and Ireland compressed into a single volume. However, the wildfowl enthusiast probably has most of this information already in one form or another, and in more detail.

Chris Waltho

In Search of Harriers: over the hills and far away. Donald Watson, 2010. Langford Press, Peterborough, ISBN 978-1-904078-12-8, hardback, 112 pages, £38.00.



It is a shame that our late Honorary President, Donald Watson, did not live to see the publication of this lovely book, the fifth that he

both wrote and illustrated. It was on the Langford Press website before he died in 2005, and why it has taken so long to appear is a mystery. Anyway, it is here at last, and is a fitting tribute to his memory and his passion for Hen Harriers. Donald was a delightful man, admired by all, and I was very grateful for his help and the chapter he contributed for my book on George Lodge, another artist naturalist with whom he had much in common.

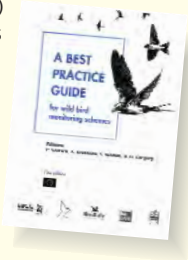
For those familiar with Donald's previous books, you will find a few paintings here which have appeared before. Most of the roughly 80 illustrations are new, however, and very good. Despite the absence of specific labelling, I had fun locating several of them from a map of Galloway, making use of information in the text. After a short Introduction, the book is divided into three broad sections: "Harriers and other species", "Hen Harriers in the breeding season" and "Winter roosts", and within each section are numerous "chapters" relating to the paintings. These are nearly all gouache but there are a few scraperboard and pencil drawings. Donald's text is as evocative as ever, and his historic anecdotes have added significance to the context of a declining Hen Harrier population. I recommend this book.

John Savory

A Best Practice Guide for Wild Bird Monitoring Schemes. P. Voříšek, A. Klváňová, S. Wotton, R.D. Gregory, 2008. CSO/RSPB, ISBN 978-80-903554-3-9, paperback, 150 pages, £19.99.

The idea for this Best Practice Guide emerged at European bird monitoring scheme meetings where the diversity of existing

(national) projects was recognised. Whilst the requirements for some aspects of monitoring will necessarily vary between



regions, there is a great deal of experience and knowledge that can usefully be shared. Thus this guide aims to improve the quality of wild bird monitoring schemes via exposition of key principles, description of relevant examples and references to sources of more detailed information. It has been written by active members of the Pan-European Common Bird Monitoring Scheme (PECBMS), an initiative of the European Bird Census Council (EBCC).

The book is well presented and fits together nicely considering it is a multi-author effort. Topics include the motivation, survey design, sampling strategies, field methods, managing and analysing the data and using the results. A diverse set of cases studies further illuminate various issues.

This is a rather specialist book targeted mainly at those running such schemes, nevertheless many aspects will also be of interest to dedicated fieldworkers. For example, those who may be concerned that their breeding bird records are dominated by the more vocal species, recording disproportionately more Wrens than Goldcrests, may be reassured to read about the methods to compensate for 'detectability'. A very minor criticism is on the danger of using web references, the software cited in the latter case requiring more work to find online. The book is available from NHBS.

Stephen Welch

Where to Watch Birds in Britain (second edition). Simon Harrap & Nigel Redman, 2010. Christopher Helm, London, ISBN 978-1-4081-10591, softback, 671 pages, £19.99.

The authors' justification for producing this new guide only seven years after the first edition (reviewed in *SBN* 70) is to take account of "tremendous changes in the British avifauna" that have occurred in the interim. This begs the question of how long it will be till the next edition. The number of sites covered has now risen from nearly 440 to 454, and the number of maps has also risen, to almost 300. Many of these are new, many have been revised and updated, and some feature more than one site. Grid references are provided for the first time and many more websites are listed. However, as the authors admit, "it is inevitable that a site guide such as this will become out of date as soon as it is published". I found this to be true when I took it with me recently to RSPB Titchwell reserve in Norfolk and found that two of the three hides it showed there have been demolished as part of current re-landscaping!



The Scottish coverage, of 105 sites, is far from comprehensive, and for local birding you are probably still better off with "Where to Watch Birds in Scotland" (also published by Helm). Nevertheless, this new book is still a most informative guide for the whole British mainland (including the Isle of Wight but not Northern Ireland), and there is a useful new section at the back showing all the sites where you can go to look for the

authors' choice of "the 100 most sought-after species in Britain".

John Savory

Advanced Bird ID Guide: the Western Palearctic. Nils van Duivendijk, in association with British Birds, 2010. New Holland Publishers (UK) Ltd, ISBN 978-1-84773-607-9, paperback, 304 pages, £14.99. Special offer to SOC members £9.99 with free P&P from Grantham Book Services 01476 541080.

Nils van Duivendijk has been birding since the age of nine, studying birds in a more systematic way as an adult. He then became chairman of the Dutch Rarities Committee and published the precursor to this book in Dutch in 2002. He is a regular contributor to *Dutch Birding*.



Now published in English for the first time, the *Advanced Bird ID Guide* is a concise pocket-sized guide, and, as the name suggests, for the more serious bird watcher. Apart from two pages of illustrations detailing the topography of the birds there are no photos or pictures in the book but in-depth detail of the plumage of all 1,300 species and subspecies recorded in Britain, Europe, North Africa and the Middle East. It gives key details on specific identification characters separating particularly difficult species including rare vagrants; information that you would not normally find in standard identification guides. The information is arranged in bullet points and is straight-to-the-point.

The size of the book is designed to be used in the field or from photographs or in the hand. A bibliography and index are also comprehensive.

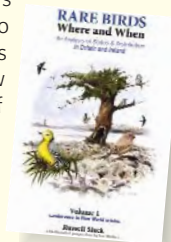
All-in-all this is excellent value and an absolute must for all serious birdwatchers.

Karen Bidgood

Rare Birds, Where and When: an analysis of status and distribution in Britain and Ireland. Volume 1: sandgrouse to New World orioles. Russell Slack, 2009. Rare Bird Books, ISBN 978-0-9562823-0-9, hardback, 483 pages, £29.99.

Rare vagrant birds are a source of great fascination to many and this book, the first of two volumes, provides an illuminating account of their occurrence in Britain and Ireland. The author was motivated by a desire to understand the occurrence patterns of rarities. The in-depth analysis here is a substantial step in pursuit of this goal.

Following the foreword by Ian Wallace, an excellent chapter on vagrancy mechanisms in passerines and near-passerines is provided by Alexander Lees and James Gilroy. Broken down by source region and season, the general emphasis is on the complexity of factors affecting vagrancy, with simplistic explanations dismissed. Two useful chapters briefly overview the role of BOURC and BBRC, authored by their respective chairmen.



The species accounts are tailored to each individual case, covering breeding range, subspecies (many with a discussion of the latest taxonomy), status, historical review, where, when and discussion. The status section includes a summary of British and Irish occurrences (to 2007), with a complete list for (sub)species with up to 22 records, and many of the rarer occurrences are further illuminate by finder's accounts. Frequent use is made of charts and graphs in presenting the historical and seasonal patterns. Category D and selected E species are treated in the same manner at the end.

The discussion sections interpret trends in occurrences in terms of distributional or population changes and migration routes, making reference to other relevant extra-limital records in the rest of the Western Palearctic.

Inclusion of maps would have been a useful enhancement, but aside from a few typographical errors, there is no doubting the value of this enhanced analysis of our rare birds and the second volume is eagerly anticipated.

Stephen Welch

Nightjars of the World.
Nigel Cleere, 2010.
Wildguides Ltd, ISBN 978-1-903657-07-2, hardback, 464 pages, £45.00.

With my own experience restricted to the two European nightjars, this beautiful photographic guide was a revelation. Coverage of the nocturnal *Caprimulgiformes* must be one of the most taxing of all orders, but the author has done

an incredible job. The book's subtitle also refers to the other members of the order treated here - potoos, frogmouths, Oilbird and owlet-nightjars. After an introduction, there are comprehensive chapters on distribution, plumage and structure, general biology and taxonomy, profusely illustrated by stunning colour photographs of structure, displays and nests. The major part of the book (362 pages) comprises the 135 species accounts, each accompanied by a distribution map, a short text and several colour photos. Some species are so rare that only photographs of museum specimens were available. The texts very briefly summarise key identification points and information on vocalisations, habitat, altitudinal range, breeding and current status. The photographs are large, to a very high standard, and absolutely remarkable, considering the nocturnal behaviour and cryptic plumage of most species. These were sourced from many photographers worldwide, whose credits fill 17 pages after a useful glossary. Appendices list extinct species and alternative English names.

Although not expensive for a book of this nature, I'm not certain who would buy it. As an identification guide, it lacks detail, especially on vocalisation - an all-important aspect when considering nocturnal species. As a specialist reference book, most birders may refer to it only occasionally and then only as a library copy - but it's a beautiful book to browse.

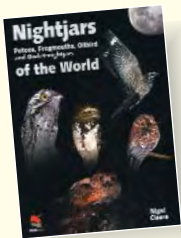
Norman Elkins

Species Management: challenges and solutions for the 21st century.
Scottish Natural Heritage, edited by John Baxter & Colin Galbraith, 2010. The Stationery Office, ISBN 978-0-11-497348-3, hardback, 572 pages, £27.50.

This substantial publication contains the proceedings of a major conference on the a b o v e subject organised by SNH in 2009. There are 29 papers covering a wide range of species-related topics - mainly focussed on Scotland but set within the context of the rest of Europe and beyond.

The papers are grouped broadly under four headings - species in need of conservation action (including re-introductions), dealing with invasive alien species, conflicts of interest between species and with man, and sustainable use. Species as diverse as bumblebees, Mink and White-tailed Eagles feature, as well as the intractable issue of Hen Harrier persecution. The relationship of species to their marine and terrestrial ecosystems is also considered in several papers.

As one would expect, the authors are distinguished in their various fields and provide an authoritative coverage of their subjects. Without exception the papers are very readable and some give a fascinating insight into the social and political dimensions which so often provide barriers to progress. Clearly an enormous amount of time and money is being invested by scientists, agencies, NGOs and amateur enthusiasts - so that we now



understand a great deal about the various problems and issues. There are some success stories, but overall it is disappointing that despite this huge effort so many of our species and natural ecosystems are still in decline or under pressure.

John Hunt

Twitcher for the iPhone and iPod Touch. 2010. Edgeware Technology Ltd, £9.99 from AppStore or via www.twitcherapp.co.uk. Requires iOS 4.0 or later.

Several birding applications (shortened to 'apps') are now appearing on the market; this review looks at one of the first to become available. Only read on if you have an iPhone...

