

Bird ringing in Britain and Ireland in 2008

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✈ This is the 72nd annual report of the British Trust for Ornithology's Ringing Scheme, covering work carried out, and data received, in 2008. ✈ Research carried out in 2008 included developing methods to combine ringing data with data from other monitoring schemes to detect the causes of population change. This approach was used for Song Thrush *Turdus philomelos* data, confirming the findings of previous analyses that the population decline observed over the last thirty years is primarily related to first-year survival. ✈ Constant Effort Site data suggested that low productivity in 2007 contributed to reduced adult numbers during 2008 for many species, including significant decreases in Blackcap *Sylvia atricapilla*, Willow Warbler *Phylloscopus trochilus*, Blue Tit *Cyanistes caeruleus* and Bullfinch *Pyrrhula pyrrhula*. However, there were significant increases in numbers of adult Long-tailed Tits *Aegithalos caudatus* and Chiffchaffs *Phylloscopus collybita*. As in 2007, the 2008 breeding season was poor, with 11 of the 25 core species monitored by the Scheme showing significantly lower productivity compared to the long-term average (1983–2007). In contrast to 2007, many of the species faring worst were residents, including Blackbird *Turdus merula*, Song Thrush and Great Tit *Parus major*. ✈ Data for 92 Retrapping Adults for Survival studies were submitted, covering 34 species, more than half of which are of conservation concern. ✈ The total number of birds ringed (835,326) was 2% lower than the mean of the previous five years. This reduction may have been influenced by the poor breeding season in 2008; the total number of pulli ringed in 2008 (161,846) was 6% lower than the preceding five-year mean, while that of fully grown birds (673,480) showed no change. The recovery total (15,164) was the highest in over 15 years; however, this is partly due to changes in the way that records of colour-ringed and other specially marked birds are stored, which led to an inflation of the 2008 total. The number of recoveries of foreign-ringed birds (1,192) was higher than the mean of the preceding five years, although this figure is influenced by response times of different ringing schemes, which vary from year to year. Recoveries of 230 individual birds are presented in the final section of the report. They include unexpected movements, movements that confirm suspected or known migration patterns, and longevity records.

This is the 72nd annual report of the Ringing Scheme of the British Trust for Ornithology (BTO). The report summarises the research carried out during 2008 using ringing data, as well as providing information on the numbers of birds ringed and recovered (reports of ringed birds found dead and those found alive away from the site of ringing). In addition, details of some exceptional recoveries received in 2008, and those that set new longevity records, are included in the report.

Each metal ring fitted to a bird has a return address and a unique number identifying every ringed bird as an individual. The species, date and location of each bird caught, along with other measurements such as age, sex and biometrics, are recorded by 2,300 volunteer ringers

who then submit these data to BTO HQ in Thetford. In 2008, ringers input and submitted 95% of their ringing data electronically; the few remaining data were submitted on paper and input by a volunteer.

In addition, ringers submit recoveries and recaptures (birds recaptured at or near the site of ringing) electronically. The finding details of just over 10,000 recoveries and close to 180,000 recaptures were received electronically in 2008. Recoveries are also reported by members of the public (many of whom now use the EURING online reporting form at www.ring.ac) and other ringing schemes. All details of recoveries received on paper are computerised. Information about each bird recovered is sent to both the ringer and the finder of each bird and, if the bird was ringed or found overseas, a copy is also sent to the appropriate national ringing scheme.

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Several hundred reports giving details of colour-marked birds (without giving a metal ring number) are also received each year. Colour-marking allows birds to be identified as individuals, or as part of a cohort, without being recaptured.

The value of ringing as a scientific tool is illustrated by the wide variety of conservation-related, pure and applied research for which it is used.

By running the Ringing Scheme, the BTO fulfils the duty of the UK and Irish governments (as members of the European Union) to support the study of migratory birds and maintain a ringing scheme. The BTO operates a permit system under licence from the statutory conservation agencies and ensures ringers are trained to a high standard. The BTO also administers, on behalf of the statutory conservation agencies, the licensing of ringers and nest recorders to visit the nests of birds on Schedule 1 of the Wildlife and Countryside Act 1981.

RESEARCH

Integrated demographic analysis

Populations of wild birds are in a constant state of flux, but with increasing human pressure on limited land resources in Britain & Ireland, many are declining (eg Fuller & Ausden 2008). To address these declines effectively, it is important to understand the underlying demographic and ecological processes that bring about population change (Baillie & Schaub 2009). As part of the BTO's Integrated Population Monitoring (IPM) Programme, the Ringing Scheme plays a key role in providing information on both survival and productivity for many species. Methods are currently being developed to combine data from the Ringing Scheme with data from other monitoring schemes (notably the Common Birds Census and Breeding Bird Survey, which give measures of abundance, and the Nest Record Scheme, which provides detailed productivity estimates) using 'state-space' models. These models link two components: a model of the observed counts (and their variation due to sampling effects) and an underlying model of the process of population change, ie how survival and productivity influence population size (Brooks *et al* 2004). This approach allows data from all of the BTO monitoring schemes to be combined in one analysis, enhancing the statistical power to detect the causes of population change. Developing methods to apply this type of analysis to BTO data is a key priority, and data from the Ringing Scheme are central to this approach.

As part of the development process, the BTO undertook an analysis of demographic data for Song Thrush *Turdus philomelos* using state-space models (Baillie *et al* 2008). This work largely confirmed previous analyses that the population decline in Song Thrushes observed over the

last thirty years was primarily related to reduced survival of first-year birds during their first winter. The methods used in this project are now being extended to other species, ensuring that ringing data will remain at the forefront of investigations into the causes of population change.

Demography of seabird populations

Britain & Ireland has some of the largest seabird breeding colonies in Europe and is home to the majority of the world population of three species (Manx Shearwater *Puffinus puffinus*, Gannet *Morus bassanus* and Great Skua *Stercorarius skua*), with numbers of many more species important in a European context. However (unlike many terrestrial species), there is no overall framework for demographic monitoring of seabird populations in Britain & Ireland. These populations face a large number of threats, including changing resource distribution in response to increasing sea temperatures, pollution and nest predation, particularly from introduced predators such as Brown Rat *Rattus norvegicus* and American Mink *Mustela vison* (eg Parsons *et al* 2006, JNCC 2009). In order to identify the threats that are important in driving population change, it is necessary to understand the demographic processes (ie survival and productivity) underlying them. BTO recently undertook a review both of the feasibility of monitoring demographic parameters (particularly survival) of seabirds and the value of ringing data already collected (Robinson & Ratcliffe 2009).

Estimating survival rates of seabirds is problematic for a number of reasons, principally because most birds are ringed as chicks, making estimation of age-specific survival rates difficult. In addition, as seabirds spend much of their lives at sea, the probability that individuals will be recovered (except during catastrophic events, such as oil-spills, or weather-related 'wrecks') is relatively low. The review concluded that future annual monitoring of survival rates is likely to be possible for a small suite of species, and that methods combining mark-recapture studies with more general mark-recovery data were likely to provide a useful way forward. Ideally this would involve a network of key monitoring sites, which would probably require the involvement of volunteer ringers, and an element of training and capacity building would be necessary. The Retrapping Adults for Survival (RAS) programme would form a useful model for this, and indeed already includes a small number of seabird projects. Ringing of a greater number of adults of all species is to be encouraged as this enables age-specific survival rates to be estimated with much greater precision.

The role of individual condition

It is well established that body mass of individual birds is controlled dynamically and can change rapidly in response

to changing conditions. In particular, body-mass levels are often influenced by the perceived risks of starvation and predation, with birds gaining and losing mass in response to these risks (eg MacLeod *et al* 2005). Collection of computerised biometric data at a large scale is increasingly facilitating our ability to look at individual condition and how this relates to population processes.

Intriguingly, analyses of biometric data have shown that exactly how birds react to different starvation and predation risks in regulating their body mass correlates well with population status (MacLeod *et al* 2007). Birds that are in a food-rich environment tend to have a lower body mass as there is less risk of starving, and their populations are generally increasing. In contrast, if the foraging environment is poor, birds tend to weigh more and generally have a decreasing population trend.

Further analysis of body mass in Starlings *Sturnus vulgaris* has shown that, controlling for size, age, sex, time and location of capture, Starlings were heavier in areas where population decline was greatest (MacLeod *et al* 2008). It is hypothesised that this is because individuals are carrying more mass to insure themselves against a greater likelihood of starvation as a result of poorer food supplies. This accords with analysis of survival rates from ring-recovery data, which indicated that changes in survival rate were related to rates of population change (Freeman *et al* 2007). The continued computerisation of biometric data will be important in helping to unravel the mechanisms of demographic change.

Turnover in shorebird populations

The development of methods to assess the number of birds using an estuary continued during the year. Waterbird sites are normally designated as being of scientific interest using the peak count of birds on the site, but can also be designated for the total number of birds using a site. Invariably this will be many more birds than are present at a given time, owing to turnover, with new birds arriving and others moving on. Establishing the total number of birds using a site is likely to have important implications for the selection of sites that are designated. BTO are working with Suffolk Wildlife Trust, Newton & Wright ringing partnership and Natural England, colour-marking Redshank *Tringa totanus* and Dunlin *Calidris alpina* to assess turnover on the Stour and Orwell Estuaries. Initial results are very promising and this work will be continued and spread to other estuaries as funding is available. The data collected will also enable us to assess survival of these species on the Stour–Orwell.

Constant Effort Sites scheme

The Constant Effort Sites (CES) scheme, a vital tool in monitoring the breeding performance of some of

our commonest songbirds, ran for its 26th year in 2008. Analyses of captures from standardised catching effort at registered sites allow us to monitor three key demographic parameters: adult abundance, productivity (a comparison of the number of juveniles caught versus the number of adults) and adult survival (using the return rate of adult birds between years as a measure of overwinter survival). The scheme is funded by the partnership between the BTO and the Joint Nature Conservation Committee (JNCC).

During 2008 data were received from 117 sites, the same number as in 2007. The number of sites in England (90) continued to increase and the BTO will be seeking recruitment of more sites in other countries in the future. Currently there are 15 sites in Scotland, seven in Wales, three in the Republic of Ireland and two in Northern Ireland. Sites cover a variety of habitats, with 34% in dry scrub, 29% in wet scrub, 21% in reedbed and 15% in woodland.

Adult numbers

Many species showed reduced adult numbers in 2008 compared to 2007 (Table A), which may be partly due to poor productivity in 2007 (when significant declines compared to the long-term average were reported for 11 of the 25 core species: Coiffait *et al* 2008b). Significant declines in adult abundance were recorded for four species: Blackcap *Sylvia atricapilla*, Willow Warbler *Phylloscopus trochilus*, Blue Tit *Cyanistes caeruleus* and Bullfinch *Pyrrhula pyrrhula*. Adults were also caught in their lowest-ever numbers for five species: Sedge Warbler *Acrocephalus schoenobaenus*, Whitethroat *Sylvia communis*, Willow Warbler, Bullfinch and Reed Bunting *Emberiza schoeniclus*, with catching totals of a further two, Reed Warbler *Acrocephalus scirpaceus* and Linnet *Carduelis cannabina*, at their second-lowest numbers.

However, significant increases in adult abundance were recorded for Long-tailed Tit *Aegithalos caudatus* (which were caught in their highest-ever numbers on CES) and Chiffchaff *Phylloscopus collybita*, both species apparently profiting from nesting early in the season. In addition, adult Robins *Erithacus rubecula* and Cetti's Warblers *Cettia cetti* were caught in their second-highest numbers in 2008.

Productivity

As in 2007, the 2008 breeding season was poor, with 11 out of the 25 core species showing productivity significantly lower than the long-term average (1983–2007, Table A). However, whilst 2007 was a particularly poor season for migrants, a rather different suite of species was affected in 2008. Many of those faring worst were resident species, with declines in productivity of 33% in Great Tit *Parus major*

and 31% in Blackbird *Turdus merula* and Song Thrush. Other species showing significantly lower productivity were Dunnock *Prunella modularis*, Robin, Sedge Warbler, Whitethroat, Garden Warbler *Sylvia borin*, Blackcap, Blue Tit and Chaffinch *Fringilla coelebs*.