Under the banner "the ultimate bird identifier and field guide", this App has several functions. The 'bird identifier' uses a key approach to allow you to home in on likely species based on a series of



questions. It is remarkably similar to the 'bird identifier' feature on the RSPB website, and indeed uses their illustrations. The questions are basic and you have set choices, e.g. you have five size classes and the range of colours is a strange selection including blue, pink, orange, etc, but not buff! Some males and females are split, but there are no juveniles or immatures (unlike the RSPB version). Testing it out, it worked in many cases, but answering some questions 'wrongly' often excluded my bird from the list of potentials and apparently a Black-tailed Godwit is 'larger than a Mallard'.

The 'reference' tab links to details of the 267 species included (300 entries when you count the males and females that have been split). For each there is an illustration, sound clip, basic description and various other headings. Dipping into these, I found the information of mixed value - the Blackcap sound clip sounded more like a Garden Warbler and the fact that male Corn Buntings were '20% larger than females' was news to me. Links to Wikipedia and photos on Flickr are useful, but these need an internet connection.

'My sighting' is a potentially useful function where the app creates a record, taking your current GPS location to which you can add a species and a comment. These can be emailed as a file which can be opened in Excel. This has limitations, as much of the detail has to be lumped into a 'notes' field.

The name 'Twitcher' jarred and is an odd choice, as no rarities are included. The app is most suited to those learning identification skills, and in my view, even then it is of limited value. The concept is good, and one which I hope will evolve over the years.

Ian Andrews

Other recent acquisitions to the SOC library

Strangers - memoirs of a lighthouse keeper's daughter including those on May Island by Ruth Dickson, 2009. Published by Craill Museum Trust.

A short pamphlet of memories of the daughter of the lighthouse keeper on the Isle of May in the early 20th century, including memories of the Misses Baxter and Rintoul. Of interest for those who have visited the Isle of May and would like to know more about how people lived on the island.

Atlante della Migrazione degli Uccelli in Italia. Volumes: I. Non-passeriformi and II. Passeriformi by Fernando Spina & Stefano Volponi. Published by Istituto Superiore per la Protezione e la Ricerca Ambientale.

This rather heavy and impressive looking migration atlas is in Italian with English sub-titles and an English summary for each species. It provides an historical perspective of the origins of bird watching in Italy. Detail is also provided on Materials and Methods used to collect the data. It comprises of two volumes of 600 and 800 pages and bears many similarities to our own Bird Atlas but without the colour photos.

New Journals recently added to the collection

Chinese Birds - a collection of scientific papers written in English.
Bird Art & Photography - an interesting mix of articles that will appeal to birdwatchers, bird art lovers, amateur painters and photo enthusiasts.

Karen Bidgood

OBSERVATORIES' ROUNDUP

Observatories' Roundup is a regular bi-annual feature about our bird observatories in Scotland. The intention is to publicize the work of the observatories, visiting opportunities, as well as incidental snippets of news from the islands.



Plate 295. *The Tower, McLeod's Garden, the Beacon and Signal Station* © P. Sandeman/SOC archive.

75 years of the Isle of May Bird Observatory

"28 September 1934. WBA, HFDE, RML and EVW landed on the island. The shrubs to form the artificial cover, wire netting and other materials for erecting the trap had been sent over earlier."

This is the first entry in a large ledger bought from George Waterston and Co, Stationers and forming Volume One of the Isle of May Bird Observatory Log. It records the establishment of Scotland's first bird observatory on the Isle of May in the Firth of Forth but who were these people described in the log only by their initials and how did they come to be on the Isle of May?

The author, HFDE, was Frank Elder. He was in his early twenties and was the first Secretary of the Bird Observatory. WBA was Wilfred Alexander - the first Director of the Edward Grey Institute for Field Ornithology. He had given a lecture on bird



Plate 296. *Founder members H.F.E. Elder, G. Waterston, P.W. Sandeman, W.M. Kerr, and A.G.S. Bryson (left to right) outside the original Observatory* © SOC archive.



Plate 297. *The Signal Station or Lookout - the original home of the Observatory* © IoMBO Trust.

observatories to the Royal Physical Society in Edinburgh in January 1934 which had aroused a lot of interest. RML was Ronald Lockley, the founder of Britain's first bird observatory on Skokholm and a very original ornithologist doing important work on seabirds, particularly Manx Shearwaters. EVW was Eric Watson who was 20. He was a first rate all round naturalist who later became a distinguished botanist and authority on liverworts. How did these four young men come to be on the May?

They were following up work on bird migration started by Dr Eagle Clarke and continued by two remarkable ladies inspired by him to take an interest in bird migration. The two ladies were the Misses Baxter and Rintoul. From their base in Fife, they pursued their study of migration using the Isle of May. We have their beautifully kept records. One is full of admiration for their energy and stamina though not, nowadays, for their skill with the shotgun. In September 1907, Miss Baxter's log records seeing a Barred Warbler on the May which was "flushed and returned repeatedly to the same place in spite of having been fired at several times", and also a Red-backed Shrike which "looked sad and never happy". Perhaps unsurprising, since Miss Baxter shortly afterwards shot it.

Between 1907 and 1933, they made spring and autumn visits to the May, except for the period of the Great War. During this period they spent a total of 684 days on the island, on average three weeks a year. In addition, they received from the lighthouse keepers detailed schedules of bird observations covering the long periods when they themselves were unable to be on the island. The ladies were not only industrious, they were also thoughtful and concerned to try and explain what they saw. They didn't accept the received wisdom. For instance, on 12 June 1905, Miss Baxter recorded that, "Our boatman told us that Gannets never fly in even numbers. This statement we observed to be incorrect."

From their regular visits to the island they developed their concept of migrational drift which they published in *Ibis* in 1918. This important and original article noted the association of easterly and south-easterly winds and poor weather with rushes of migrating birds. They drew on experience of homing pigeons in different wind conditions in the Forth and very clearly and forcefully argued for the concept of drift migration. The wider work of the Misses Baxter and Rintoul on Scottish birds was of huge importance to the development of Scottish ornithology and not only to the development of the May.

The Inverleith Field Club

The 1920s was the period when bird watching moved beyond collecting and classifying, beyond the shotgun and the museum and into fieldwork, much of it carried out by enthusiastic volunteers. In 1929 a group of young men in Edinburgh formed the Inverleith Field Club. They were either at, or had just left, The Edinburgh Academy. Their average age was 18 and they met in George Waterston's house in Inverleith Terrace. George Waterston was a great moving spirit, an enthuser and a creative force in Scottish ornithology. The Inverleith Field Club was aware of the valuable work which had been done by the Misses Baxter and Rintoul on the May. In January 1932, Miss Rintoul came to Edinburgh and gave a talk to the Inverleith Field Club. She clearly made a great impression. George Waterston recorded in the minutes of the Club that "the racy manner in which she delivered her talk was greatly appreciated by everyone."

In 1932, George Waterston and Frank Elder paid their first visit to the May. The next year a larger group of the Club camped on the island in the autumn. It was on that 1933 visit, while playing a game of football against the lighthouse keepers, that the Club members had their first

experience of a rush. The goalie noticed a Red-spotted Bluethroat and by the end of the game six had been seen. The Bird Boys beat the Lighthouse Keepers 11–10.

In 1933, the Inverleith Field Club expanded into the Midlothian Ornithological Club. The Club emphasised the furtherance of knowledge through cooperation - a principle we now take for granted but many of the older naturalists were quite jealous of their knowledge. The new Club decided to set up an observatory on the May. The Misses Baxter and Rintoul were cool about this initially. However, the Club decided to go ahead. They moved with remarkable speed. During 1934 they put out a successful appeal for what seems today a very modest sum of money: £83.

On 28 September 1934, the MOC members landed on the May and made that first entry in the log. The Observatory had started its work. Their premises were an old signal station made available by the Northern Lighthouse Commissioners. By 3 October 1934, the new Heligoland trap was in operation and had caught its first birds - a Wren, a Blackbird, a Song Thrush and a Goldcrest. By 1936 1,511 birds had been ringed.



Plate 298. Frank Elder, Archie Bryson and Donald Watson (left to right) at the Low Trap in 1935, with the first ringing hut under construction in the background © SOC archive.

The heroic period

The stage was now set for the first period in the Observatory's history, up until the Second World War. This is the heroic period of the observatory. The great work of the Misses Baxter and Rintoul was taken over by younger people with the new approach of trapping and ringing - although shotguns appear in early photographs. This was also the first stage of the development of the bird observatory movement in Great Britain. The Isle of May was not the first bird observatory in Britain - Skokholm was. However, the May is the oldest surviving British observatory. Spurn Point followed in 1938, but it was not till after the Second World War that the expansion really took place. It is worth pausing at this point to consider the excitement of those days and the appeal of migration work.

First, the subject. Here was a puzzle worth trying to solve. Why do birds migrate, how and when do they migrate, how do they survive and find their way? Why do certain birds turn up at certain times in certain types of weather? Second, the place and method of study - remote and exciting places. James Fisher wrote, "Migration study will always depend on the observatory and the field man, the island lover, the cape cliff haunter, the bunk sleeper and the sandwich eater". R.M. Lockley wrote, "There is something about a small island that satisfies the heart of man." There was still plenty to be found out by the enterprising amateur. In the 1930s, boat hire was cheap and the observatory charge was a shilling (5p) for an overnight stay on the Isle of May.

The period was one of great enthusiasm. The logs record not only lots of interesting birds, but also games of football and rounders with the lighthouse keepers and concerts by the Isle of May choir in the Principal Keeper's house, going on till 2 am.

A formidable visitor in 1935 was Max Nicholson. Massively energetic, he played a major part in founding the BTO, the Edward Grey Institute and the Nature Conservancy. He turned bird watching from an amateur pastime into something more rigorous. When he visited the May, he got everyone doing systematic censuses of all the birds on the island.

The War

However, all this was suddenly interrupted. On 20 September 1938 - right in the middle of the migration season - the lighthouse keepers of the Isle of May brought down a radio message from the Commissioners for Northern Lights to tell the observers they had to leave the island the next day so that it could be garrisoned by the Navy in the face of the worsening international situation. Within a short time the island was transformed, with the building of huts and the influx of the Navy. Eventually, 70 service personnel were staying on the island. The Isle of May became *HMS May Island* and the work of the observatory stopped for the period of the War.

In 1939, Landsborough Thompson wrote that no rare or unusual migrants were marked in 1939 as trapping on the Isle of May was necessarily in abeyance - an illustration of the importance of the Observatory in the 1930s.

On 3 September 1939, Archie Bryson, one of the original members of the Inverleith Field Club and a frequent visitor to the May wrote splendidly in his diary, "The Second German war started today. It was unanimously resolved that the birding must go on."

The members of the Midlothian Ornithological Club who had set up the Observatory joined the forces and were scattered over the world. Almost miraculously, all survived. Throughout the War they continued birdwatching.

George Waterston was captured after the fall of Crete and sent to Eichstatt Prisoner of War Camp in Bavaria. Also in the camp were Peter Conder, who became warden of Skokholm Observatory and Director of the RSPB, and John Buxton, who was R.M. Lockley's brother-in-law. Buxton organised his fellow prisoners to watch Redstarts' nests and after the War wrote the *New Naturalist* volume on the Redstart. From his captivity, George Waterston sent off his ornithological notes from his time on Crete to the German ornithologist Erwin Stresemann (after whom Stresemann's Bush Crow is named). Stresemann went to Crete after the German occupation and published an article on the birds of Crete in 1944 incorporating, with acknowledgement, George's observations. More importantly, George



Plate 299. Donald Watson painting at the south end of the May © SOC archive.

Waterston and another fellow prisoner, Ian Pitman, planned Fair Isle Bird Observatory. Frank Elder, the first secretary of the Observatory, and Ian Munro met up during an artillery battle following the Normandy landings and had a discussion about Firecrests. Archie Bryson, the Observatory's Treasurer, was posted to the Royal Indian Navy. As he sailed out in a convoy, his diary mixes observations of Great Shearwaters with accounts of U-boat alarms. Donald Watson called on Archie in India on his way to fight in Burma. Donald noted Yellow-browed Warblers and Red-breasted Flycatchers - familiar to him from the May - during the Battle of Arakan. Donald carried with him a small paint box and after the War become one of Scotland's leading bird artists. Maxwell Hamilton, who joined the Royal Navy, was sunk twice, once within sight of the May. Herbert Dacker was captured at Torbruk. Pat Sandeman took part in both the Dunkirk evacuation and the Normandy landings. The Pittenweem fisherman, Andrew Blackery, who took the observers out to the May in the 1930s, was engaged on a more hazardous task as he ferried troops ashore on D Day. Max Nicholson was organising Atlantic convoys and at Yalta with Churchill - but always birdwatching.

The Golden Age

George Waterston was repatriated on medical grounds in 1944 and in November of that year managed to visit the May despite the opposition of its rather prickly CO. In March 1945, Maxwell Hamilton visited the island. It was still occupied by the Navy. Broody hens were being kept in one of the traps. With a splendid sense of priorities, Maxwell Hamilton reported to the Midlothian Ornithological Club that "We must be prepared to act immediately after the defeat of Germany on the assumption the island will be vacated."

On 13 April 1946, the Observatory reopened. On reopening, there was a long correspondence between the Observatory and the Commissioners for Northern Lights about whether women ornithologists would be allowed to stay in the Low Light. The Commissioners eventually relented in 1947. Women were allowed. In 1947, the control of the Observatory was transferred to the Isle of May Bird Observatory Committee with representatives of the four Scottish Universities. In 1985, the Committee was replaced by a charitable trust.

The period after the War and during the 1950s was the golden age of bird observatories. Almost every year a new bird observatory was set up. Twenty-four observatories were set up between 1933 and 1970. There was, of course, Fair Isle in 1948 and many others followed in England and Wales. Oddly, there was not to be another major bird observatory in Scotland after Fair Isle till North Ronaldsay in 1987. Of the 30 new species added to the British list between 1948 and 1958 half were found at bird observatories.

When the Observatory on the May reopened after the War, it was in new premises. The old leading light on the east coast of the island - the Low Light - had been refurbished to accommodate the Observer Corps. It was taken over by the bird observatory and remains its quarters to this day. The Low Light was built in 1844 and consists of a small white washed tower and modest single storey accommodation.

It was an exciting time for birds too. Species such as the Isabelline Shrike and the Siberian Thrush were added to the British list. Substantial

data on migration was collected and many birds ringed. The migration seen on the May can be divided into three types. First, the coastal migration of birds such as hirundines, pipits and larks where the island is a stepping stone across the Forth. Second, the disoriented movements of migrating birds associated with certain weather patterns, particularly easterly and south-easterly winds and poor visibility. This leads to the most interesting birds turning up. However, nothing is predictable about it. Interesting things can turn up at any time and the relationship between migration and weather is often obscure. Third, there are the huge influxes of birds, particularly thrushes, in the autumn with Redwings and Fieldfares tumbling out of the sky. October has seen exceptional movements of birds: with day counts of 15,000 Goldcrests, 30,000 Blackbirds, 7,000 Meadow Pipits and 12,000 Redwings. On 11 October 1980, 25,000 migrant birds were present on the island. Quite recently - in October 2006 - an amazing autumn movement of 100,000 Little Auks was seen from the island.



Plate 300 (a-b). Siberian Thrush, Isle of May, October 1954 © Dougal Andrew.



Plate 301. Sooty Tern, Isle of May, July 1989 © Mike Harris.

New developments in migration studies

To cope with the huge interest in migration in the 1950s, with the May in the forefront, the BTO appointed a Migration Officer - Kenneth Williamson, the first warden of Fair Isle Bird Observatory. A special journal *Bird Migration* was published. The Bird Observatories Council was established. However, there were in the late fifties two important developments: radar and mist nets. By great good fortune David Lack, one of the most distinguished ornithologists of the twentieth century, spent his war service developing radar. This put him in an ideal position to examine and explain what were at first called angels on radar screens. They were in fact flocks of migrating birds. This information added a valuable new dimension to migration studies. Radar evidence suggested that what was seen at bird observatories on the ground was not representative of what passed undetected overhead. This argument has perhaps been overstated. It was not as if radar told the whole story either. The reverse was also true since low flying birds fly under the radar. Thus there can be falls of birds at observatories which are not detected by radar.

The second development was the mist net. This ended the supremacy of the observatories' Heligoland traps which up till then had accounted for a high proportion of adult birds ringed. However, mist nets are used by observatories too and have expanded the possibilities rather than replaced them. Yet, by 1976 ten of the original observatories had closed down. However, 19 remain. Other interests and techniques were enriching ornithology. The 1960s onwards was a period of census and survey with the BTO taking the lead through its huge and growing body of volunteers and the development of computing capacity in its major atlas projects. This led to massive increases in knowledge of bird populations and their size and also a huge development in migration studies. In addition there have been other remarkable technical advances, such as radio tracking. These remarkable developments continue. The scope of migration studies is increasing all the time.

The 1960s to the present day has seen the Isle of May continue its studies of bird migration and maintain a data series which now spans more than a century. The Observatory has continued

to ring birds and at the end of 2008 had ringed 267,128 birds of 183 species. Over 275 species have now been seen on this tiny rocky island. The number of traps has been increased so that there are now four Heligoland traps. After much effort, some more bushes have been established and rides for mist nets have been established. In 1989, the island was transferred from the ownership of the Northern Lighthouse Board to the Nature Conservancy Council.

Observatory life and people

When the Observatory started, it provided the simple life and facilities which were wholly acceptable to a group of young men on an island. Not a lot has changed. The Observatory was well equipped in the 1930s with china and other items from the two wrecks of the period - The Mars and The Island. In the early days, all the cooking was done on primus stoves and lighting was by paraffin lamps. The Observatory was heated by a coke range from a huge coal heap outside the back door. We have moved a little since then. Cooking and lighting are by Calor gas and the Observatory is heated by wood burning stoves, powered by driftwood.

However, it still remains a very simple life. There is no access to shops and all those staying on the island have to bring all their food with them, including some extra in case they are stranded.

The Observatory has flourished because of a number of remarkable people. The founders have already been mentioned. In the 1950s and 1960s Dr Joe Eggeling played a major part in running the Observatory as its secretary. He holds the record for being stranded on the island the longest - 11 days beyond the date he was due to leave. He also wrote the standard work on the May - an excellent work covering all aspects of the island. He was head of the Nature Conservancy in Scotland. A man in a category all of his own was Maury Meiklejohn, Professor of Italian at Glasgow University. It was Maury Meiklejohn who on 20 September 1949 added a new bird to the British list - *Dissimulatrix spuria*, otherwise known as the Hoodwink. The Isle of May log for that day contains a full description of the bird which has now been seen quite widely. Among its field characteristics are that it only perches beyond the range of strong binoculars and has remarkable powers of mimicry of rarer



Plate 302 Maury Meiklejohn © SOC archive.



Plate 303. Joe Eggeling © SOC archive.

species. Its song is described as a melodious 'teww-twee-swee-swee-birr' and also as resembling the words 'See you outside the Odeon, Saturday'. The general plumage is buffish tan, shading to tannish buff; and much more besides.

In the observatory logs one can chart the artistic development of Keith Brockie. This finds its culmination in his superb book *One Man's Island* which is a magnificent celebration of the island and its birds in drawings and paintings. Keith plans to spend a substantial part of 2010 at the Observatory working on a sequel to this book. Derek Robertson, another leading bird artist, has also produced excellent pictures of the birds of the May.

The Observatory has had a succession of energetic and efficient Secretaries. Joe Eggeling and the first Secretary, Frank Elder have been mentioned. Nancy Gordon, John Arnott, Bernie Zonfrillo, Ian Darling and Margaret Thorne have all made great contributions to the running and development of the Observatory. The Observatory has also been lucky to have had a succession of great boatmen ready to tackle all sorts of weather to get observers on and off the island. We started with fishing boats and now go out in a RIB.

Over the 75 years the other inhabitants of the island have changed. When the Observatory opened, there were lighthouse keepers and their families. There were babies in prams. There were beautiful gardens. There were goats and sheep and hens - and ferrets. However, in 1972 the lighthouse became a rock station and the families left. In 1989 the light became automatic and all the keepers left. The lighthouse keepers' accommodation now houses staff from the Centre for Ecology and Hydrology (CEH) doing work on seabirds and also PhD students. There may be up to 15 present in the summer. In the winter months, the Sea Mammal Research Unit comes onto the island to study the seals which breed there. Over a thousand Grey Seal pups are produced each year in November. There are two SNH wardens on the island during the summer months. They are very helpful to the Observatory in all sorts of ways. In the summer there are large numbers of day visitors. They have the opportunity to see an outstanding and

remarkably accessible seabird colony. The island is an important source of public education. It is worth recording that Charles Darwin was an early day visitor to the May - in 1826 when he was a student at Edinburgh University.

The future

Clearly the key part of our plans for the future is to maintain observer cover and the remarkable series of records of birds and, particularly, migrant birds. This means making accommodation and travel arrangements which will ensure that the Observatory is manned from the end of March until the end of October by competent ornithologists and, ideally, with ringers.

Another important part of our forward plans is to improve the facilities of the Low Light. We want to improve the sleeping arrangements and provide a bit more comfort and privacy. We want to use renewable energy for lighting and end our use of 'Elsie' the chemical lavatory. We shall shortly be launching an appeal for funds for these improvements. However, the essential character will remain. The Observatory will continue to be manned by volunteers and without a warden. It will remain its present size, which is in keeping with the size of the island.