Compared to 2007, there were significant increases in productivity for five species, but most were reversals of trends from 2007 (Reed Warbler, Chiffchaff, Willow Warbler, Blue Tit and Treecreeper *Certhia familiaris*), and none of the species' long-term productivity trends (1987–2007) showed a significant increase.

Influence of climate on productivity

The success of the breeding season is strongly affected by the timing of weather events, and it is interesting to compare weather patterns in 2008 with those in 2007. Both years saw similar summer rainfall levels (358 mm total precipitation in 2007 and 327 mm in 2008: www.metoffice.gov.uk/climate/uk), though the timing of the rainfall was quite different: in 2007, May, June and July were the wettest months, compared to July and August in 2008. Prolonged spells of heavy rain can quickly drench newly hatched chicks. Young birds, whether in the nest or recently fledged, are particularly susceptible to chilling due to the relatively poor insulation provided by their growing body feathers. It is possible that the first broods of migrants suffered increased mortality in 2007, whereas the second broods of resident species (such as Robin, Blackbird and Song Thrush) were generally more affected in 2008.

These climate patterns are, however, very general and subject to substantial regional variability. Climate models predict future rainfall to occur in fewer, more concentrated bursts, similar to those observed in recent years (Jenkins *et al* 2008), potentially increasing the chances of breeding failure in many British & Irish bird species. Demographic data such as those collected by the CES scheme will play an increasingly pivotal role in determining the consequences of changing weather patterns, both locally and globally, for birds breeding in Britain & Ireland.

CES in Europe

Since the establishment of CES in Britain & Ireland in 1983, the scheme has been emulated in other countries throughout Europe, notably Finland (since 1986), France (1989), Spain (1991), the Netherlands (1994), Germany (1997) and Sweden (1997). All of these schemes follow a similar protocol, enabling population dynamics to be studied at a continental scale. In order to facilitate this, representatives of the major CES schemes came together in a meeting in Wageningen, the Netherlands, in November 2008 to discuss ways of encouraging greater co-operation between CES schemes. This productive meeting led to the acceptance of a common format to enable exchange of data

Table A. Changes in the catches of adult passerines and in productivity between 2007 and 2008 (* denotes a significant change, $P < 0.05$). The difference in productivity relative to the long-term average for the Constant Effort Sites scheme (1983–2007) is also shown. Scientific names are given in Table 2.

	Adult numbers in 2008 % change vs 2007	Productivity in 2008 % change vs 2007	% change vs 1983–2007
Wren	-5	+4	-1
Dunnock	-4	-8	-19 *
Robin	-3	-15 *	-21 *
Blackbird	+6	-40 *	-31 *
Song Thrush	-5	-33 *	-31 *
Cetti's Warbler	+13	+4	+10
Sedge Warbler	-4	-12	-18 *
Reed Warbler	-5	+29 *	+4
Blackcap	-13 *	0	-23 *
Garden Warbler	-4	-25 *	-38 *
Lesser Whitethroat	+24	-22	-15
Whitethroat	-10	-3	-21 *
Chiffchaff	+23 *	+18 *	-2
Willow Warbler	-19 *	+20 *	+2
Long-tailed Tit	+14 *	-24 *	-6
Blue Tit	-20 *	+19 *	-27 *
Great Tit	-8	-7	-33 *
Willow Tit	+3	+51	-29
Treecreeper	-16	+58 *	+8
Chaffinch	0	-26 *	-22 *
Greenfinch	-3	+7	+24
Goldfinch	+13	-9	+13
Linnet	+20	-29	+17
Bullfinch	-14 *	-6	+1
Reed Bunting	-2	+16	+3

between schemes, which has been implemented through the EURING (European Union for Bird Ringing) website co-ordinated by the BTO. A number of exciting projects making use of this new facility are proposed, including a BTO-funded project investigating spatial variation in the demographic parameters of migrant species, many of which are apparently declining across Europe (eg Sanderson *et al* 2006).

Retrapping Adults for Survival scheme

The Retrapping Adults for Survival (RAS) scheme is designed to monitor survival rates, primarily of species of conservation concern, that are monitored relatively poorly by CES and general ringing activity. The scheme comprises a series of independent projects operated by volunteer ringers, each of which collects data on a particular species,

to allow the estimation of annual adult survival rates at a given location. During 2008, 92 projects submitted data, compared to 96 in 2007. The 2008 data sets covered 34 species, of which five were on the (then current) Red List of species of conservation concern and 15 were on the Amber List (Gregory *et al* 2002).

The most-studied species were Pied Flycatcher *Ficedula hypoleuca* (18 projects), Amber-listed Sand Martin *Riparia riparia* (13) and Red-listed House Sparrow *Passer domesticus* (eight). Other projects focus on Red-listed species included those on Marsh Tit *Poecile palustris*, Starling, Tree Sparrow *Passer montanus* and Yellowhammer *Emberiza citrinella*. Whilst the number of projects active in 2008 was slightly lower than in 2007, many long-running projects continued to provide data of very high quality, making them increasingly valuable. Of the currently active projects, 43 have now submitted data covering more than 10 years, with three projects (two on Pied Flycatcher and one on Common Sandpiper *Actitis hypoleucos*) exceeding 30 years of data.

Survival is a key demographic parameter in bird populations yet remarkably little is known about the seasonal pattern of survival. Although the main focus of RAS involves ringing populations during the breeding season, some volunteers continue their ringing year-round. Analysing such data may be more challenging if birds from different populations are present at different times of the year. However, a study of Blackbirds in East Anglia has invested considerable effort in resighting colour-marked birds, which enabled identification of the breeding population (in which we are most interested). This year-round effort allowed, for the first time, survival rates at different times of year to be estimated. The annual survival rate (0.67) was similar to that estimated from analyses of dead recoveries across Britain (Siriwardena *et al* 1998). However, there was significant within-year variation, with survival rates at their lowest during the early part of the breeding period and highest in the autumn. There was little difference between the sexes, although females tended to have lower survival during the incubation period (Robinson *et al* in press).

NUMBERS OF BIRDS RINGED

A total of 835,326 birds, comprising 161,846 pulli and 673,480 fully grown birds, were ringed in 2008. For comparative purposes, annual totals for the years 1999 to 2008 are shown in Table 1. The 2008 total was 2% lower than the mean for the preceding five years (2003–07), largely as a result of fewer pulli being ringed; the pullus total was 6% lower, but the number of fully grown birds did not differ from the preceding five-year mean. The decrease in the number of pulli ringed in 2008 was probably at least

Table B. Species with more than 2,500 ringed in Britain & Ireland for which the number ringed in 2008 shows a change of more than 50% (up or down) when compared with the five-year mean for 2003–07. Scientific names are given in Table 2.

Species	Percentage change between 2008 totals and mean for 2003–07
Pink-footed Goose	–80
Greylag Goose	+53
Wigeon	–75
Shoveler	–59
Red Grouse	–53
Gannet	–89
Red Kite	+58
Knot	+63
Sanderling	–66
Purple Sandpiper	–51
Woodcock	+425
Black-tailed Godwit	+66
Bar-tailed Godwit	–74
Arctic Skua	–89
Great Skua	+53
Arctic Tern	–56
Guillemot	–63
Razorbill	–51
Puffin	–65
Woodlark	+63
Yellow Wagtail	+113
Coal Tit	+69
Rook	+76
Goldfinch	+58
Siskin	+136
Lesser Redpoll	+125

partly due to reduced productivity in a number of species. CES data showed that many birds had a poor breeding season in 2008, and preliminary analysis of Nest Record data suggested that the number of chicks fledging per breeding attempt was significantly lower than predicted in 15 species (BTO unpublished data).

Totals of all species ringed and recovered in 2008 are presented in Table 2. Species for which the total ringed in 2008 represents a change of more than 50% (up or down) when compared to the 2003–07 mean are listed in Table B (only species with more than 2,500 ringed in Britain & Ireland are included). Twenty-six species are included in this Table, of which half increased.

The majority of the species listed in Table B were of conservation concern (Gregory *et al* 2002), which will have contributed to overall changes in the number of

Table C. Ringing totals for 2008 summarised by subsidy category.

	No. ringed 2008	Mean 2003–07	Difference from 2003–07 mean	% change in 2008
Red-listed	75,050	79,341	-4,291	-5
Amber-listed	99,685	103,033	-3,348	-3
Waders	4,817	5,228	-411	-8
Top predators	5,407	5,445	-38	-1
Seabirds	14,228	23,761	-9,533	-40
All extra subsidy	199,187	216,807	-17,620	-8
All basic subsidy	636,139	631,913	+4,226	+1
Totals	835,326	848,719	-13,393	-2

birds ringed in each subsidy category, shown in Table C. Extra subsidies encourage ringers to target these species. However, numbers of birds ringed in each category receiving an extra subsidy all showed a decrease compared to the 2003–07 mean; the most marked decrease was for seabirds. As discussed below, many seabird species have had poor breeding seasons in recent years, while the decrease in the number of waders caught in 2008 may be due to variable catching success.

Some species are caught by just a few ringers, so small changes in ringing effort or catching success can lead to wide variation in the number of birds ringed from year to year. This probably explains the increase in Greylag Goose *Anser anser* and decrease in Red Grouse *Lagopus lagopus* ringing totals. Similarly, the use of specialised techniques can lead to variable catching success. For example, the annual ringing totals of waders and geese caught by cannon-netting tend to fluctuate widely and many are regularly included in Table B. In 2008, the number of successful cannon-net catches contributed to an increase in Knot *Calidris canutus* and Black-tailed Godwit *Limosa limosa*, and a decrease in ringing totals of Pink-footed Goose *Anser brachyrhynchus*, Wigeon *Anas penelope*, Sanderling *Calidris alba*, Purple Sandpiper *Calidris maritima* and Bar-tailed Godwit *Limosa lapponica*. In addition, some species are ringed in low numbers each year, so small changes in the number ringed can lead to large percentage changes in the annual totals. This is the case for Shoveler *Anas clypeata* (typically between 10 and 20 birds are ringed each year), numbers of which decreased in 2008.

The initiation of a Woodcock *Scolopax rusticola* ringing programme in 2007–08 in south and west Wales (Cross & Williams 2008) led to a large increase in the 2008 ringing total for this Amber-listed species, with birds often caught by dazzling.

Six of the individual species showing a decrease in their annual ringing total (Table B) are seabirds: Gannet, Arctic Skua *Stercorarius parasiticus*, Arctic Tern *Sterna paradisaea*, Guillemot *Uria aalge*, Razorbill *Alca torda* and Puffin *Fratercula arctica*. Many seabird species have had a run

of disastrous breeding seasons in recent years (eg Mavor *et al* 2005, 2006, 2008, Seabird Group 2008), and the populations of many seabirds in Scotland have declined. The most marked declines are evident in species feeding mainly on Sandeel *Ammodytes marinus*, including Arctic Skua, Arctic Tern, and Kittiwake *Rissa tridactyla* (Parsons *et al* 2006). As discussed in the Research section, seabird colonies in Britain & Ireland face a number of other threats, including island introductions of non-native mammalian predators (eg Parsons *et al* 2006, JNCC 2009).

Nevertheless, as some seabird species are ringed by a few dedicated ringers at a limited number of sites, differences in ringing effort between years can also cause major changes to the annual ringing totals. In addition, in some years there are ringing expeditions to remote seabird colonies, which will inflate totals in that particular year, but may lead to a corresponding decrease in years when expeditions do not take place. For example, Gannets have not been ringed at Great Saltee Island since 2003, and the decline in the number ringed in 2008 is likely to be a result of changes in ringing effort, rather than reflecting changes in population size.

The only seabird species that showed an increase in the 2008 ringing total was Great Skua, probably due to the targeting of this species for a colour-ringing project in Sutherland. All of the seabird species included in Table C were Amber-listed in 2008 (Gregory *et al* 2002); Arctic Skua has since been moved to the Red List (Eaton *et al* 2009).