Visiting the island

A visit is strongly recommended. There are two ways to do it. First, a day trip from Anstruther. From April till the end of September, weather permitting, the *May Princess* sails from Anstruther. This is an excellent boat and it gives the visitor about two and a half hours on the island. It is run by Colin Murray and details are available on the Anstruther Pleasure Trips web site www.isleofmayferry.com. It is strongly recommended as a great way of seeing the seabirds, including the biggest Puffin colony in Britain. The second way is to stay at the Observatory. While this is open to all keen naturalists, it is important that the Observatory is manned by experienced ornithologists during migration times. The Observatory can accommodate six and it is normally expected that a stay will be for a week. The weekly charge, which includes the boat fare, is £95 per person; less for students and children. Details on how to book are available on the Isle of May Bird Observatory web site www.isleofmaybirdobs.org.



Plate 304. *The Low Light - the current home of the bird observatory* © Brian Orr/IoMBOT.

Celebration

There is a great deal to celebrate in the Isle of May Bird Observatory's 75 years. Firstly, the achievements of two remarkable middle-aged ladies and a remarkable group of young men in tackling the problem of migration in an energetic and thoughtful way and genuinely advancing the study and understanding of migration. Secondly, the commitment to the study of birds through difficult times, as the War intervened and the 'bird boys' all gathered again to restart the Observatory and continue it in its flourishing state to the present day. Thirdly, its continuation as an important source of knowledge on migration, with records spanning over a century. Fourthly, the way in which the island has developed as a nature reserve and place of important seabird studies. Finally, and perhaps most important, the pleasure and fun that so many people have had staying at the Observatory and contributing to its work.

Niall Campbell

The Future

To ensure that the Isle of May Bird Observatory is placed to meet the needs of the next 75 years, the Trust has planning permission to build a

modest extension to the Low Light. This will contain new bedrooms, a flushing lavatory, improved washing arrangements and a solar powered electricity supply. The result will still be simple accommodation, but more comfortable and environmentally friendly. The essential character of the Low Light will remain unchanged.

Building on an island like the May poses special challenges – transporting materials, accommodating the workforce etc., and this adds to the expense. We need to raise over £200,00 to achieve the improvements, and have made good progress since the Development Appeal was launched in September, but we still have some way to go. Leaflets explaining the plans and the 'Isle of May Development Appeal' have been included with recent mailings of *Scottish Birds*, and we are grateful for the generosity of those SOC members who have already responded. If you would like to contribute, you can do so by sending a cheque (payable to "The Isle of May Bird Observatory Development Appeal") to: Niall Campbell, IoMBOT Treasurer, 15 Warriston Crescent, Edinburgh EH3 5LA. Further information is available from Niall or from the Isle of May website (www.isleofmaybirdobs.org).



Plate 305. *Yellow-billed Cuckoo, Deerness, Orkney, September 2009* © Gerry Cannon.

Yellow-billed Cuckoos in Scotland in autumn 2009

G. CANNON & S. KEAY

Deerness, Orkney, 29 September 2009
G. Cannon

I had managed to get down to South Ronaldsay to see the Sandhill Crane on 28 September 2009 and the next day I thought I would head to East Mainland - to Deerness.

I got to the car-park by the Mull Head RSPB Reserve and walked along the path that leads to a feature called The Gloop, a sea-cave with a cliff-top opening. Normally, after reaching this, I would continue toward the cliffs, then turn north toward Mull Head. That day though I decided to change route and diverted to photograph some horses. I walked along a ditch by the fence of the fields in which the horses grazed.

A bird suddenly rose from the ditch and sat on the wire fence. Although I'm no expert birder, it

was something very unfamiliar. The plain russet back, and the size and shape all told me it was something unusual. Fortunately, it did not go far, but stopped almost immediately on the fence running along the ditch.

The shape and posture suggested a cuckoo, but the colours were wrong, as well as the time of year. I thought that it might be the rufous variation that I'd read of, and perhaps was a late migrant that had drifted to Orkney from Scandinavia or Iceland. The fact that it had halted on the fence also suggested that it might be a young bird that hadn't yet learnt an older birds' wariness.

My main concern was to get a sharp image that could identify the species without doubt. I was too close to the bird, and out in the open, to risk changing position or even settings and, sure

enough, the camera's automatic focussing would later seem to have selected the wire fence to focus on rather than the bird. Just as I was considering trying to edge closer it took off and flew low and fast to the left. After about 120 m it flew into ground cover at The Gloup. The hawk-like flight added to the provisional identification as a cuckoo. I thought of following the bird up the slope but considered it too likely that it would move onto the rougher, cliff-top ground beyond The Gloup.

I wasn't aware of the bird's rarity and continued my walk, though I did head home earlier than



Plate 308. *Yellow-billed Cuckoo, Deerness, Orkney, September 2009* © Gerry Cannon.

usual. I posted an image on the local birder site 'Orkbird' (groups.yahoo.com/group/Orkbird), then checked a book or two and the web. I had decided that it might be a Black-billed or a Yellow-billed Cuckoo when an e-mail from local expert Paul Higson positively identified it as Yellow-billed, along with a plea for its exact location. He, and a few others got the bird later. I was quite surprised at the amount of interest, and pleased also at getting such a rare bird during my first year in Orkney. It also showed the usefulness of digital photography to the less expert birder like me.

Gerry Cannon, Kirkwall, Orkney KW15 1JL.



Plate 306. *Yellow-billed Cuckoo, Deerness, Orkney, September 2009* © Keith Hague.



Plate 307. *Yellow-billed Cuckoo, Deerness, Orkney, September 2009* © Keith Hague.

**Almondbank, Perth & Kinross,
4 October 2009**

S. Keay

On the evening of 4 October 2009, I answered a knock at our door to find our neighbour Myra Brien clutching something wrapped in kitchen towel. Her grandchildren had been playing in the garden that afternoon and had found a dead bird that had probably flown into the large lounge window. Myra was puzzled as to its identity as it wasn't a run-of-the-mill garden resident, and thought that I would be able to identify it. I wasn't too much help, but realised that it must be a passing migrant of some type. We set about scouring our respective bird books and although I found nothing in mine, Myra thought she had found it in hers and phoned to ask me to come over. At first I was rather sceptical when she showed me the illustration of Yellow-billed Cuckoo, but assured her that between a couple of my contacts, we would have the answer the following morning. I

emailed an ecologist friend and keen birder, Enda McLoughlin, at work first thing and was amazed when an excited e-mail returned within minutes confirming that it was indeed a Yellow-billed Cuckoo, and telling me that this was indeed a rare occurrence. I left Enda to pass on the news and to see whether any of our museums would be interested in the body. A further e-mail later that day put me in touch with Bob McGowan of the National Museum of Scotland in Edinburgh. They were very interested in our find and would like to have the cuckoo's corpse for the skin collection. As luck would have it we were passing through Edinburgh on the Monday and agreed to drop it off with him. The cuckoo has been set up as a study skin and investigations by the museum revealed it to be an immature male whose last meal consisted of some insects which they were hoping to identify later.

*Steve Keay, Cromwellpark, Almondbank,
Perth PH1 3LW.*



Plate 309. Immature Yellow-billed Cuckoo, Almondbank, Perth and Kinross, October 2009 © NMS.

The diet of the 2009 Yellow-billed Cuckoo in Perthshire and a review of the age and sex of all Scottish occurrences

R.Y. McGOWAN & R.M. LYSZKOWSKI

Yellow-billed Cuckoo *Coccyzus americanus* breeds in North America and migrates to winter mainly in South America. There are over 80 accepted autumn records of trans-Atlantic vagrants from Greenland, the British Isles, Scandinavia, Western Europe, the Azores, Morocco, Italy and Sicily. There have been 59 birds recorded in Britain, and nine from Ireland, to the end of 2008 (Payne 2005, Slack 2009).

A Yellow-billed Cuckoo was found dead following an apparent window strike on 4 October 2009 at Cromwellpark, near Almondbank, Perth by Mrs Myra Brien. The corpse was kindly donated to National Museums Scotland (NMS) and prepared as a skin and partial skeleton (NMS.Z 2009.136.1 and 2). The undersides of the tail feathers were greyish, with poorly demarcated whitish spots (Plate 310), which indicated the bird was immature (Cramp 1985, Hughes 1999); inspection of gonads proved it was male. This is the first record for Perthshire and the 12th for Scotland.

Diet

Remains of insects were retrieved from the Perth bird's stomach, but much of the content could not be identified to species as it was too fragmented. Identifiable remains consisted of at least 13 specimens of the Hawthorn Shieldbug *Acanthosoma haemorrhoidale* as well as portions of the elytra (wing-cases) of the Eyed Ladybird *Anatis ocellata* and a portion of the wing of a scathophagid fly. The Hawthorn Shieldbug is a common European species with a scattered Scottish distribution (RML pers. obs.); published records for the species are all post-1959, but the NMS has specimens taken in southern Scotland in 1946. The Eyed Ladybird occurs throughout the Palearctic and has been recorded from many parts of Scotland and is often quite common in coniferous woodland (RML pers. obs.); it has not been recorded in North America.

Mortality of Yellow-billed Cuckoos in Britain and Ireland is high, with 56% of birds found dead or dying (Cramp 1985). Anecdotally it has been suggested that one reason for these birds showing such extreme stress is that they may be less well adapted to the toxic prey species encountered here, in contrast to their adaptation to the normal range of prey insects in North America. Most ladybird species, certainly brightly-coloured ones, are toxic or distasteful to birds (Majerus 1994). Shieldbugs are also called stinkbugs, the former name alluding to the overall shape of the adult, and the latter name to the rather pungent smell possessed by most of them. Feeding trials have been shown to demonstrate rejection or aversion to feeding on stinkbugs by Killdeer *Charadrius vociferous*, Common Starling *Sturnus vulgaris*, American Robin *Turdus migratorius* and Anole Lizards *Anolis carolinensis* (Krall *et al.* 1999).

The main diet of Yellow-billed Cuckoo normally includes a range of large insects; one quantitative analysis revealed stomach contents comprising almost 50% caterpillars of butterflies and moths, and 12.5% Hemiptera (bugs) and Coleoptera (beetles) (Hughes 1999). North American species of stinkbug and beetle appear to be harmless to this cuckoo. Given the apparent healthy condition of the Perth bird, there is no overt indication that it was consuming (locally obtained) prey items that were injurious to its health.

Review of age and sex of Scottish occurrences

Details of age and sex presented in the species account in Forrester *et al.* (2007) are updated/supplemented here (and in one case, corrected). Ages of museum specimens were determined by the appearance of the undertail



Plate 310. *Immature Yellow-billed Cuckoo, Almondbank, Perth and Kinross, October 2009* © NMS.