Of the 'top predators' subsidy category, the only species showing a substantial change in numbers ringed (Table B) was the Red Kite *Milvus milvus*, which again increased. The species represents a significant conservation success story in Britain; in 2002 it was moved from the Red to the Amber List (Gregory *et al* 2002), and has continued to recover since then, thanks largely to a reintroduction program.

Another positive story can be reported for Woodlark *Lullula arborea*, the breeding range of which has expanded in Britain, resulting in the species recently being moved from the Red to the Amber List (Eaton *et al* 2009). As in

2007, the number of Woodlark ringed in 2008 increased; most of these birds were ringed as pulli for a pilot project investigating nest predation.

Ringing (and recovery) totals of Siskins *Carduelis spinus* fluctuate widely from year to year, generally reflecting the large variation in their numbers and distribution during the winter. Years with poor cone crops coincide with higher numbers of Siskins visiting gardens and *vice versa* (Wernham *et al* 2002). In 2008, the Siskin ringing total increased, as did that of Lesser Redpoll *Carduelis cabaret*. Most of the Lesser Redpolls ringed in 2008 were caught during the months of September, October and November (and unprecedented numbers were recorded at Sandwich Bay Bird Observatory during these months: www.sbbot.co.uk), indicating that most of these birds were migrants.

The Goldfinch *Carduelis carduelis* ringing total also showed an increase. Goldfinch abundance fell sharply from the mid 1970s until the mid 1980s, but this was followed by a significant rise in numbers, which has been accompanied by a more frequent use of gardens for winter feeding (Cannon *et al* 2005). Perhaps reflecting this, Goldfinch ringing totals have been steadily increasing over the last decade or so.

The ringing total for Rooks *Corvus frugilegus* again increased in 2008; annual totals for this species began increasing in 2006 owing to a colour-ringing project studying the species' dispersal and feeding ecology. Ringing totals of two other passerine species also increased: Yellow Wagtail *Motacilla flava* (owing to high numbers caught at Rye Bay, Sussex) and Coal Tit *Periparus ater*. The record number of Coal Tits ringed during the year appears to be due to exceptionally high numbers of pulli and juveniles, suggesting that productivity of this species may have been higher than usual in 2008. Numbers of Coal Tit nest records increased between 2007 and 2008 (representing a 17% increase, BTO unpublished data). A large fall of Irish Coal Tits on Cape Clear in the autumn also suggested that the species had a productive breeding season in Ireland (BirdWatch Ireland 2009).

Two new species were added to the ringing totals in 2008: Citril Finch *Serinus citrinella*, ringed at Fair Isle Bird Observatory in June 2008, and Alder Flycatcher *Empidonax alnorum* ringed in Cornwall in October 2008, the first records of both species in Britain & Ireland. The Citril Finch occurs in south and central Europe, while the Alder Flycatcher breeds in Alaska, Canada and northeastern USA and winters in South America (eg Robinson 2005).

NUMBERS OF BIRDS RECOVERED

The 2008 recovery totals for BTO-ringed birds (Table 2) include birds found dead and controls, *ie* birds recaptured

by ringers away from the original ringing site (see Footnotes to Table 2). The annual recovery totals for the last decade (1999–2008) are shown in Table 1. The total number of birds recovered in 2008 was 15,164, the highest total in over 15 years. It is important to note, however, that changes in the way that records of specially marked birds (*ie* those with colour rings or radio tags *etc*) are stored led to an inflation of the 2008 recovery totals. In previous years, details of all sightings/reports of an individual received during a particular season (eg winter) at the same location were summarised and recorded in a text field within the initial recovery record (*ie* the first date that the bird was caught or resighted). As many of these multiple reports were received electronically, they were stored in a recapture table. However, since 2008 these records have been stored as individual recoveries, and are thus in the totals of the current report.

The recovery totals for individual species were compared to the preceding five-year means (2003–07), and changes of at least 25% (increase or decrease) are shown in Table D. Since large percentage changes could result from small numbers of a species being ringed, the table shows only those species for which the 2008 recovery total, or the preceding five-year mean, is more than 50 records. In 2008, 37 species fulfilled these criteria, 24 of which increased.

Increases in Whooper Swan *Cygnus cygnus*, Grey Heron *Ardea cinerea*, Hen Harrier *Circus cyaneus*, Peregrine *Falco peregrinus*, Coot *Fulica atra*, Black-headed Gull *Chroicocephalus ridibundus*, Common Gull *Larus canus*, Lesser Black-backed Gull *Larus fuscus* and Herring Gull *Larus argentatus* recovery totals are due to multiple recoveries of one or more individuals with a special mark, rather than an increase in the total number of individuals recovered.

In contrast, the number of recoveries of Greylag Goose and Shag *Phalacrocorax aristotelis* decreased, as fewer sightings of colour-marked individuals were reported in 2008 relative to previous years. This may also explain the decrease in the number of Chough *Pyrrhocorax pyrrhocorax* recoveries. However, the reason for the decrease in Great Black-backed Gull *Larus marinus* recoveries is unclear but does not appear to be related to changes in colour-ringing.

Guillemots are seriously affected by oil spills, which increase recovery totals and the absence of serious incidents in recent years may explain the corresponding decrease in Guillemot recoveries. Similarly, a wreck of Razorbills throughout the North Sea in September–October 2007 led to an increase in Razorbill recoveries that year, which explains the corresponding decrease in 2008 when no wrecks were reported. The change in Puffin recoveries is a result of reduced ringing effort; a ringing expedition to Sule Skerry in 2007 led to an increase in recoveries that

year, but no similar expeditions took place in 2008, when recovery totals were lower.

Annual recovery totals for Common Tern *Sterna hirundo* tend to fluctuate from year to year, and can be strongly affected by changing rates of submissions of sightings in different years (Clark *et al* 2005). The reason for the decrease in Sandwich Tern *Sterna sandvicensis* recoveries is not clear, but may be owing to changes in ringing effort. However, numbers of Sandwich Terns recovered in West African countries such as Ghana and Côte d'Ivoire have declined in recent years, which may be due to reduced hunting pressure in some countries, or may reflect a reduction in reporting rates. The underlying causes of the increase in recovery totals of Teal *Anas crecca*, Mallard *Anas platyrhynchos* and Kestrel *Falco tinnunculus* are also difficult to determine; ringing and recovery totals of these species vary from year to year and there are no clear trends.

Numbers of both Barn Owl *Tyto alba* and Tawny Owl *Strix aluco* recoveries followed the same trend as in 2007, with totals of both species again showing an increase. As with ringing totals, recoveries of Barn Owls have steadily increased over the past few years, largely due to the Barn Owl Monitoring Programme and Barn Owl nest-box studies. In contrast, numbers of Tawny Owls ringed and recovered vary from year to year.

As in 2007, recovery totals of a number of finches showed substantial changes in 2008, although not all species followed the direction of change reported in 2007. Numbers of both Goldfinch and Chaffinch recoveries again increased. There was a corresponding increase in Goldfinch ringing totals in 2008 (Table B) and, indeed, numbers ringed have steadily increased in the past few years, which may reflect changes in the population, as discussed in the previous section. Numbers of Chaffinch ringed have remained fairly constant over the past few years but BBS data revealed a significant increase in the breeding population between 2008 and 2007, as well as in the long-term trend (1994–2007) (Risely *et al* 2009).

Ringing totals of Siskin and Lesser Redpoll increased in 2008 (Table B) and most of the recoveries of these two species were controls. The increase in numbers of birds ringed thus explains the corresponding increase in recovery totals for both species. The number of Brambling *Fringilla montifringilla* ringed in 2008 increased by 28% and, as with Siskin and Lesser Redpoll, the majority of Bramblings recovered were controls. Bramblings are mainly winter visitors to Britain & Ireland from northern breeding populations and the species appears to be somewhat irruptive (Wernham *et al* 2002).

Recoveries of the Red-listed Linnet also increased in 2008. Relatively high numbers have been ringed in recent years and the majority of recoveries were controls.

Table D. Species with recovery totals of birds ringed in Britain & Ireland exceeding 50 in 2008 or for the five-year mean, and showing a change of more than 25% (up or down) between 2008 and the five-year mean (2003–07). Scientific names are given in Table 2.

Species	Difference between 2008 totals and mean for 2003–07 (%)
Whooper Swan	+246
Greylag Goose	–34
Teal	+52
Mallard	+144
Shag	–38
Grey Heron	+77
Hen Harrier	+614
Kestrel	+25
Peregrine	+128
Coot	+309
Black-headed Gull	+27
Common Gull	+36
Lesser Black-backed Gull	+48
Herring Gull	+245
Great Black-backed Gull	–41
Sandwich Tern	–28
Common Tern	–48
Guillemot	–63
Razorbill	–75
Puffin	–88
Barn Owl	+34
Tawny Owl	+25
Sand Martin	–28
Swallow	–25
Goldcrest	+64
Long-tailed Tit	+37
Coal Tit	+79
Chough	–49
Jackdaw	+206
Chaffinch	+25
Brambling	+28
Goldfinch	+51
Siskin	+103
Linnet	+116
Twite	–35
Lesser Redpoll	+135
Reed Bunting	–35

In contrast, 2008 recoveries of another Red-listed finch, Twite *Carduelis flavirostris*, showed a decrease in 2008. This appears to be related to a recent reduction in colour-ringing of this species, due to completion of studies investigating the movement (Raine *et al* 2006a, b).

The decrease in the number of Swallow *Hirundo rustica* recoveries may reflect the completion of the Swallow Roost Project (SRP), which ran from 2002 to 2006 and encouraged ringers to target roosting Swallows. Numbers ringed peaked in 2006 (coinciding with the final year of the Project) and have declined in the two years since then. Sand Martin recoveries also decreased in 2008 and, as with Swallows, ringing totals have decreased in the last two years. Since the majority of recoveries are controls, the most probable explanation is a change in ringing effort.

The increases in Coal Tit and Long-tailed Tit recoveries are likely to be due to an increase in numbers ringed. The number of Long-tailed Tits ringed in 2008 increased by 37% and on CES sites the number of adults caught increased significantly compared to 2007 (Table A). Similarly, although Goldcrest *Regulus regulus* did not appear in Table B, the 2008 ringing total was more than double those in both 2006 and 2007. This probably explains the exceptional number of Goldcrest recoveries in 2008 (numbers of controls and birds found dead were both higher than in recent years). Over 80% of the Goldcrests ringed in 2008 were caught during the months of September, October and November, suggesting that the number of migrants arriving in Britain & Ireland may have been particularly high that year.

Two other passerine species showed a substantial change in recovery totals. Numbers of Jackdaw *Corvus monedula* recoveries each year are typically quite low, but the 2008 total was inflated by a substantial number that came from birds that were shot in Lancashire. In contrast, numbers of Reed Bunting recoveries decreased. The number of controls was much lower than in previous years, suggesting that the change was due to a decrease in the number ringed, which was 23% lower than the 2003–07 mean.

The only species added to the recovery totals in 2008 was Yellow-legged Gull *Larus michahellis*, which was recently split from Herring Gull (Sangster *et al* 2005).

A total of 1,192 recoveries of foreign-ringed birds were received in 2008 (Table 3). This is an increase of 36% compared to the preceding five-year mean. It should be noted, however, that numbers of recoveries of foreign-ringed birds vary considerably, depending on the response times of other schemes.

INFORMATION FROM RECOVERIES

Recoveries of 153 individual BTO-ringed birds and 77 individual foreign-ringed birds are listed in systematic order in the final section of this report. Recoveries are included where they extend or confirm our existing knowledge of the movements of birds, or where the movements are

particularly unusual. For each species, comments are given to put the listed recoveries into context. Some recoveries of particular interest are discussed below.