Plate 311. *Immature Yellow-billed Cuckoo, Almondbank, Perth and Kinross, October 2009* © NMS.

pattern, and sex was determined from labels and/or wing length; comparative biometrics were from Hughes (1999). The skin of the bird from North Ronaldsay, 1991 is still held at North Ronaldsay Bird Observatory. Tail appearance was typical of an immature bird and wing length (149 mm) was indicative of a female. The corpse of the Argyll 1969 bird was photographed at the time and although the

images have not recently been reviewed, the tail appearance was considered to be that of an immature bird (H. Insley, pers comm.).

Argyll, Colonsay 1904, (BMNH 1904.11.28.1): immature; male suggested/indicated by wing length of 140 mm.

Orkney 1936 (Stromness Museum Z.95): immature; female (sex indicated on

specimen label)

Shetland 1952 (NMS.Z 1953.1.8): earlier sources (Forrester *et al.* 2007) gave age as immature, but bird was growing adult rectrices, therefore it is either in immature-adult moult or in adult-adult moult; female

Orkney 1956 (NMS.Z 1956.68): immature

Argyll, Balcaldine 1969: immature

Caithness 1970 (NMS.Z 1983.40): immature; female

Orkney 1991 (specimen at NRBO): immature; female indicated by wing length of 149 mm

Orkney 2009: adult (from images, see Plates 305–308)

Of nine sexed specimens (known or likely), four (44%) were male. Ageing by plumage appearance may not be straightforward as retention patterns of rectrices vary in 'second-year' and 'after second-year' birds (Hughes 1999). Of the 11 birds whose ages were assessed on appearance of tail feathers, nine were immature. One (Orkney 2009) was adult on the basis of a full 'after second-year' tail in September. Another individual, (Shetland 1952) was growing adult rectrices in November, suggesting either completion of 'second-year' to 'after second year' moult or one undergoing an 'after second-year' - subsequent year moult.

The masses of two birds are recorded on specimen labels. The Caithness female weighed 36.5g, typical for an exhausted immature autumn migrant (Cramp 1985). The Perth 2009 bird weighed 43 g, a remarkably high value for a migrant, though the stomach contents showed that this bird was apparently feeding well and there was no suggestion of starvation.

Somewhat remarkably, ten of the 12 Yellow-billed Cuckoos seen in Scotland have been found dead or dying; eight are preserved at museums and one is held at a bird observatory. Unfortunately, one corpse was not savaged. Clearly a case can be made for developing awareness and expertise in field preservation techniques to increase the opportunity for rare birds being deposited in museum collections.

Acknowledgements

The following are thanked for their help with the production of this note: Janette Park (Stromness

Museum), Katrina van Grouw (Natural History Museum), Kevin Woodbridge and Alison Duncan (North Ronaldsay Bird Observatory) supplied details of specimens in their care; Paul Sweet, Randall T. Schuh, Lee Herman and Sarfraz Lodhi (American Museum of Natural History, New York) commented on insect identification and distribution; Steve Young and Keith Hague made available a selection of images of the Orkney 2009 bird; Hugh Insley supplied details of the Balcaldine bird.

References

- Cramp, S. (ed) 1985.** *The Birds of the Western Palearctic*. Vol IV. Oxford University Press, Oxford.
- Forrester, R.W., Andrews, I.J., McInerney, C.J., Murray, R.D., McGowan, R.Y., Zonfrillo, B., Betts, M.W., Jardine, D.C. & Grundy, D.S. (eds) 2007.** *The Birds of Scotland*. The Scottish Ornithologists' Club, Aberlady
- Hughes, J.M. 1999.** Yellow-billed Cuckoo (*Coccyzus americanus*), *The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/418> doi:10.2173/bna.418
- Kovář, I. 2007.** Coccinellidae, pp. 568–631. In I. Löbl & A. Smetana (ed.) *Catalogue of Palaearctic Coleoptera*, Vol. 4, Apollo Books, Stenstrup.
- Krall, B.S., Bartelt, R.J., Lewis, C.J. & Whitman, D.W. 1999.** Chemical defense in the stink bug *Cosmopepla bimaculata*. *Journal of Chemical Ecology*. 25: 2477–2494.
- Majerus, M.E.N. 1994.** *Ladybirds*. New Naturalist Series, Vol. 81. HarperCollins, London.
- Payne, R.B. 2005.** *The Cuckoos*. Oxford University Press, Oxford.
- Slack, R. 2009.** *Rare Birds, Where and When: an analysis of status & distribution in Britain and Ireland*. Vol I. Rare Birds Books, York.
- Southwood, T.R.E. & Leston, D. 1959.** *Land and Water Bugs of the British Isles*. Frederick Warne & Co. Ltd., London.

Robert Y. McGowan & Richard M. Lyszkowski, Department of Natural Sciences, National Museums Scotland, Chambers Street, Edinburgh, EH1 1JF.

Stop Press: 13th Scottish occurrence on South Uist, November 2010, corpse secured.



Plate 312. *Baird's Sandpiper, White Sands Bay, Lothian, December 2009* © Peter Macdonald.

Baird's Sandpiper wintering in Lothian in 2009/10

I.J. ANDREWS

Baird's Sandpipers typically winter in southern South America from the high Andes down to sea level, and as far south as Patagonia. They are also more at home on freshwater than on the coast. It was therefore rather surprising that a way off-track migrant decided to winter on the beach at White Sands Bay in East Lothian during the freezing winter of 2009/10.

Colin Davison first saw the bird at Belhaven Bay on 7 November 2009 - already the latest Scottish record. After a five-day stay, it was not seen again until the 30th when he relocated it 6 km along the coast at White Sands Bay. The bird preferred the upper part of this sandy beach amongst the tide line wrack, where it fed mainly by probing in the sand. It survived an extremely cold spell, when there was even frost and snow on the beach, and was last seen on



Plate 313. *Baird's Sandpiper, White Sands Bay, Lothian, December 2009* © Peter Macdonald.

11 January 2010. Its departure coincided with the end of the coldest snap, so maybe it took this opportunity to move on, or maybe it just succumbed to the weather or the local raptors.

The bird showed no sign of moult from juvenile plumage during its stay. However, the feather fringes were worn and considerably thinner than on fresh juveniles, which look decidedly scaly in comparison. Typical juvenile Baird's Sandpipers moult on arrival in their winter range, by which time the plumage can be extremely worn. Interesting, this can be as early as late October (Howell 2010), so this bird was certainly late moulting.

The only other record of over-wintering in the UK is a bird at Staines Reservoir, Surrey, which stayed from 14 October 1982 to 24 April 1983.

Reference

Howell, S.N.G. 2010. *Molt in North American Birds*. Peterson Reference Guides.

Ian J. Andrews



Plate 314. Baird's Sandpiper, White Sands Bay, Lothian, December 2009 © Peter Macdonald.



Plate 315. Baird's Sandpiper, White Sands Bay, Lothian, December 2009 © Peter Macdonald.



Plate 316. Glossy Ibis, RSPB Loch of Strathbeg, North-east Scotland, October 2009 © Chris Gibbins.

Glossy Ibises in Scotland in autumn 2009

P. DAW, D. PARNABY & J. NADIN

Near Loch Sween, Argyll, September 2009

P. Daw

A report was received that a Glossy Ibis had been seen NNW of Knockvologan, near Fionnphort, on 16 September 2009. It was apparently seen the following day, but was not photographed and no description/record has been submitted for this.

On 26 September, I was driving back from doing my Loch Sween WeBS count when I saw a strange bird near Barraormid Farm (c. NR715835) at 14:35. I first saw the bird as it was standing in the field and got the impression of an all dark (blackish) wading bird slightly larger than a Eurasian Curlew. I stopped to see what on earth it was and the bird flew up. I was extremely fortunate that it just circled and



Plate 317. Glossy Ibis, near Loch Sween, Argyll, September 2009 © Morag Rae.

landed back in the same place so that I was able to snatch a few quick photos through the car window. The plumage appeared dark greyish-black with a purplish tinge. It had a similar basic structure to a Curlew, although rather larger, with longish neck, a long blackish down-curved bill and long blackish legs. It was quite obviously a Glossy Ibis!

After a couple of minutes it flew off south-west towards 'The Puddle' (Ulva Lagoons). As far as I could see it landed again on the north-west shore of the lagoons, but when I drove back down there for a quick look I couldn't find it. It may well still have been in the area, though as I didn't have time for a more thorough search.

When I phoned Morag Rea (who lives at Tayvallich) to tell her about it she told me she had had a phone call the day before (25th) saying the bird had been seen (by John MacCallum & later Charlie Self) at about 11:30 feeding with Hooded Crows in the caravan park at Tayvallich! Sadly, by the time Morag and her husband got there the bird had flown. So, the bird had obviously been in the area for at least a couple of days.



Plate 318. *Glossy Ibis, near Loch Sween, Argyll, September 2009 © Morag Rae.*

Following my phone call, Morag and her husband Norman drove down towards Keills and found the Ibis at about 15:15 in almost exactly the same place that I had seen it. They watched it there for about 20 minutes. At one point it came to within about 30 m from them and she managed to get some excellent photos. It was also seen briefly associating with a Hooded Crow. It was looked for again on 27 September, but without success.

**Paul Daw, Tigh-na-Tulloch, Tullochgorm,
Minard, Inveraray, Argyll, PA32 8YQ.**



Plate 319. *Glossy Ibis, near Loch Sween, Argyll, September 2009 © Morag Rae.*

RSPB Loch of Strathbeg, North-east Scotland, October 2009

D. Parnaby

I was dropped off at work at RSPB Loch of Strathbeg nature reserve on 9 October just before 8 am by my wife Susannah, who was in a hurry to get back home. I suggested it may be worth popping into the Visitor Centre for a quick check, "You just never know what might be out there," I suggested. Despite generally not trusting my forecasts, a recent run of reasonable birds on the reserve in the preceding week (including White-rumped Sandpiper and a couple of Snow Geese) persuaded her that it might be worth it.

From the observation room I was surprised to see, sat hunched in the main channel of the pools in front of the centre, an immature Glossy Ibis. A Grey Heron towered over it, giving an indication of the relatively small size of the bird, but there was no need to worry about size comparisons: an all dark brown bird with a quite thick, decurved bill (giving an overall impression reminiscent of a chunky curlew), left only one option for the identification.



Plates 320–321. Glossy Ibis, RSPB Loch of Strathbeg, North-east Scotland, October 2009 © Chris Gibbins.



Plate 322. Glossy Ibis, RSPB Loch of Strathbeg, North-east Scotland, October 2009 © Chris Gibbins.