Amongst the most significant recoveries reported in 2008 were the first BTO-ringed Stone-curlews *Burhinus oedipnemos* to be reported in Switzerland and Ghana. The British-breeding Stone-curlew population has undergone a large population decline and range contraction since the 1930s (*eg* Taylor *et al* 2007) although, as a result of a recent recovery in the species' range, it has now been moved from the Red to the Amber List (Eaton *et al* 2009). It is thought that many first-winter Stone-curlews migrate to arid, sparsely populated parts of North and West Africa (where the chance of recoveries is low), while most adults winter further north in France or Spain (Green *et al* 1997, Wernham *et al* 2002). The bird recovered in Switzerland (in early April) may have been on passage when it was resighted. Recoveries in Mallorca and the Netherlands suggest that Stone-curlews returning to British breeding grounds in the spring may follow a more easterly route than that used in autumn (Wernham *et al* 2002). Although there have been several Stone-curlew recoveries in North Africa, the bird found in Ghana was only the second in West Africa (the other was found freshly dead in Sierra Leone in 1982 during its first winter: Mead & Hudson 1983).

A particularly interesting recovery in 2008 was that of a Roseate Tern *Sterna dougallii*, which was not only the first report of a BTO-ringed Roseate Tern in Belgium, but also the bird was nesting with a Common Tern. The pair bred successfully and the hybrid chicks were ringed (Didier Vangeluwe pers comm). The small European breeding population of Roseate Terns declined markedly between 1970 and 1990 and now consists of as few as 1,800 pairs (Burfield & van Bommel 2004). The species does not usually breed in Belgium (although small numbers have done so in the past: Hagemeyer & Blair 1997), but hybridising pairs have occasionally been reported in the colony where this bird was found, and observations of Roseate Terns there have increased in recent years. Unfortunately, however, in 2009 this tern colony was devastated by foxes *Vulpes vulpes* (Didier Vangeluwe pers comm).

Another exceptional recovery was that of a Wood Sandpiper *Tringa glareola* ringed in Kent in August 2000 and recovered in Liberia in January 2006. Although a few pairs of Wood Sandpiper breed in Scotland (in 2006 the number was down to just 0–8 pairs, Holling *et al* 2009), this bird was more likely to have originated from the Scandinavian breeding population, a small proportion of which occur in Britain & Ireland on passage (Wernham *et al* 2002). It is the first recovery of a BTO-ringed Wood Sandpiper on the African wintering grounds, and only the second international movement for this species involving

BTO ringing (the other was a bird ringed in Ireland in 1974 and recovered in Belgium in 1982: Mead & Clark 1993).

The majority of the European Red-necked Phalarope *Phalaropus lobatus* population breeds in Iceland, Sweden, Norway and Finland (Hagemeijer & Blair 1997), but there is a small breeding population in Scotland (with an estimated 23–30 breeding pairs in 2006: Holling *et al* 2009) and some birds also occur here on passage (*eg* Robinson 2005). Relatively little is known about the migration routes or wintering areas of Red-necked Phalaropes breeding in Europe. The second recovery of a BTO-ringed Red-necked Phalarope was reported in 2008; the bird was ringed in Shetland in July 1996 and recovered a few kilometres away in June 2008.

Other notable wader recoveries included three BTO-ringed birds: the second Black-tailed Godwit in Portugal, the second Bar-tailed Godwit in Norway and the second Whimbrel *Numenius phaeopus* in Finland, while recoveries of foreign-ringed waders in Britain & Ireland included the first recovery of a Polish-ringed Jack Snipe *Lymnocyptes minimus*, the first Italian-ringed Golden Plover *Pluvialis apricaria*, the second French-ringed Grey Plover *Pluvialis squatarola*, the first Sanderling ringed in Greenland and the first Green Sandpiper *Tringa ochropus* ringed in the Netherlands.

The second recovery of a Glaucous Gull *Larus hyperboreus* ringed on Bear Island (lying between the Norwegian mainland and the Svalbard archipelago) was reported in Britain & Ireland in 2008. The species is mainly a winter visitor to our shores, but with only six recoveries of foreign-ringed birds (including this recovery), the origins of birds wintering here are far from clear (Wernham *et al* 2002). All of these foreign birds were ringed as pulli (three in Iceland, one in Norway and two on Bear Island). Both Yellow-legged Gull and Caspian Gull *Larus cachinnans* gained full species status recently (Sangster *et al* 2005, 2007). The first recoveries of BTO-ringed Yellow-legged Gulls since the species split were reported in 2008, including a bird found in the Netherlands and one in Spain, as well as the first Polish-ringed Caspian Gulls in Britain & Ireland.

Other seabird recoveries included the first BTO-ringed Sandwich Tern to be reported in Poland and the second BTO-ringed Common Tern to be reported on the Canary Islands. Foreign-ringed seabirds reported in Britain & Ireland included the first Dutch-ringed Fulmar *Fulmarus glacialis*, the first two Russian-ringed Gannets, the second South-African-ringed Sandwich Tern, and the second Common Tern ringed in the Channel Islands.

'Firsts' amongst the wildfowl and waterbird recoveries, all BTO-ringed birds, were a Whooper Swan in Germany, a Barnacle Goose *Branta leucopsis* in France, a Little Egret *Egretta garzetta* in the Netherlands and a Grey Heron in

Sweden. The second BTO-ringed Bean Goose *Anser fabalis* in Finland was also reported, bringing the total number of recoveries of this species from BTO ringing to five.

The first BTO-ringed Barn Owl recovery in Spain brought the total found overseas to five (all were ringed as pulli). Although Barn Owls ringed in Britain & Ireland disperse away from natal sites during the first few weeks after fledging (Wernham *et al* 2002), long-distance movements are unusual. This bird was found (freshly dead) by a ringer, away from any major roads, so it seems unlikely that it was moved by a vehicle. Another unusual Barn Owl recovery was a Dutch-ringed female of the dark-breasted *guttata* subspecies found breeding in Norfolk.

Among the raptor recoveries was the first report of a Honey-buzzard *Pernis apivorus* ringed in the Netherlands, which brings the total number of international movements involving Britain & Ireland to seven. Other exchanges of raptor species of which there have previously been few included the second BTO-ringed Hobby *Falco subbuteo* to be reported in Germany and second BTO-ringed Peregrine to be reported in France, as well as the second Norwegian-ringed Osprey *Pandion haliaetus* and second Spanish-ringed Kestrel to be reported in Britain & Ireland.

A particularly noteworthy passerine recovery was the first BTO-ringed Pied Flycatcher in Liberia. Pied Flycatchers breeding in Britain & Ireland are thought to winter in West Africa, although the true extent of their wintering range has yet to be determined (Wernham *et al* 2002). Another exceptional passerine recovery was the first BTO-ringed Swallow on Madeira. Swallows regularly occur on Madeira as vagrants (Clarke 2006); nevertheless, recovery data suggest that movements so far west are unusual.

A further unprecedented passerine recovery was the first Dutch-ringed Yellowhammer to be reported in Britain & Ireland. Outside Britain & Ireland, the Yellowhammer is a partial, short-distance migrant. Movements are largely influenced by weather conditions; in cold winters, small numbers regularly migrate as far south as North Africa and parts of the Middle East (Wernham *et al* 2002). Although small numbers of Yellowhammers are known to occur here on passage, only one other foreign-ringed bird (from Norway) has been recovered here.

As in most years, 2008 saw several exchanges of passerine species of which there have previously been few. These included several BTO-ringed birds: the first Grey Wagtail *Motacilla cinerea* to be reported in Norway, the second Pied Wagtail *Motacilla alba* to be reported in the Netherlands and the first Goldfinch to be reported in the Channel Islands. Foreign-ringed birds recovered in Britain & Ireland included the first Sand Martin ringed in Hungary, the second Dutch-ringed Dunnock and Common Redpoll *Carduelis flammea*, and the second Brambling from Russia.

With limited numbers of Nightingales *Luscinia megarhynchos* ringed in Britain, there have been few recoveries of this species; unusually, four exchanges with France were reported in 2008.

The first BTO-ringed Song Thrush recovered in Lithuania (the third in the Baltic States) was also reported. This bird may have switched its wintering area; the British & Irish breeding population, which is mainly sedentary, is generally thought to be faithful to both its natal and breeding sites (Wernham *et al* 2002), but it is not clear whether other breeding populations show equally strong site-fidelity. Another unusual recovery of a thrush species was the second Icelandic-ringed Redwing *Turdus iliacus* to be reported in England; the Icelandic-breeding subspecies *coburni* usually overwinters in Scotland and Ireland, as well as France and Iberia (Milwright 2002, Wernham *et al* 2002).

The first report of a BTO-ringed Firecrest *Regulus ignicapilla* in Germany brought the total number of BTO-ringed Firecrests found overseas to six. Firecrests are localised breeding birds in England and Wales, although they also occur regularly in Britain & Ireland on passage during the spring and autumn, and are scarce winter visitors (Wernham *et al* 2002).

A number of interesting warbler recoveries were reported, among them three BTO-ringed Sedge Warblers recovered in the species' West African wintering quarters (one in Burkina Faso and two caught on the same day at the same site in Mauritania), and two Cetti's Warblers ringed in northern France (the second and third from that country) that were caught six days apart in Icklesham, Sussex. During the twentieth century, Cetti's Warblers showed a marked range expansion in western Europe from a primarily Iberian and Mediterranean distribution (Wernham *et al* 2002). Within Britain & Ireland, numbers are increasing and the range continues to expand (eg Robinson *et al* 2007). 'Firsts' of BTO-ringed warblers included a Marsh Warbler *Acrocephalus palustris* in Belgium, a Blackcap in Liberia and a Blackcap and Lesser Whitethroat *Sylvia curruca* in Slovenia (although note that individuals of both species have previously been recovered in the former Yugoslavia). Also reported was the second Blackcap ringed in the Czech Republic to be recovered in Britain & Ireland.

ADMINISTRATION

There was a further outbreak of Highly Pathogenic Avian Influenza (HPAI) H5N1 in January 2008 when three dead Mute Swans *Cygnus olor* collected at Abbotsbury in Dorset tested positive. BTO staff again participated in the Ornithological Experts Panel (OEP), providing advice to Defra, including analyses of ringing and WeBS data and

organising and taking part in emergency field assessments. Following advice from the OEP, Defra set up a 3-km Wild Bird Control Area and a 10-km Wild Bird Monitoring Area around the outbreak at Abbotsbury, but also stretching along the coast to Portland Bill and Weymouth Bay. This larger area was recommended as waterbirds mix along this part of the coast. Ringing was suspended within both areas and all ringers in Dorset were informed. Additional dead Mute Swans tested positive, bringing the total to 10, but all birds in a sample of live Mute Swans caught and swabbed on 18 January tested negative. The Wild Bird Control Area was lifted on 19 February and the Wild Bird Monitoring Area was about to be lifted on 29 February when a Canada Goose *Branta canadensis* tested positive and the Control Area was reinstated. As the orders cannot be fully lifted until 30 days after the last positive sample is collected, they stayed in place until 27 March, when all suspension of ringing was also lifted. Prior to this, Portland Bill Bird Observatory requested to be allowed to resume ringing passerines and other migrants in the Observatory garden area only and, after discussion with Defra, they were given this exemption on 11 March.

Ringers make a contribution to the costs of the rings they use but all ringing is subsidised by either the BTO/JNCC partnership (see Finance) or the BTO. Further subsidies encourage ringing as part of projects (CES, RAS), computerising data, and the ringing of some groups of species (such as seabirds) and individual species of conservation concern. If all, or most, rings of a particular size are used on species of conservation concern, the price paid by ringers is reduced, but some extra subsidies are provided via refunds to ringers at the end of the year. The current pricing structure was introduced in 1998, taking full effect in 1999 (Clark *et al* 1998).

Almost all ringers now computerise their ringing, recapture and recovery data, with over 95% of the ringing data for 2008 being received electronically, mostly by email. Nearly 11 million electronic ringing records had been received from ringers by the end of 2008, along with almost two million local recaptures (nearly 180,000 records in 2008). Ringers now also submit recoveries electronically, with just over 10,000 electronic records being received in 2008. The few remaining records are submitted on paper forms and the ringing data are computerised by a volunteer. Ringers input their data in IPMR, a bespoke program developed by volunteer Mark Cubitt. A Vista-compatible version was released during the year. Members of the public are now able to submit recovery data via the web (www.ring.ac) and over 2,500 records were received in this way in 2008.