Susannah had a look at the bird, then headed home, and I went to get the reserve camera and get the news out. The Ibis seemed quite settled and, given that the last one I saw in Devon didn't move much for about two years, I thought it was probably safe to leave it for a moment. Sadly, on my return, there was no sign of the bird. I assumed it would emerge from one of the channels at any moment, but as time ticked on, it became obvious it had disappeared.

A few observers began to arrive and I was left to explain that the bird wasn't on show and that I wasn't entirely sure where it was - surely it would turn up somewhere on the reserves extensive wetlands soon though? After about three hours, I was put out of my misery. Alex Guthrie and her dad, Gus, were returning from a birding trip to Orkney to their home in Angus, and though they had seen the message that the Ibis had disappeared, they thought it was worth calling past in the hope it would be relocated. They probably hadn't banked on finding it in a roadside field on the St Combs road though!

Amazingly, the Glossy Ibis had decided that a small, soggy area of field was the perfect place to settle, despite being only a few yards from the B9033. It remained here until 26 October, often showing down to just a few yards - even when roadworks started up 50m from its favourite puddle! At times it was seen in the trees at the side of the road, and it seems likely that it was roosting here as it was never seen on the reserve again, despite the site being regularly checked at dawn and dusk. The few times during its stay when it was not present in its favourite field, it may have been roosting in the trees, or was possibly feeding elsewhere, although it never went missing for long.

Although there had been a large influx of Glossy Ibises into southern England in early September, very few had made it north of the Midlands and we had assumed we weren't going to share in the bounty, with the earlier one in Argyll in late September destined to be the only Scottish record from the influx.

Subsequently, there was a later record of one in Upper Forth on 9 November, and then a surprising record of one near the Loch of

Strathbeg on 24 December, less than a mile from the original sighting. Presumably this was the same bird as seen in October, but where had it been hiding in the meantime? The fact that the bird had lingered in such an easy to see location for almost three weeks meant that when it disappeared, it wasn't really looked for and may well have been hiding in a wet field somewhere, just off the beaten track.

David Parnaby, RSPB Loch of Strathbeg, Starnafin, Crimond, Fraserburgh, AB34 8QN.

Black Devon Wetlands, Upper Forth, November 2009

J.S. Nadin

On 9 November 2009 I was doing a bird survey in the area of Black Devon Wetlands (near Clackmannan) when at about 13.15 I picked up a dark bird in flight to the west of the River Black Devon. I managed to get my telescope on it and was shocked to see a Glossy Ibis flying south-east along the edge of a disused tip - I was expecting it to be one of the usual Cormorants, of which there are many. Luckily the bird turned and headed north-west and towards me and flew high, virtually over my head. I attempted to take a photograph with my pocket camera but only managed a distant record shot. It then landed on a wet area in a newly cut area of rough grassland, but before I could set the scope and camera up for some digiscope pics it was harassed by a group of Carrion Crows and soon took flight again. This time it headed south-west towards the River Forth and appeared to come down in that area - but sadly out of sight.

Although I stayed for almost two hours I did not see the bird again. I phoned a few people to try and get them out to try and see the bird and Birdline Scotland. At least two people looked for the bird later that day in the Black Devon Wetlands area, Rab Shand checked the area (from the south side of the River Forth near Dunmore) the next day and I spent several hours looking for it on 11th (on both sides of the Forth) but there were no further sightings of the bird (that I am aware of). I heard on the evening of the 9th (from BirdGuides) that a



Plate 323. Glossy Ibis, Black Devon Wetlands, Upper Forth, November 2009 © John Nadin.

Glossy Ibis was reported near Loch Lomond that morning, and I suppose that sighting could relate to the bird I saw.

In flight the bird resembled a flying black cross but with the wings looking much wider/broader than the head-neck or tail-legs. The flight consisted of several quick wing-beats followed by a glide (especially when coming in to land). The bird looked quite uniformly dark, suggesting it was an adult, but due to the recent large influx of first-winter birds I suspect this bird was of similar age (although no white was noted on the head or neck). As the bird was only seen at distance on the ground and the majority of the 4–5 minute duration of the sighting was of the bird in flight the subtleties of the birds plumage colour (purples/greens) were not really seen, nor was the bird's eye colour noted during the observation.

**John S. Nadin, 40 Dempster Place,
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Glossy Ibis – its status in Scotland

This species has a discontinuous breeding range in wetlands of tropical to temperate zones throughout the world. In Europe the largest populations are found in south-eastern Europe from the Balkans eastwards. These

birds normally migrate to winter in Africa, but are prone to making post-breeding dispersals. The species underwent a notable decline over much of its European range during the 20th century. However, in recent times there has been a dramatic re-establishment of breeding populations in southern Spain from a handful of pairs in the 1990s to over 2,000 in 2009. Similarly, breeding was observed again in the Camargue, France during the 1990s and has now reached over 250 pairs.

Up until the end of 1949 there were about 340 birds recorded in Britain, with around 57 of these in Scotland. There was then a decrease in occurrence, mirroring its European decline, with just 93 further birds in Britain to the end of 2006, and with only eight of these seen in Scotland. In 2007 there was a major change in fortunes with a record-breaking total in Britain of at least 29 birds, most arriving in spring, though none were recorded in Scotland. In 2008 a plethora of sightings could be accounted for by just five wandering birds (again none in Scotland), but in 2009 there was a major influx into Britain in September and October 2009, with a new record total of at least 38 birds involved.

The influx included several ringed birds, which confirmed that six had come from the Coto Doñana National Park in Spain and one from the Camargue in France. The influx generated numerous sightings and involved many wandering individuals. However, due to the complex movement of birds BBRC has not been able to unequivocally ascribe sightings to particular birds. It seems likely that all Scottish sightings relate to one or two birds. Certainly it seems probable that the Argyll individual was the same bird later seen at Strathbeg, but it is not clear if the Black Devon sighting involves a second bird nor if the December sighting near Strathbeg relates to the original bird or the possible second bird.

A further individual was present at Mersehead RSPB Reserve (Dumfries & Galloway) on 10–14 October 2010, again a lone straggler from a large northward post-breeding dispersal of young birds into Britain from breeding areas in SW Europe.



Plate 324. Black Kite (left) with Red Kite, Aberdeen, North-east Scotland, May 2010 © Ian Francis.

Black Kite in Red Kite territory, Aberdeen, May 2010

I. FRANCIS

When the unexpected happens, it's good to have a digital camera. But sometimes, having a digital camera can itself produce the unexpected!

On 23 May 2010, I had been searching through woods near Aberdeen for Red Kite nests all day. The kites have just begun nesting in the area following the start of a reintroduction project here in 2007 by RSPB Scotland. The first nest was in 2008, with five pairs nesting in 2009. As part of the nest finding process, we try to photograph potential breeding birds flying over woods to read any wing tags they might have, which are otherwise hard to read in flight (which the kites mostly are!). On this occasion, I was driving along a road and noticed some kites over a wood, some 200–300 m away. I suspected a breeding pair here and pulled in immediately and started taking a sequence of photos (with my digital SLR and 300 mm lens) until the birds drifted off over

the trees, after a period of around four minutes. Because I was preoccupied with taking photographs, and trying to get the birds at a suitable angle as they turned, I did not look at them through my binoculars at all.

I had no reason while doing this to suspect anything other than Red Kite, and while photographing them I did not notice that any of the birds was different - though they were fairly small in the viewfinder at that range. Most of the time all birds were diving, twisting, turning and chasing as the resident Red Kites saw the intruder bird off from a territory, and in doing this all were equally as agile and none drew no attention to itself (through the camera) as being different. There was one short period at the end when they circled along with a nearby Buzzard, then all birds moved out of view behind the trees.



Plates 325 A–D. *Black Kite, Aberdeen, North-east Scotland, May 2010* © Ian Francis. (Each plate, left to right: **A:** Red Kite, Black Kite and Buzzard; **B:** Black Kite; **C:** Black Kite and Red Kite; **D:** Black Kite.)

At home, when I looked at the photos to see if tag details were legible, it was immediately obvious that one was a Black Kite. I have, after all, seen many Black Kites over the years in many countries - not that this was helpful during the encounter! At first, I examined the photos closely to make sure we were not talking about anything else - a Marsh Harrier, for example. Then my thoughts turned to a possible hybrid - a Black Kite bred with a Red Kite in Highland in 2006, fledging two young. It seemed too much like a Black Kite for that. Could it have been a Red Kite, perhaps a dark youngster from the previous year? The photos made it very clear that could not be the case. So a Black Kite it was. A few emails around to other local birders returned the same verdict. A bird had been reported the previous week near Loch of Strathbeg, but it is not clear whether this was that bird. The individual I saw was not seen again, and one at Dalnally at the end of the month was a different bird too, from examination of that photograph. Subject to acceptance by the Scottish Birds Records Committee, this was one of only a handful of Black Kites seen in North-east Scotland during the last century.

So why was it a Black Kite? Having three species of raptor in the same photograph certainly helps. The Black Kite is darker, stockier, with a shorter,

broader, less forked tail, almost rounded at times. The tail can be seen being twisted on a couple of occasions though, in typical kite manner. It has broader, shorter wings, wider at the base and with a less pronounced 'wrist' than the Red Kite. Compared to the Buzzard, though, it is less stocky, with narrower wings and tail and its wings are held much more in the 'drooping' kite pose, compared to the Buzzard's elevated wing angle. The Red Kites are also in wing moult, as most breeding raptors are. The Black Kite is in good condition, with no moult, and the paler upper wing coverts and pale-tipped greater coverts suggest a bird born in 2009.

Black Kites are a very rare bird in Scotland and the UK, although they are becoming gradually more frequent. The growing population of Red Kites in Scotland might well attract more visiting Black Kites, so it is certainly worthwhile closely examining birds much more often. As in this case, take some photographs - the digital camera might prove its worth in terms of supporting evidence!

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BLAST from the PAST

- the 1991 Donmouth Sand Plover

A. WEBB & K.D. SHAW

When Gordon Smith found an unusual plover on the Don estuary, North-east Scotland on 18 August 1991, he opened a conundrum that would not be resolved for another 19 years. The early accounts of how this bird was discovered, and how those involved in its initial identification concluded that this bird could only be a Greater Sand Plover *Charadrius leschanaultii*, are described elsewhere (Shaw & Webb 1991, Smith *et al.* 1992).

It is worth starting by quoting Shaw & Webb "... the full extent of the problems of identifying a lone sand plover were not fully apparent to us until we had to identify a difficult individual on our local patch". Most of those present on its first day tended toward the bird being a Greater Sand Plover, the

remainder were unsure apart from Graham Christer, who felt certain that this was a Lesser Sand Plover *Charadrius mongolus*. The bird remained on the Don until 19 August, when additional observers, including AW, were able to spend more time watching it, and pondering the limited literature available for identifying this tricky pair. Much of the literature seemed confusing, but with the help of photographs taken by AW, Sam Alexander and Mark Sullivan, a firm identification was reached that this was one of the eastern races of Greater Sand Plover, and the record was duly accepted as such by the British Birds Rarities Committee (BBRC) in 1992.