Development and cleaning of the ORACLE database of ringing, recapture and recovery records continued in 2008 with further work to capture web recoveries electronically

and to rewrite the inputting form used by staff being planned for 2009. Old paper data are being input by volunteer John Bonell and will be incorporated into the ORACLE database.

The EURING databank (EDB), which is now hosted by the BTO, holds recoveries from all over Europe in a common format (EURING code – see www.euring.org/data_and_codes/euring_code_list/index.htm). The EDB is run by volunteer Chris du Feu. During 2008, further data sets were checked and incorporated into the EDB. There were fewer problems with data format since a workshop on this subject was held during a EURING meeting in Hungary in August 2007. Mr du Feu continues to assist schemes with data submission. The EDB is widely used by researchers in Europe and throughout the world (14 requests in 2008 covering a variety of species). Since most of the work of running the EDB is carried out on a voluntary basis, costs are minimised and in 2008 were met from the charges for data requests in that year.

Towards the end of the year a new guide to ringing was published (Balmer *et al* 2008). The book provides an introduction to ringing, both explaining how birds are caught and ringed and showcasing some of the results from ringing. The book was the first of a number of publications and events to celebrate the centenary of the Scheme in 2009.

In 2008 staff attended a number of field-based ringing courses, which are organised and run by groups of volunteers and held in different parts of Britain & Ireland. The courses help ringers to gain further experience or be assessed for a different permit or endorsement. A small grant to help with the costs of each course recognises their valuable contribution to the Scheme. Three BTO/Field Studies Council ringing courses for beginners were run during the year and again recruited more trainees.

Table 4 shows the number of ringers holding permits in each of the last 10 years. The number of ringers continues to grow, as higher profiling of the Scheme increases our recruitment. Overall there were 5% more ringers in 2008 than in 2007, but the increase is greater among trainees (9%) and 'C' (7%) permit holders than 'A' (2%) permit holders, reflecting increased recruitment in recent years. Table 5 gives a breakdown of permit holders by country of residence, with numbers increasing in all countries except Scotland.

Permits for ringers in Britain & Ireland are renewed annually. In addition, changes to permits (eg 'C' to 'A') and endorsements to permits are assessed by staff and, for 'A' permits and training endorsements, members of the Ringing Standards Select Committee (a select committee of the BTO's Ringing Committee). BTO staff prepare and check licences and permits for both ringers and nest recorders who visit the nests of species on Schedule 1 of the

Wildlife and Countryside Act 1981. This work is carried out on behalf of the country agencies: the Countryside Council for Wales (CCW), Natural England (NE) and Scottish Natural Heritage (SNH), and working closely with licensing staff from the agencies. All applications to visit nests of Schedule 1 species in the breeding season received at BTO HQ are checked carefully, to minimise potential disturbance and to ensure the maintenance of high standards. In 2008, BTO staff provided details allowing CCW and SNH to issue Schedule 1 licences, and issued ringing and nest recording Schedule 1 permits on behalf of NE. Equivalent licences are issued by the appropriate agencies in Ireland.

THE COMMITTEE

The members of the Ringing Committee during 2008 were: Mr D.G. Coker (Chair), Dr G.Q. Anderson, Mr S.J. Foster, Dr I.R. Hartley, Mr M. Hughes, Mr P. Jones, Ms S. Millar, Dr J.M. Reid, Dr A.H.N. Roberts, Dr H. Baker and Mr L. Way (JNCC Assessors) and Mr A.J. Walsh (The National Parks and Wildlife Service, Ireland). The following staff also attended: Dr A. Clements, Dr S.R. Baillie, Mr J.R. Blackburn (minutes), Ms J.A. Clark and Dr R.A. Robinson, as did Dr C.P.F. Redfern (as Editor of *Ringing & Migration*).

FINANCE

In 2008 the Ringing Scheme was financed by ringers, BTO and a partnership between BTO and JNCC (see Acknowledgements). Ringers pay an annual permit fee as well as paying for their equipment and making a contribution to the cost of rings. The BTO/JNCC Partnership supported the ringing of species of conservation interest, licensing, CES and RAS on behalf of CCW, NE, SNH and the Northern Ireland Environment Agency. In addition, a grant-in-aid payment was received from The National Parks and Wildlife Service (Ireland). We thank them all for their continuing support. Those requesting recovery or other data from the Scheme usually meet, or contribute to, the costs of data extraction.

STAFF

The following staff worked within the Ringing Scheme during all or part of 2008: Ms J.A. Clark, Dr R.A. Robinson, Ms S.Y. Adams, Mr L. Barber, Mr J.R. Blackburn, Ms K. Boswell, Dr L. Coiffait, Ms D.X. de Palacio (maternity

leave), Mr C. du Feu (part-time), Mr M.J. Grantham, Ms B.M. Griffin, Mr J.H. Marchant (RAS), Dr D. Moss, Mrs B. Read (part-time), Ms K. Risely, Ms M.M. Shephard, Mrs A. Trehwhitt (part-time) and Ms J. Waters. Ms K.H.M. Wright (Software Development Team Leader) and Mr S. McHugh (Database Officer) worked closely with the staff of the Ringing Unit, developing and maintaining the ORACLE and Progress databases. Dr S.R. Baillie, the Director of the Trust's Populations Research Department, and Dr H.Q.P. Crick were involved with supervision and research aspects of the Scheme.

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We work closely with the licensing staff of the country agencies and their help is much appreciated. We are grateful to the Trustees of the Natural History Museum for continuing permission to use their easily recognised and well-known address on BTO rings, thus helping us to maintain the reporting rate of rings. Thanks also to the Natural History Museum staff, both in Tring, Hertfordshire, and South Kensington, London, who take messages about ringed birds and pass them on to us. The co-operation of colleagues in other ringing schemes throughout the world is also a great help to us. Thanks are also due to the staff of Porzana Ltd who provide us with high-quality rings.

We are grateful for the voluntary office work in 2008 of John Bonell (ringing data inputting), Chris du Feu (EURING Databank), Brian Henson, Melody Lovelace, Alice Risely and Margaret Malley whose efforts were much appreciated. We would also like to thank the software advisors who help other ringers to use IPMR. In particular, we are grateful to Mark Cubitt who continues to maintain and upgrade IPMR, making an invaluable contribution to the Ringing and Nest Record Schemes.

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REFERENCES

- Austin, G.E., Collier, M., Calbrade, N.A., Hall, C. & Musgrove, A.J.** (2008) *Waterbirds in the UK 2006/07: the Wetland Bird Survey*. BTO/WWT/RSPB/JNCC, Theford.
- Baillie, S.R. & Schaub, M.** (2009) Understanding changes in bird populations — the role of bird marking. *Ringing & Migration* **24**, 189–198.
- Baillie, S.R., Brooks, S.P., King, R. & Thomas, L.** (2008) Using a state-space model of the British Song Thrush *Turdus philomelos* population to diagnose the causes of a population decline. In: *Modeling Demographic Processes in Marked Populations* (eds Thomson, D.L., Cooch, E.G. & Conroy, M.J.). pp. 541–561. Springer, New York.
- Baker, H., Stroud, D.A., Aebischer, N.J., Cranswick, P.A., Gregory, R.D., McSorley, C.A., Noble, D.G. & Rehfisch, M.M.** (2006) Population estimates of birds in Great Britain and the United Kingdom. *British Birds* **99**, 25–44.
- Balmer, D., Coiffait, L., Robinson, R. & Clark, J.** (2008) *Bird Ringing: a concise guide*. BTO, Theford.
- BirdWatch Ireland** (2009) *BirdWatch Ireland Annual Report 2008*. BirdWatch Ireland, County Wicklow. (www.birdwatchireland.ie/publications)
- Boddy, M. & Sellers, R.M.** (1983) Orientated movements of Greenfinches in southern Britain. *Ringing & Migration* **4**, 129–138.
- BOU** (2001) British Ornithologists' Union Records Committee: 27th report (October 2000). *Ibis* **143**, 171–175.
- Boyd, H. & Piersma, T.** (2001) Why do few Afro-Siberian Knots *Calidris canutus canutus* now visit Britain? *Bird Study* **48**, 147–158.
- Brooks, S.P., King, R. & Morgan, B.J.T.** (2004) A Bayesian approach to combining animal abundance and demographic data. *Animal Biodiversity and Conservation* **27**, 515–529.
- Burfield, I. & van Bommel, F.** (2004) *Birds in Europe: population estimates, trends and conservation status*. BirdLife International, Cambridge.
- Burgess, J.P.C.** (1982) Sexual differences and dispersal in the Blue Tit *Parus caeruleus*. *Ringing & Migration* **4**, 25–32.
- Cannon, A.R., Chamberlain, D.E., Toms, M.P., Hatchwell, B.J. & Gaston, K.J.** (2005) Trends in the use of private gardens by wild birds in Great Britain 1995–2002. *Journal of Applied Ecology* **42**, 659–671.
- Clark, J.A., Baillie, S.R., Gosler, A.G. & Martin, A.** (1998) Ring pricing for conservation and science. *Ringers' Bulletin* **9**, 65–67.
- Clark, J.A., Robinson, R.A., Balmer, D.E., Adams, S.Y., Collier, M.P., Grantham, M.J., Blackburn, J.R. & Griffin, B.M.** (2004) Bird ringing in Britain and Ireland in 2003. *Ringing & Migration* **22**, 85–127.
- Clark, J.A., Robinson, R.A., Balmer, D.E., Blackburn, J.R., Grantham, M.J., Griffin, B.M., Marchant, J.H., Risely, K. & Adams, S.Y.** (2005) Bird ringing in Britain and Ireland in 2004. *Ringing & Migration* **22**, 213–253.
- Clark, J.A., Robinson, R.A., Adams, S.Y., Collier, M.P., Grantham, M.J., Risely, K., Balmer, D.E., Blackburn, J.R., Griffin, B.M., Marchant, J.H. & Kimmel, V.** (2007) Bird ringing in Britain and Ireland in 2005. *Ringing & Migration* **23**, 156–192.
- Clarke, T.** (2006) *A Field Guide to the Birds of the Atlantic Islands: Canary Islands, Madeira, Azores, Cape Verde*. Christopher Helm, London.
- Coiffait, L., Clark, J.A., Robinson, R.A., Blackburn, J.R., Griffin, B.M., Risely, K., Grantham, M.J., Marchant, J.H., Girling, T. & Barber, L.** (2008a) Bird ringing in Britain and Ireland in 2006. *Ringing & Migration* **24**, 15–79.
- Coiffait, L., Clark, J.A., Robinson, R.A., Blackburn, J.R., Grantham, M.J., Marchant, J.H., Barber, L., de Palacio, D., Griffin, B.M. & Moss, D.** (2008b) Bird ringing in Britain and Ireland in 2007. *Ringing & Migration* **24**, 104–144.

- Cramp, S.** (ed) (1985) *The birds of the Western Palearctic. Volume IV. Terns to Woodpeckers*. Oxford University Press, Oxford.
- Cramp, S.** (ed) (1992) *The birds of the Western Palearctic. Volume VI. Warblers*. Oxford University Press, Oxford.
- Cramp, S. & Perrins, C.M.** (eds) (1993) *The birds of the Western Palearctic. Volume VII. Flycatchers to Shrikes*. Oxford University Press, Oxford.
- Cramp, S. & Perrins, C.M.** (eds) (1994) *The birds of the Western Palearctic. Volume IX. Buntings and New World Warblers*. Oxford University Press, Oxford.
- Cross, A.V. & Williams, O.** (2008) Woodcock ringing. *Ringers' Bulletin* **12**, 50.
- Dennis, M.K.** (1992) Wintering Blackcaps and Chiffchaffs in the London area. *London Bird Report* **57**, 145–152.
- Eaton, M.A., Brown, A.F., Noble, D.G., Musgrove, A.J., Hearn, R.D., 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 Isle of Man. *British Birds* **102**, 296–341.
- Freeman, S.N., Robinson, R.A., Clark, J.A., Griffin, B.M. & Adams, S.Y.** (2007) Changing demography and population decline in the Starling *Sturnus vulgaris*: a multi-site approach to integrated population modelling. *Ibis* **149**, 587–596.
- Fuller, R.J. & Ausden, M.** (2008) Birds and habitat change in Britain: a review of losses and gains in the twentieth century. *British Birds* **101**, 644–675.
- Garðarsson, A.** (1991) Movements of Whooper Swans *Cygnus cygnus* neckbanded in Iceland. In *Proceedings of the Third IWRB International Swan Symposium, Oxford 1989* (eds Sears, J. & Bacon, P.J.), pp 189–194. *Wildfowl* suppl. 1.
- Green, R.E., Hudson, D.P. & Holness, P.R.** (1997) Survival and movements of Stone-curlews *Burhinus oediacnemus* ringed in England. *Ringing & Migration* **18**, 102–112.
- Gregory, R.D., Wilkinson, N.I., Noble, D.G., Robinson, J.A., Brown, A.F., Hughes, J., Procter, D.A., Gibbons, D.W. & Galbraith, C.A.** (2002) The population status of birds in the United Kingdom, Channel Islands and Isle of Man: an analysis of conservation concern 2002–2007. *British Birds* **95**, 410–450.
- Hagemeijer, W.J.M. & Blair, M.J.** (eds) (1997) *The EBCC Atlas of European Breeding Birds: their distribution and abundance*. T. & A.D. Poyser, London.
- Holling, M. & the Rare Breeding Birds Panel** (2009) Rare breeding birds in the United Kingdom in 2006. *British Birds* **102**, 158–202.
- Jenkins, G., Perry, M. & Prior, J.** (2008) *The climate of the UK and recent trends*. Met Office Hadley Centre, Exeter.
- JNCC** (2009) *UK Seabirds in 2008*. JNCC, Aberdeen.
- Lack, D.** (1966) *Population Studies of Birds*. Clarendon Press, Oxford.
- Lack, P.** (ed) (1986) *The Atlas of Wintering Birds in Britain and Ireland*. T. & A.D. Poyser, Calton.
- Laubek, B., Nilsson, L., Wieloch, M., Koffijberg, K., Sudfeldt, C. & Follestad, A.** (1999) Distribution, numbers and habitat choice of the NW European Whooper Swan *Cygnus cygnus* population: results of an international census in January 1995. *Die Vogelwelt* **120**, 141–154.
- MacLeod, R., Barnett, R.B., Clark, J.A. & Cresswell, W.** (2005) Body mass change strategies in Blackbirds *Turdus merula*: the starvation–predation risk trade-off. *Journal of Animal Ecology* **74**, 292–302.
- MacLeod, R., Lind, J., Clark, J.A. & Cresswell, W.** (2007) Mass regulation in response to predation risk can indicate population declines. *Ecology Letters* **10**, 945–955.
- MacLeod, R., Clark, J.A. & Cresswell, W.** (2008) The starvation–predation risk trade-off, body mass and population status in the Common Starling *Sturnus vulgaris*. *Ibis* **150** (suppl 1), 199–208.
- Main, I.G.** (1996) Seasonal movements of British Greenfinches *Carduelis chloris*. *Bird Study* **43**, 240–252.
- Mainwood, A.R.** (1976) The movements of Storm Petrels as shown by ringing. *Ringing & Migration* **1**, 98–104.
- Mavor, R.A., Parsons, M., Heubeck, M. & Schmitt, S.** (2005) *Seabird numbers and breeding success in Britain and Ireland, 2004*. Joint Nature Conservation Committee, Peterborough.
- Mavor, R.A., Parsons, M., Heubeck, M. & Schmitt, S.** (2006) *Seabird numbers and breeding success in Britain and Ireland, 2005*. Joint Nature Conservation Committee, Peterborough.
- Mavor, R.A., Heubeck, M., Schmitt, S. & Parsons, M.** (2008) *Seabird numbers and breeding success in Britain and Ireland, 2006*. Joint Nature Conservation Committee, Peterborough.
- Mead, C.J. & Clark, J.A.** (1991) Report on bird ringing for Britain and Ireland for 1990. *Ringing & Migration* **12**, 139–176.
- Mead, C.J. & Clark, J.A.** (1993) Report on bird ringing in Britain and Ireland for 1991. *Ringing & Migration* **14**, 1–72.
- Mead, C.J. & Hudson, R.** (1983) Report on bird ringing for 1982. *Ringing & Migration* **4**, 281–319.
- Milwright, R.D.P.** (2002) Redwing *Turdus iliacus* migration and wintering areas as shown by recoveries of birds ringed in the breeding season in Fennoscandia, Poland, the Baltic Republics, Russia, Siberia and Iceland. *Ringing & Migration* **21**, 5–15.
- Milwright, R.D.P.** (2006) Post-breeding dispersal, breeding site fidelity and migration/wintering areas of migratory populations of Song Thrush *Turdus philomelos* in the Western Palearctic. *Ringing & Migration* **23**, 21–32.
- Murray, S. & Wanless, S.** (1997) The status of the Gannet in Scotland in 1994/95. *Scottish Birds* **19**, 10–27.
- Okill, J.D.** (1994) Ringing recoveries of Red-throated Divers *Gavia stellata* in Britain and Ireland. *Ringing & Migration* **15**, 107–118.
- Okill, J.D. & Bolton, M.** (2005) Ages of Storm Petrels *Hydrobates pelagicus* prospecting potential breeding colonies. *Ringing & Migration* **22**, 205–208.
- Parsons, M., Mitchell, P.I., Butler, A., Mavor, R., Ratcliffe, N., & Foster, S.** (2006) *Natural Heritage Trends: abundance of breeding seabirds in Scotland*. SNH Commissioned Report 222. SNH, Inverness.
- Pennycuik, C.J., Einarsson, Ó., Bradbury, T.A.M. & Owen, M.** (1996) Migrating Whooper Swans *Cygnus cygnus*: satellite tracks and flight performance calculations. *Journal of Avian Biology* **27**, 118–134.
- Pennycuik, C.J., Bradbury, T.A.M., Einarsson, Ó. & Owen, M.** (1999) Response to weather and light conditions of migrating Whooper Swans *Cygnus cygnus* and flying height profiles, observed with the Argos satellite system. *Ibis* **141**, 434–443.
- Raine, A.F., Sowter, D.J., Brown, A.F. & Sutherland, W.J.** (2006a) Migration patterns of two populations of Twite *Carduelis flavirostris* in Britain. *Ringing & Migration* **23**, 45–52.
- Raine, A.F., Sowter, D.J., Brown, A.F. & Sutherland, W.J.** (2006b) Natal philopatry and local movement patterns of Twite *Carduelis flavirostris*. *Ringing & Migration* **23**, 89–94.
- Richardson, M.G.** (1990) The distribution and status of Whimbrel *Numenius p. phaeopus* in Shetland and Britain. *Bird Study* **37**, 61–68.
- Risely, K., Noble, D.G. & Baillie, S.R.** (2009) *The Breeding Bird Survey 2008*. Research Report 537. BTO, Theford.
- Robinson, R.A.** (2005) *BirdFacts: profiles of birds occurring in Britain & Ireland* (v1.24, June 2009). Research Report 407. BTO, Theford. (www.bto.org/birdfacts)

- Robinson, R.A. & Ratcliffe, N.** (2009) The feasibility of Integrated Population Monitoring of Britain's seabirds. BTO Research Report 526. BTO, Thefford.
- Robinson, R.A., Freeman, S.N., Balmer, D.E. & Grantham, M.J.** (2007) Cetti's Warbler: analysis of an expanding population. *Bird Study* **54**, 230–235.
- Robinson, R.A., Kew, J.J. & Kew, A.J.** (in press) Survival of suburban Blackbirds *Turdus merula* varies seasonally but not by sex. *Journal of Avian Biology*.
- Rydzewski, W.** (1956) The nomadic movements and migrations of the European Common Heron *Ardea cinerea* L. *Ardea* **44**, 171–188.
- Sanderson, F.J., Donald, P.F., Pain, D.J., Burfield, I.J. & van Bommel, F.P.J.** (2006) Long-term population declines in Afro-Palearctic migrants. *Biological Conservation* **131**, 93–105.
- Sangster, G., Collinson, J.M., Helbig, A.J., Knox, A.G. & Parkin, D.T.** (2005) Taxonomic recommendations for British birds: third report. *Ibis* **147**, 821–826.
- Sangster, G., Collinson, J.M., Knox, A.G., Parkin, D.T. & Svensson, L.** (2007) Taxonomic recommendations for British birds: fourth report. *Ibis* **149**, 853–857.
- Seabird Group** (2008) 2007 Breeding Season News. *The Seabird Group Newsletter* **107**, 10–15.
- Siriwardena, G.M., Baillie, S.R. & Wilson, J.D.** (1998) Variation in the survival rates of British farmland passerines with respect to their population trends. *Bird Study* **45**, 276–292.
- Spencer, R. & Hudson, R.** (1975) Report on bird-ringing for 1973. *Bird Study* **22** (suppl), 1–64.
- Spencer, R. & Hudson, R.** (1977) Report on bird-ringing for 1975. *Bird Study* **24** (suppl), 1–64.
- Spencer, R. & Hudson, R.** (1978) Report on bird-ringing for 1976. *Ringing & Migration* **1**, 189–252.
- Spencer, R. & Hudson, R.** (1982) Report on bird-ringing for 1981. *Ringing & Migration* **2**, 65–128.
- Taylor, E., Green, R.E. & Perrins, J.** (2007) Stone-curlews *Burhinus oedicnemus* and recreational disturbance: developing a management tool for access. *Ibis* **149** (suppl 1), 37–44.
- Townshend, D.J.** (1985) Decisions for a lifetime: establishment of spatial defence and movement patterns by juvenile Grey Plovers *Pluvialis squatarola*. *Journal of Animal Ecology* **54**, 267–274.
- Voisin, C.** (1991) *The Herons of Europe*. T. & A.D. Poyser, London.
- Walker, A.F.G.** (1970) The moult migration of Yorkshire Canada Geese. *Wildfowl* **21**, 99–104.
- Wernham, C.V., Toms, M.P., Marchant, J.H., Clark, J.A., Siriwardena, G.M. & Baillie, S.R.** (eds) (2002) *The Migration Atlas: movements of the birds of Britain and Ireland*. T. & A.D. Poyser, London.
- Wilson, A.M., Henderson, A.C.B. & Fuller, R.J.** (2002) Status of the Nightingale *Luscinia megarhynchos* in Britain at the end of the 20th century with particular reference to climate change. *Bird Study* **49**, 193–204.

Table 1. Numbers of birds ringed and recovered in Britain & Ireland from 1999 to 2008.

Year	Juv/Adult	Ringed Pullus	Total	Recovered
1999	533,309	167,078	700,387	10,587
2000	562,039	172,196	734,235	10,912
2001	515,009	133,927	648,936	10,693
2002	614,300	176,774	791,074	11,041
2003	673,889	174,643	848,532	11,554
2004	712,925	168,995	881,920	13,713
2005	700,144	173,525	873,669	12,658
2006	673,068	179,540	852,608	13,785
2007	618,436	168,431	786,867	13,156
2008	673,480	161,846	835,326	15,164
Grand total 1909–2008			36,165,157	673,866

Table 2. Ringing and recovery totals in Britain & Ireland in 2008.