Plate 326 (above). *Lesser Sand Plover, Don Estuary, North-east Scotland, August 1991* © Sam Alexander.

However, this was by no means the end of the matter, and some of the UK's top birders voiced reservations on the safety of this identification (e.g. Mitchell & Young 1997). The record was even reviewed by BBRC, but they returned the same verdict that based on the field notes and photographs submitted, this was a Greater Sand Plover. The key problem was that the papers available at the time did not review the eastern races of Lesser Sand Plover adequately. This changed when Hirschfeld *et al.* (2000) published an improved review of Greater and Lesser Sand Plover subspecies and their identification, and also when Garner *et al.* published a short article in 2003.

AW and KDS submitted their own review of their field notes and all of AW's photographs to BBRC in November 2003. Unfortunate, but unavoidable, delays meant that BBRC did not circulate the review until 2009. However, both they and then the British Ornithologists' Union Records Committee accepted the conclusions of this review and confirmed their verdict that this was the first record of Lesser Sand Plover

for the United Kingdom. With the benefit of hindsight, AW and particularly KDS feel that they could have pursued the possibility of Lesser Sand Plover more keenly at the time of their observations. However, the best identification literature at the time pointed strongly to Greater Sand Plover.

The features of this bird that originally supported its identification as a Greater Sand Plover (presence of a slight gonydeal angle on the bill, projecting toes beyond the tail, leg colour, call, tail tip darker than rump) were no longer considered diagnostic for that species. Other features of the bird, such as the shape of the wing bar were seen only briefly and may not have been reliable. In light of new information in the Hirschfeld and Garner papers, additional features pointed more firmly toward Lesser: tarsus length in relation to bill length was probably too long for a Greater; the bluntness of the bill tip; the small body size, the roundness of the head (though many of the photographs were confusing); the timing of moult (a Greater should have mostly





Plate 331. *Birders of the time watching the Lesser Sand Plover, Don Estuary, North-east Scotland, August 1991*
© Sam Alexander.

completed its moult by this time of year); the broadness of the breast band; and the extent of summer plumage down the flanks. The last two features, as well as the presence of darker tail feather tips, pointed toward this being one of the eastern races of Lesser Sand Plover. Indeed, it was accepted as belonging to the race *C. m. mongolus* by BBRC and BOURC (Hudson *et al.* 2010).

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References

Garner, M., Lewington, I. & Slack, R. 2003. Mongolian and Lesser Sand Plovers: an identification overview. *Birding World* 16: 377–385.
Hirschfeld, E., Roselaar, C.S. & Shirihai, H. 2000. Identification, taxonomy and distribution of Greater and Lesser Sand Plovers. *British Birds* 93:162–189

Hudson, N. and the Rarities Committee. 2010. Report on rare birds in Great Britain in 2009. *British Birds* 103: 562–638.

Mitchell, D. & Young, S. 1997. *Photographic Handbook of the Rare Birds of Britain and Europe*. New Holland.

Shaw, K. & Webb, A. 1991. The Greater Sand Plover on the Don Estuary, Grampian. *Birding World* 4: 396–398

Smith, G., Shaw, K.D. & Webb, A. 1992. Greater Sand Plover on the Don Estuary on 18 and 19 August 1991 - the first record for North-east Scotland. *North-East Scotland Bird Report* 1991: 69–70

With the acceptance as this first Scottish (and British) Lesser Sand Plover, the Aberlady bird in 2004 becomes Scotland's second (and also of the mongolus group). Scottish Greater Sand Plover records now number four and date from 1979, 1982, 1999 and 2008. Eds

Plates 327–330 (left). *Lesser Sand Plover, Don Estuary, North-east Scotland, August 1991* © Sam Alexander.

Birdline Scotland Review: 1 July to 30 September 2010

A. MURRAY

**BIRDLINE
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All records refer to the period 1 July–30 September 2010 unless otherwise stated.

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The following abbreviations for the respective recording areas are used within the text: Ang - Angus & Dundee; Arg - Argyll; Ayr - 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.

Snow Goose: at least eight birds were present on Orkney Mainland throughout the period including two adults and three juveniles - the result of successful breeding on West Mainland. Others were reported in Aug and Sept from Argyll and Perth &

Kinross. **Ross's Goose:** an adult summered, with Barnacle Geese at Loch Leven (P&K) up to 14 Sept, with then presumed to be the same bird relocating to WWT Caerlaverock (D&G) from 17 Sept. Also in Sept, two adults were with the Pink-footed Geese in the Aberlady Bay/Gullane area (Loth) on 17th–30th. **Canada Goose:** one, of a small form, was with the wild geese at the RSPB Loch of Strathbeg reserve (NES) on 19 Sept.

Ruddy Shelduck: nine were at RSPB Loch of Strathbeg (NES) on 12–29 July then at Montrose Basin (Ang) on 30 July–11 Aug, with two still on 12th–15th. **Ring-necked Duck:** a drake was at Loch Leven (P&K) on 2 July, with nearby in July single drakes were at Loch Gelly and Angle Park GP (both Fife) on 3rd–30th and 3–22 Aug respectively. Also in Aug, a drake was again at Loch Leven on 16th–20th, with two drakes seen on 30th, with in Sept a drake at Loch of Tingwall (Shet) on 22nd. **King Eider:** in July a drake was seen twice off West Mainland Shetland from 17th and a female was at Bay of Noup,

Westray (Ork) again on 5 Aug. **Surf Scoter:** at least four drakes were present off Blackdog (NES) throughout July and Aug, with one drake still on 2 Sept; a drake was at Lunan Bay (Ang) on 23 July–29 Aug, a drake was at Trondra then Wester Quarff (Shet) on 4–22 Aug and a drake was in Largo Bay (Fife) throughout Sept.

Great Shearwater: in Aug singles were reported past Fife Ness (Fife) on 15th and 21st and one was reported from a boat off Muck (High) on 31st, whilst in Sept the only report was of one off the Beatrice Oil Field (Caith) on 22nd.

Sooty Shearwater: the first bird of the season reported was off the Beatrice Oil Field (Caith) on 19 July; only very low numbers were reported in Aug, with moderate numbers then seen in Sept, the largest count being 214 past North Ronaldsay (Ork) on 25th. **Balearic Shearwater:** the first reported was off Saltcoats (Ayr) on 29 July, 19 were reported in Aug, but then only four reported in Sept. **Leach's Petrel:** the largest numbers seen were in the 14–16 Sept period, with the largest count being 86 past Uisaed Point (Arg) on 14th.



Plate 332. Little Egret, Fairlie, Ayrshire, August 2010 © Ian Dalgleish.



Plate 333. *Semipalmated Sandpiper*, Tynninghame, Lothian, September 2010 © Peter Macdonald.

Little Egret: it was a good autumn for the species in Scotland, with up to 30 reported from 10 July including at least four colour-ringed birds, dispersing juveniles from the ever increasing breeding numbers in England and Wales. **Black Stork:** a juvenile was at Cromdale, Speyside (High) on 9–10 Sept following on from an unconfirmed report of one at Kyle of Lochalsh (High) on 8–9 Sept. **White Stork:** the regular free-flying bird was at Blair Drummond Wildlife Park (UF) on at least 8 Aug and one was reported at Clachan, Loch Fyne (Arg) on 14 Sept. **Spoonbill:** up to four were on the Ythan Estuary (NES) throughout July until 9 Aug, with also in July an immature at Wigtown Bay (D&G) on 1st–2nd.

Honey Buzzard: in July singles were seen on the Isle of May and Hermaness, Unst (Shet) both on 2nd and eight migrants were reported in Sept. **Pallid**

Harrier: a probable, a juvenile, was at St. Abbs Head then near Eyemouth (Bord) on 4 Sept.

Rough-legged Buzzard: one was at Skigersta, Lewis (OH) on 25–26 Sept. **Common Crane:** in July one was still at Crossbost, Lewis (OH) on 3rd and three were between New Pitsligo and Strichen (NES) on at least 5th; an adult was at Montrose Basin (Ang) on 8 Aug–15 Sept, two were in the Stromness area (Ork) on 6 Aug–19 Sept and three flew over Hound Point (Loth) on 24 Sept, with two then seen the next day over the A1 near Haddington (Loth).

Avocet: one was at Findhorn Bay (M&N) on 11–12 Sept. **Dotterel:** two adults were on Scald Law (Loth) on 21–24 Aug. **Pacific Golden Plover:** an adult was on South Uist (OH) on 4–12 Aug.

American Golden Plover: an adult was on North Ronaldsay (Ork) on 30 Aug–22 Sept and

seven more were reported in Sept all on the Outer Hebrides and Shetland apart from an adult at Loch Gruinart, Islay (Arg) on 4th–11th.

Semipalmated Sandpiper: a juvenile was at Tynninghame (Loth) from 27 Aug to 14 Sept - first record for Lothian and only the second record for mainland Scotland.

Pectoral Sandpiper: in July one was on North Ronaldsay (Ork) still on 1st and one at Rossie Bog (Fife) on 8th–12th, in Aug a juvenile was at Vane Farm RSPB (P&K) on 10th–22nd and in Sept at least 29 were reported including five at Loch Fada, Benbecula (OH) on 22nd.

Buff-breasted Sandpiper: in Aug single adults were near Collieston (NES) on 2nd–7th and The Wig, Loch Ryan (D&G) on 22nd–28th and at least 26 were reported in Sept all on islands in Argyll, Outer Hebrides, Shetland and Orkney including five on Oronsay (Arg) on 26th.

Great Snipe: one was on Foula (Shet) on 11–14 Sept. **Long-billed Dowitcher:** one was reported briefly at WWT Caerlaverock (D&G) on 2 Aug. **Lesser Yellowlegs:** a juvenile was at Ardvule/Kildonan, South Uist (OH) on 18–19 Sept. **Grey Phalarope:** one was off Mangursthadh, Lewis (OH) on 24 July and in Sept at least 30 were reported including a popular juvenile at Skinflats Lagoons (UF) on 19th–23rd.

Pomarine Skua: only low numbers seen, with 23 reported in Aug and only 40+ reported in Sept. **Long-tailed Skua:** the summering adult on Shetland was reported still at West Burra on 11 July, nine were reported in Aug and c. 15 were seen in Sept.