		Juv/Adult	Pullus	Ringed 2008 Total	Grand Total	Recovered	
						2008	Grand Total
Mute Swan	<i>Cygnus olor</i>	1,935	539	2,474	116,657	831	30,690
Bewick's Swan	<i>Cygnus columbianus</i>	6	0	6	2,422	2	1,348
Whooper Swan	<i>Cygnus cygnus</i>	219	0	219	2,994	99	674
Bean Goose	<i>Anser fabalis</i>	0	0	0	5	1	5
Pink-footed Goose	<i>Anser brachyrhynchus</i>	27	0	27	15,122	29	4,738
White-fronted Goose	<i>Anser albifrons</i>	31	0	31	2,463	3	577
Greylag Goose	<i>Anser anser</i>	550	128	678	13,127	131	3,021
Canada Goose	<i>Branta canadensis</i>	978	63	1,041	75,311	167	12,902
Barnacle Goose	<i>Branta leucopsis</i>	198	0	198	6,651	16	522
Brent Goose	<i>Branta bernicla</i>	0	0	0	1,008	1	80
Egyptian Goose	<i>Alopochen aegyptiaca</i>	24	12	36	326	10	42
Shelduck	<i>Tadorna tadorna</i>	308	6	314	11,191	11	881
Mandarin Duck	<i>Aix galericulata</i>	24	1	25	1,592	1	72
Wigeon	<i>Anas penelope</i>	301	0	301	28,006	70	2,979
Gadwall	<i>Anas strepera</i>	104	41	145	7,580	17	888
Teal	<i>Anas crecca</i>	1,483	4	1,487	107,883	165	15,010
Mallard	<i>Anas platyrhynchos</i>	1,712	103	1,815	177,384	211	26,522
Pintail	<i>Anas acuta</i>	137	0	137	8,318	19	1,114
Shoveler	<i>Anas clypeata</i>	1	7	8	2,970	2	477
Pochard	<i>Aythya ferina</i>	98	2	100	15,889	19	1,846
Tufted Duck	<i>Aythya fuligula</i>	311	12	323	36,350	24	3,783
Scaup	<i>Aythya marila</i>	1	0	1	212	0	45
Eider	<i>Somateria mollissima</i>	183	0	183	22,989	20	3,712
Long-tailed Duck	<i>Clangula hyemalis</i>	1	0	1	42	0	6
Goldeneye	<i>Bucephala clangula</i>	23	0	23	540	6	37
Red-breasted Merganser	<i>Mergus serrator</i>	1	0	1	216	0	17
Goosander	<i>Mergus merganser</i>	15	0	15	1,401	0	177
Ruddy Duck	<i>Oxyura jamaicensis</i>	0	2	2	369	3	35
Red Grouse	<i>Lagopus lagopus</i>	1	88	89	2,610	0	205
Grey Partridge	<i>Perdix perdix</i>	69	0	69	1,330	0	45
Quail	<i>Coturnix coturnix</i>	1	0	1	60	0	2
Red-throated Diver	<i>Gavia stellata</i>	2	103	105	4,009	16	285
Great Northern Diver	<i>Gavia immer</i>	1	0	1	11	0	1
Little Grebe	<i>Tachybaptus ruficollis</i>	21	0	21	1,581	1	49
Great Crested Grebe	<i>Podiceps cristatus</i>	4	0	4	401	0	42
Fulmar	<i>Fulmarus glacialis</i>	235	472	707	115,871	14	1,680
Cory's Shearwater	<i>Calonectris diomedea</i>	1	0	1	2	0	0
Manx Shearwater	<i>Puffinus puffinus</i>	1,671	1,551	3,222	322,566	46	4,274
Storm Petrel	<i>Hydrobates pelagicus</i>	10,151	39	10,190	450,231	392	12,771
Leach's Petrel	<i>Oceanodroma leucorhoa</i>	556	5	561	15,180	2	84
Gannet	<i>Morus bassanus</i>	4	82	86	72,715	33	4,201
Cormorant	<i>Phalacrocorax carbo</i>	4	1,670	1,674	84,233	139	10,480
Shag	<i>Phalacrocorax aristotelis</i>	254	2,631	2,885	224,410	232	15,742
Little Egret	<i>Egretta garzetta</i>	2	115	117	352	24	47
Grey Heron	<i>Ardea cinerea</i>	13	334	347	28,608	53	2,814
Honey-buzzard	<i>Pernis apivorus</i>	2	13	15	187	0	6
Red Kite	<i>Milvus milvus</i>	56	584	640	4,974	131	850

Table 2. continued

		Juv/Adult	Pullus	Ringed 2008 Total	Grand Total	Recovered 2008	Grand Total
White-tailed Eagle	<i>Haliaeetus albicilla</i>	0	27	27	271	3	23
Marsh Harrier	<i>Circus aeruginosus</i>	2	58	60	2,194	5	86
Hen Harrier	<i>Circus cyaneus</i>	2	360	362	10,094	100	594
Montagu's Harrier	<i>Circus pygargus</i>	0	4	4	510	0	44
Goshawk	<i>Accipiter gentilis</i>	0	272	272	5,905	11	223
Sparrowhawk	<i>Accipiter nisus</i>	607	278	885	47,683	61	4,512
Buzzard	<i>Buteo buteo</i>	86	599	685	14,649	33	1,000
Rough-legged Buzzard	<i>Buteo lagopus</i>	1	0	1	5	0	0
Golden Eagle	<i>Aquila chrysaetos</i>	3	53	56	1,326	1	56
Osprey	<i>Pandion haliaetus</i>	1	148	149	2,486	7	198
Kestrel	<i>Falco tinnunculus</i>	182	1,868	2,050	66,855	108	5,245
Merlin	<i>Falco columbarius</i>	14	428	442	18,651	15	1,081
Hobby	<i>Falco subbuteo</i>	4	153	157	2,172	6	59
Peregrine	<i>Falco peregrinus</i>	14	334	348	10,021	62	900
Water Rail	<i>Rallus aquaticus</i>	107	3	110	5,576	1	83
Corncrake	<i>Crex crex</i>	3	0	3	2,262	0	25
Moorhen	<i>Gallinula chloropus</i>	395	20	415	33,150	6	1,079
Coot	<i>Fulica atra</i>	477	16	493	19,112	63	1,303
Oystercatcher	<i>Haematopus ostralegus</i>	2,373	387	2,760	157,461	159	10,002
Avocet	<i>Recurvirostra avosetta</i>	9	36	45	1,538	1	87
Stone-curlew	<i>Burhinus oedicanus</i>	0	226	226	5,116	4	185
Little Ringed Plover	<i>Charadrius dubius</i>	22	108	130	6,054	0	90
Ringed Plover	<i>Charadrius hiaticula</i>	228	272	500	56,837	22	1,043
Dotterel	<i>Charadrius morinellus</i>	1	4	5	2,358	1	45
Golden Plover	<i>Pluvialis apricaria</i>	67	14	81	6,484	1	117
Grey Plover	<i>Pluvialis squatarola</i>	72	0	72	10,350	2	416
Lapwing	<i>Vanellus vanellus</i>	206	2,085	2,291	234,585	20	3,460
Knot	<i>Calidris canutus</i>	2,488	0	2,488	109,327	42	2,477
Sanderling	<i>Calidris alba</i>	181	0	181	30,189	3	685
Temminck's Stint	<i>Calidris temminckii</i>	1	0	1	28	0	0
Pectoral Sandpiper	<i>Calidris melanotos</i>	1	0	1	75	0	1
Curlew Sandpiper	<i>Calidris ferruginea</i>	9	0	9	2,353	0	26
Purple Sandpiper	<i>Calidris maritima</i>	109	0	109	8,101	0	102
Dunlin	<i>Calidris alpina</i>	2,623	52	2,675	433,612	13	6,250
Ruff	<i>Philomachus pugnax</i>	12	0	12	2,532	0	78
Jack Snipe	<i>Lymnocyptes minimus</i>	72	0	72	4,200	0	66
Snipe	<i>Gallinago gallinago</i>	190	27	217	34,994	5	1,216
Woodcock	<i>Scolopax rusticola</i>	333	19	352	10,401	8	782
Black-tailed Godwit	<i>Limosa limosa</i>	261	0	261	3,902	9	434
Bar-tailed Godwit	<i>Limosa lapponica</i>	117	0	117	14,055	3	340
Whimbrel	<i>Numenius phaeopus</i>	39	0	39	2,386	1	52
Curlew	<i>Numenius arquata</i>	352	145	497	33,995	19	1,614
Common Sandpiper	<i>Actitis hypoleucos</i>	90	117	207	21,057	5	261
Green Sandpiper	<i>Tringa ochropus</i>	49	0	49	2,057	0	44
Spotted Redshank	<i>Tringa erythropus</i>	1	0	1	389	0	13
Greenshank	<i>Tringa nebularia</i>	66	2	68	3,020	3	140
Wood Sandpiper	<i>Tringa glareola</i>	1	0	1	413	1	4

Table 2. continued

		Juv/Adult	Pullus	Ringed 2008 Total	Grand Total	Recovered	
						2008	Grand Total
Redshank	<i>Tringa totanus</i>	2,067	148	2,215	122,171	32	3,525
Turnstone	<i>Arenaria interpres</i>	520	0	520	34,076	4	888
Red-necked Phalarope	<i>Phalaropus lobatus</i>	0	13	13	654	1	2
Arctic Skua	<i>Stercorarius parasiticus</i>	1	9	10	14,263	3	359
Great Skua	<i>Stercorarius skua</i>	16	622	638	75,239	34	2,442
Kittiwake	<i>Rissa tridactyla</i>	352	826	1,178	133,430	20	2,269
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	1,487	3,091	4,578	370,521	451	20,639
Little Gull	<i>Hydrocoloeus minutus</i>	1	0	1	494	0	18
Mediterranean Gull	<i>Larus melanocephalus</i>	1	9	10	210	1	82
Common Gull	<i>Larus canus</i>	28	1,994	2,022	91,081	53	1,936
Lesser Black-backed Gull	<i>Larus fuscus</i>	855	1,384	2,239	197,027	2,162	26,349
Herring Gull	<i>Larus argentatus</i>	2,272	1,721	3,993	323,617	1,306	22,147
Yellow-legged Gull	<i>Larus michahellis</i>	10	0	10	23	5	5
Great Black-backed Gull	<i>Larus marinus</i>	343	592	935	75,848	41	3,290
Little Tern	<i>Sternula albifrons</i>	2	439	441	17,383	13	234
Black Tern	<i>Chlidonias niger</i>	1	0	1	100	0	0
Sandwich Tern	<i>Sterna sandvicensis</i>	8	2,310	2,318	178,672	61	5,211
Common Tern	<i>Sterna hirundo</i>	117	3,612	3,729	185,603	67	4,703
Roseate Tern	<i>Sterna dougallii</i>	2	1,019	1,021	40,490	6	1,160
Arctic Tern	<i>Sterna paradisaea</i>	109	1,282	1,391	198,427	17	1,566
Guillemot	<i>Uria aalge</i>	409	1,909	2,318	314,355	90	9,175
Razorbill	<i>Alca torda</i>	314	591	905	109,262	18	3,512
Black Guillemot	<i>Cephus grylle</i>	11	177	188	12,006	6	223
Puffin	<i>Fratercula arctica</i>	2,000	415	2,415	264,973	33	3,615
Rock Dove	<i>Columba livia</i>	57	8	65	1,802	1	57
Stock Dove	<i>Columba oenas</i>	266	1,122	1,388	23,089	8	469
Woodpigeon	<i>Columba palumbus</i>	1,093	350	1,443	45,809	41	2,947
Collared Dove	<i>Streptopelia decaocto</i>	833	95	928	34,225	19	1,000
Turtle Dove	<i>Streptopelia turtur</i>	22	3	25	7,459	0	219
Ring-necked Parakeet	<i>Psittacula krameri</i>	188	0	188	962	5	13
Cuckoo	<i>Cuculus canorus</i>	22	14	36	6,368	0	138
Barn Owl	<i>Tyto alba</i>	834	5,422	6,256	77,981	857	8,897
Eurasian Eagle-Owl	<i>Bubo bubo</i>	0	2	2	31	0	2
Little Owl	<i>Athene noctua</i>	67	282	349	11,613	8	520
Tawny Owl	<i>Strix aluco</i>	180	1,116	1,296	42,342	61	2,393
Long-eared Owl	<i>Asio otus</i>	28	42	70	4,463	1	293
Short-eared Owl	<i>Asio flammeus</i>	5	24	29	2,693	0	134
Nightjar	<i>Caprimulgus europaeus</i>	108	86	194	5,217	2	94
Swift	<i>Apus apus</i>	968	268	1,236	182,080	13	3,282
Kingfisher	<i>Alcedo atthis</i>	613	11	624	26,232	8	886
Hoopoe	<i>Upupa epops</i>	1	0	1	45	0	1
Wryneck	<i>Jynx torquilla</i>	23	0	23	2,224	0	22
Green Woodpecker	<i>Picus viridis</i>	297	1	298	7,559	6	232
Great Spotted Woodpecker	<i>Dendrocopos major</i>	2,058	24	2,082	29,784	36	656
Lesser Spotted Woodpecker	<i>Dendrocopos minor</i>	10	0	10	1,701	0	18
Woodlark	<i>Lullula arborea</i>	1	240	241	5,363	0	31
Skylark	<i>Alauda arvensis</i>	80	323	403	54,050	29	267