Ring-billed Gull: a presumed returning adult was at Dunstaffnage Bay (Arg) from 22 Aug and an adult at Kinneil (UF) on 18 Sept was also presumably the bird seen there in previous years. **Sabine's Gull:** an adult was reported from the Scrabster–Stromness ferry (Ork/Caith) on 31 July and c. 18 were reported in Sept including in Dumfries & Galloway single lingering juveniles at Wigtown Bay on 22nd–30th and Loch Ryan on 24th–25th. **White-winged Black Tern:** a juvenile was seen briefly at Vane Farm RSPB (P&K) on 22 Aug and a juvenile was at Loch of Skail (Ork) briefly on 19 Sept.

Snowy Owl: the same long-staying male was presumably

responsible for sightings on Lewis on 8 Sept and North Uist on 17 Sept (both OH). **Alpine Swift:** one was near Burwick, South Ronaldsay (Ork) on 3–7 Aug. **Hoopoe:** one was at Warbeth Cemetery, Stromness (Ork) on 30 Sept. **Wryneck:** eight were seen in Aug on the Northern Isles between 18th and 22nd, and 22 were seen in Sept between 2nd and 14th. **Short-toed Lark:** in Sept singles were on Fair Isle on 10th, at Toab/Scatness (Shet) on 28th–30th, Out Skerries (Shet) on 29th–30th, North Ronaldsay (Ork) on 29th–30th and Girdle Ness (NES) on 30th. **Shore Lark:** one was on the Isle of May on 28 Sept.

Richard's Pipit: in Sept singles were on Fair Isle on 27th, on North Ronaldsay (Ork) on 28th–30th and Foula (Shet) on 30th. **Olive-backed Pipit:** one was on Fair Isle on 30 Sept. **Red-throated Pipit:** three were reported in Sept: on Fair Isle on 27th and 30th and at Kirkwall (Ork) on 28th. **Buff-bellied Pipit:** in Sept three were seen: on Fair Isle on 20th–30th, at Eshaness (Shet) on 28th–30th and at Yesnaby (Ork) on 27th. **Grey-headed Wagtail:** several were reported in Sept amongst good numbers of *flava* Wagtails seen - all birds reported in Sept were presumably of some sort of eastern origin. **Citrine Wagtail:** up to eight were reported in Sept, with on Shetland singles at Baltasound, Unst on 6th, at Norwick, Unst on 17th, at Burravoe, Yell on 20th and Isbister, North Roe 26th, on Orkney one on North Ronaldsay on 10th and one reported Rousay on 16th, elsewhere one was on Fair Isle on 22nd–23rd and one at Ardrol, Uig, Lewis (OH) on 23rd.

Thrush Nightingale: singles were on Foula (Shet) on 11th



Plate 334. Grey Phalarope, Skinflats Lagoon, Upper Forth, September 2010
© John Anderson.



Plate 335. *Alpine Swift, Burwick, South Ronaldsay, Orkney, August 2010* © Dave Pullan.

and 16 Sept. **Common Nightingale:** one was on Fair Isle on 26 Sept. **Bluethroat:** around 27 were reported in Sept, with apart from one on the Isle of May all were on the Northern Isles including five on Fair Isle on 27th. **Red-flanked Bluetail:** in Sept two were present on Fair Isle on the 27th, one was trapped at Fife Ness (Fife) on 28th, one was at Norwick, Unst (Shet) on 28th and one at Skaw, Whalsay (Shet) on 30th. **Siberian Stonechat:** one was on Fetlar (Shet) on 27 Sept. **White's Thrush:** one was at the Swinister Burn, Sandwick (Shet) on 26 Sept. **Swainson's Thrush:** one was seen briefly on Fair Isle (Shet) on 15 Sept.

Pallas's Grasshopper Warbler: one was on Fair Isle on 22–23 Sept. **Lanceolated Warbler:** one was on Foula (Shet) on 28 Sept. **River Warbler:** in Sept singles were at Quendale (Shet) on

20th and Fladdabister (Shet) on 30th. **Paddyfield Warbler:** singles were at Halligarth, Unst (Shet) on 6th and 22–23 Aug, with in Sept three seen on Shetland, at Quendale on 10th and 27th and Foula on 30th. **Blyth's Reed Warbler:** in Sept singles were at Quendale and Wester Quarff (both Shet) both on 27th, one was trapped at Foveran Bushes (NES) on 30th, first record for North-east Scotland and one was trapped on North Ronaldsay (Ork) also on the 30th. **Marsh Warbler:** one was on Fair Isle on 31 Aug, with in Sept five reported from Shetland and one was at Barns Ness (Loth) on 30th. **Eastern Olivaceous Warbler:** one was at Bigton (Shet) on 11–12 Sept. **Sykes's Warbler:** one was at Burrafirth, Unst (Shet) on 16–17 Aug. **Icterine Warbler:** seven were seen on Shetland in Aug and 12 were seen in Sept including three in Angus.

Melodious Warbler: one was at Norwick, Unst (Shet) on 19–27 Sept. **Subalpine Warbler:** one was on Fair Isle on 26 Sept. **Barred Warbler:** the first singles were on Fair Isle and Unst (Shet) on 14 Aug, with another 25 seen by the end of the month including singles on the Outer Hebrides, in North-east Scotland and on the Isle of May, with up to 100 reported in Sept centred around major arrivals on the 7th–8th and in the last week.

Greenish Warbler: one was at Sumburgh (Shet) on 10–11 Aug, with in Sept one at Scatness (Shet) on 4th, one at RSPB Loch of Strathbeg (NES) on 8th and one on the Isle of May on 10th. **Arctic Warbler:** singles were on Fair Isle on 14–15 Aug and 31 Aug–2 Sept, with also in Aug one at Haroldswick, Unst (Shet) on 18th and then in Sept one was at Grogarry, South Uist (OH) on 8th and 10 were reported on

Shetland including three on the 4th followed by one at Lerwick on 12th and the remaining six from the 23rd. **Yellow-browed Warbler:** the first was on Whalsay (Shet) on 11 Sept, with 100+ reported by the end of the month mostly from Shetland including 37 noted throughout the archipelago on 30th alone. **Western Bonelli's Warbler:** one was at Creadyknowe, Whalsay (Shet) on 9–15 Sept and one on North Ronaldsay (Ork) on 10–11 Sept.

Firecrest: in Sept singles were on Barra (OH) on 29th–30th and Skaw, Whalsay (Shet) on 30th. **Red-breasted Flycatcher:** 27 were reported in Sept from the 7th onwards. **Red-backed Shrike:** in July a male was on Sanday (Ork) on 15th and one on Papa Westray (Ork) on 19th, whilst in Sept 13 were reported from the 7th onwards. **Great**

Grey Shrike: five were seen on 30 Sept on Fair Isle (2), Shetland (2) and at Girdle Ness (NES). **Arctic Redpoll:** 11, all of the form *hornemanni*, were seen on Orkney and Shetland from 19 Sept. **Common Rosefinch:** three were seen in July, on Orkney, Isle of May and on Fair Isle, 20+ were reported in August from the 8th all, bar one on the Isle of May, on Shetland including six on Fair Isle on 31st and c. 90 were reported in Sept mainly on Shetland including counts of seven on Fair Isle on 1st and 5th and five on Foula on 30th. **Northern Parula:** the long-awaited first record for Scotland was a first-winter female at Carnan Mor, Tiree (Arg) on 25–29 Sept.

Lapland Bunting: in a record breaking showing the first were two at Balranald, North Uist

(OH) on 25 Aug, with exceptional numbers from then on, with on 31 Aug 142 on Fair Isle and 92 on North Ronaldsay (Ork) and there was no let up in Sept, with a second wave of new arrivals at the end of the month. The largest numbers were predictably on the Northern and Western Isles where record-breaking counts included 275+ at Balranald, North Uist (OH) on 12 Sept, 272 North Ronaldsay (Ork) on 27 Sept and 185 Fair Isle on 1 Sept. The highest count on mainland Scotland was 71 between Sandwood Bay and Balchrack (High) on 2 Sept. **Ortolan Bunting:** in Sept singles were on the Isle of May on 8th and 22nd, one was reported on The Oa, Islay (Arg) on 15th, three were on Shetland on 10th–30th, one was on Fair Isle on 19th–20th and one was at Cara, South Ronaldsay (Ork) on 30th. **Rustic Bunting:** one was at Isbister, North Roe (Shet) on 27–30 Sept. **Little Bunting:** in Sept one was on the Isle of May on 8th–9th, one was on Foula (Shet) on 25th–30th, one on North Ronaldsay (Ork) on 27th and on the 30th singles were on the Out Skerries (Shet), on Fair Isle and near Finstown (Ork). **Black-headed Bunting:** a male was reported at Oldshoremore (High) on 1 July, with also a belated report from Highland concerning a male photographed at Raffin, Stoer on 2 June.



Plate 336. Northern Parula, Tiree, Argyll, September 2010 © James Hanlon.

After ten years, Angus Murray has decided to hand over the writing of our recent reports summaries. The editors would like to express their thanks to Angus for his valuable contributions over the years to Scottish Bird News and now Scottish Birds. Angus has agreed to continue to supply information from Birdline Scotland to the new compiler(s). Eds

Scottish Birds

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PhotoSPOT

Plate 337. On 29 August 2010, I discussed a visit to the Fife Bird Club seawatching hide that afternoon with Ken Shaw as the winds were strong from the NW and we both thought it could be good for seabird passage. Local birder and photographer John Anderson, Chris Rodger (RSPB Vane Farm) and I watched from the hide and soon we were seeing some close seabirds including a Great Skua which flew over the rocks in front of the hide. This sighting persuaded JA to move out onto the rocks to the left of the hide to try and capture some close flight shots. Chris and I had seen a few Manx Shearwaters, Arctic and Great Skuas when to my great surprise a juvenile White-tailed Eagle flew in low from the south struggling against the very strong winds and it set down on the rocks to the right of the hide, fortunately I had remembered my Samsung NV3 digital camera so I started to take some pictures of the bird through my telescope (Swarovski ATM 85 HD with 20-60 Zoom). When I am digiscoping I hand hold my camera and have it set to auto usually with the camera zoom set to max optical and I set the telescope zoom

to x 20, as the eagle was reasonably close I also took a few shot with the camera zoom set back from max optical, but most were taken at x 3 (full optical zoom on the Samsung). When I am digiscoping I always take many pictures and I tend to vary the telescope focus to try and enable at least a few sharp images. The eagle had a large yellow wing tag 'L' and a radio transmitter and was one of this year's east of Scotland releases. KDS soon joined us in the hide and enjoyed some fine views of the eagle, later in the afternoon we managed to see a few Sooty Shearwaters, but the star of the afternoon was the White-tailed Eagle.

John Nadin

Post script. Chris Rodger sent some of my images to Claire Smith (the East Scotland Sea Eagle Officer) and she added one to her blog which stated that the bird had been sighted on the Isle of May the next day, where it had been nicknamed 'Erik' by the staff on the island.



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