Table 2. continued

		Juv/Adult	Pullus	Ringed 2008 Total	Grand Total	Recovered 2008	Grand Total
Sand Martin	<i>Riparia riparia</i>	10,171	1,472	11,643	1,129,922	158	18,990
Swallow	<i>Hirundo rustica</i>	21,673	14,403	36,076	1,753,861	186	10,832
House Martin	<i>Delichon urbicum</i>	6,280	304	6,584	356,246	14	1,316
Richard's Pipit	<i>Anthus richardi</i>	1	0	1	30	0	0
Tree Pipit	<i>Anthus trivialis</i>	157	125	282	19,886	0	37
Meadow Pipit	<i>Anthus pratensis</i>	9,060	666	9,726	274,170	19	1,033
Rock Pipit	<i>Anthus petrosus</i>	279	57	336	28,329	3	142
Water Pipit	<i>Anthus spinoletta</i>	9	0	9	136	0	2
Yellow Wagtail	<i>Motacilla flava</i>	663	64	727	75,721	1	502
Grey Wagtail	<i>Motacilla cinerea</i>	585	552	1,137	43,428	7	305
Pied Wagtail	<i>Motacilla alba</i>	3,902	961	4,863	270,696	45	4,001
Waxwing	<i>Bombycilla garrulus</i>	305	0	305	4,870	12	351
Dipper	<i>Cinclus cinclus</i>	255	1,372	1,627	68,588	30	661
Wren	<i>Troglodytes troglodytes</i>	12,408	358	12,766	550,335	48	1,964
Dunnock	<i>Prunella modularis</i>	15,818	338	16,156	776,175	96	6,053
Robin	<i>Erithacus rubecula</i>	20,705	1,288	21,993	911,215	122	9,880
Thrush Nightingale	<i>Luscinia luscinia</i>	6	0	6	109	0	0
Nightingale	<i>Luscinia megarhynchos</i>	140	6	146	11,667	4	94
Bluethroat	<i>Luscinia svecica</i>	16	0	16	1,100	0	7
Red-flanked Bluetail	<i>Tarsiger cyanurus</i>	3	0	3	18	0	0
Black Redstart	<i>Phoenicurus ochruros</i>	56	3	59	4,861	0	49
Redstart	<i>Phoenicurus phoenicurus</i>	678	980	1,658	100,130	4	377
Whinchat	<i>Saxicola rubetra</i>	130	286	416	40,579	2	139
Stonechat	<i>Saxicola torquatus</i>	473	637	1,110	38,757	5	242
Wheatear	<i>Oenanthe oenanthe</i>	649	458	1,107	86,102	1	367
White's Thrush	<i>Zoothera dauma</i>	1	0	1	9	0	0
Grey-cheeked Thrush	<i>Catharus minimus</i>	1	0	1	15	0	0
Ring Ouzel	<i>Turdus torquatus</i>	31	227	258	13,089	0	141
Blackbird	<i>Turdus merula</i>	28,899	1,847	30,746	1,850,332	455	54,477
Fieldfare	<i>Turdus pilaris</i>	1,474	0	1,474	66,028	7	828
Song Thrush	<i>Turdus philomelos</i>	6,027	664	6,691	611,263	32	11,947
Redwing	<i>Turdus iliacus</i>	4,183	5	4,188	257,656	13	1,849
Mistle Thrush	<i>Turdus viscivorus</i>	199	162	361	46,730	2	1,356
Cetti's Warbler	<i>Cettia cetti</i>	694	14	708	8,878	12	169
Pallas's Grasshopper Warbler	<i>Locustella certhiola</i>	1	0	1	26	0	0
Grasshopper Warbler	<i>Locustella naevia</i>	1,013	15	1,028	27,699	3	56
Savi's Warbler	<i>Locustella luscinioides</i>	1	0	1	74	0	2
Aquatic Warbler	<i>Acrocephalus paludicola</i>	5	0	5	775	0	3
Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	16,787	235	17,022	858,583	242	7,046
Paddyfield Warbler	<i>Acrocephalus agricola</i>	3	0	3	40	0	1
Blyth's Reed Warbler	<i>Acrocephalus dumetorum</i>	2	0	2	61	0	2
Marsh Warbler	<i>Acrocephalus palustris</i>	18	0	18	1,401	1	18
Reed Warbler	<i>Acrocephalus scirpaceus</i>	19,565	676	20,241	775,960	240	9,203
Great Reed Warbler	<i>Acrocephalus arundinaceus</i>	1	0	1	53	0	0
Eastern Olivaceous Warbler	<i>Hippolais pallida</i>	1	0	1	10	0	0
Icterine Warbler	<i>Hippolais icterina</i>	31	0	31	1,026	0	2
Melodious Warbler	<i>Hippolais polyglotta</i>	9	0	9	501	0	1

Table 2. continued

		Juv/Adult	Pullus	Ringed 2008 Total	Grand Total	Recovered 2008	Recovered Grand Total
Blackcap	<i>Sylvia atricapilla</i>	24,629	105	24,734	678,033	137	3,617
Garden Warbler	<i>Sylvia borin</i>	3,443	31	3,474	159,829	17	625
Barred Warbler	<i>Sylvia nisoria</i>	17	0	17	1,812	0	5
Lesser Whitethroat	<i>Sylvia curruca</i>	2,072	22	2,094	114,760	7	497
Whitethroat	<i>Sylvia communis</i>	6,949	239	7,188	370,846	21	1,137
Dartford Warbler	<i>Sylvia undata</i>	89	22	111	2,890	0	20
Subalpine Warbler	<i>Sylvia cantillans</i>	6	0	6	175	0	2
Greenish Warbler	<i>Phylloscopus trochiloides</i>	2	0	2	156	0	0
Pallas's Warbler	<i>Phylloscopus proregulus</i>	11	0	11	352	0	2
Yellow-browed Warbler	<i>Phylloscopus inornatus</i>	112	0	112	1,784	0	3
Hume's Warbler	<i>Phylloscopus humei</i>	2	0	2	9	0	0
Radde's Warbler	<i>Phylloscopus schwarzi</i>	5	0	5	89	0	0
Dusky Warbler	<i>Phylloscopus fuscatus</i>	1	0	1	78	0	1
Wood Warbler	<i>Phylloscopus sibilatrix</i>	58	100	158	19,977	0	47
Chiffchaff	<i>Phylloscopus collybita</i>	23,829	215	24,044	532,592	102	2,076
Willow Warbler	<i>Phylloscopus trochilus</i>	16,580	613	17,193	1,234,027	55	3,279
Goldcrest	<i>Regulus regulus</i>	22,571	8	22,579	503,625	74	1,602
Firecrest	<i>Regulus ignicapilla</i>	428	0	428	10,211	6	52
Spotted Flycatcher	<i>Muscicapa striata</i>	602	309	911	98,105	1	439
Red-breasted Flycatcher	<i>Ficedula parva</i>	9	0	9	767	0	1
Pied Flycatcher	<i>Ficedula hypoleuca</i>	1,322	11,294	12,616	589,335	131	5,383
Alder Flycatcher*	<i>Empidonax alnorum</i>	1	0	1	1	0	0
Bearded Tit	<i>Panurus biarmicus</i>	424	12	436	38,278	7	1,131
Long-tailed Tit	<i>Aegithalos caudatus</i>	17,788	177	17,965	372,193	83	1,792
Blue Tit	<i>Cyanistes caeruleus</i>	51,828	31,667	83,495	3,352,475	309	22,387
Great Tit	<i>Parus major</i>	35,441	24,938	60,379	1,672,372	287	10,085
Crested Tit	<i>Lophophanes cristatus</i>	9	9	18	2,237	0	7
Coal Tit	<i>Periparus ater</i>	14,381	796	15,177	273,877	80	1,438
Willow Tit	<i>Poecile montanus</i>	301	37	338	49,090	4	254
Marsh Tit	<i>Poecile palustris</i>	727	386	1,113	43,541	4	198
Nuthatch	<i>Sitta europaea</i>	1,065	1,267	2,332	50,787	12	401
Treecreeper	<i>Certhia familiaris</i>	1,614	73	1,687	73,240	1	201
Penduline Tit	<i>Remiz pendulinus</i>	2	0	2	25	0	2
Golden Oriole	<i>Oriolus oriolus</i>	2	0	2	215	0	9
Red-backed Shrike	<i>Lanius collurio</i>	18	0	18	3,982	0	18
Great Grey Shrike	<i>Lanius excubitor</i>	2	0	2	455	0	8
Jay	<i>Garrulus glandarius</i>	540	14	554	23,051	14	1,158
Magpie	<i>Pica pica</i>	406	51	457	26,666	23	1,359
Chough	<i>Pyrrhocorax pyrrhocorax</i>	13	346	359	6,417	28	470
Jackdaw	<i>Corvus monedula</i>	476	1,010	1,486	49,958	57	1,812
Rook	<i>Corvus frugilegus</i>	584	36	620	39,962	11	1,719
Carrion Crow	<i>Corvus corone</i>	98	75	173	17,877	6	1,050
Hooded Crow	<i>Corvus cornix</i>	12	20	32	122	0	9
Raven	<i>Corvus corax</i>	1	185	186	12,866	10	756
Starling	<i>Sturnus vulgaris</i>	11,253	1,481	12,734	1,356,168	119	39,717
Rose-coloured Starling	<i>Sturnus roseus</i>	2	0	2	15	0	0
House Sparrow	<i>Passer domesticus</i>	10,187	1,313	11,500	535,436	80	6,884

Table 2. continued

		Juv/Adult	Pullus	Ringed 2008 Total	Grand Total	Recovered	
						2008	Grand Total
Tree Sparrow	<i>Passer montanus</i>	3,876	7,027	10,903	313,952	67	1,202
Chaffinch	<i>Fringilla coelebs</i>	34,735	260	34,995	1,193,549	273	8,153
Brambling	<i>Fringilla montifringilla</i>	5,906	0	5,906	128,412	79	1,014
Citril Finch*	<i>Serinus citrinella</i>	1	0	1	1	0	0
Greenfinch	<i>Carduelis chloris</i>	40,711	294	41,005	2,030,584	776	34,724
Goldfinch	<i>Carduelis carduelis</i>	27,558	156	27,714	309,676	196	2,289
Siskin	<i>Carduelis spinus</i>	37,366	6	37,372	405,125	665	9,059
Linnet	<i>Carduelis cannabina</i>	8,567	319	8,886	418,767	138	2,440
Twite	<i>Carduelis flavirostris</i>	1,038	60	1,098	32,627	63	695
Lesser Redpoll	<i>Carduelis cabaret</i>	11,051	0	11,051	232,340	80	1,930
Common Redpoll	<i>Carduelis flammea</i>	74	0	74	441	0	1
Two-barred Crossbill	<i>Loxia leucoptera</i>	9	0	9	17	0	0
Common Crossbill	<i>Loxia curvirostra</i>	82	3	85	5,051	4	36
Scottish Crossbill	<i>Loxia scotica</i>	9	4	13	449	0	4
Common Rosefinch	<i>Carpodacus erythrinus</i>	21	0	21	706	0	2
Bullfinch	<i>Pyrrhula pyrrhula</i>	4,946	27	4,973	310,044	26	3,433
Hawfinch	<i>Coccothraustes coccothraustes</i>	89	0	89	1,641	2	33
White-throated Sparrow	<i>Zonotrichia albicollis</i>	1	0	1	7	0	0
Lapland Bunting	<i>Calcarius lapponicus</i>	4	0	4	542	0	1
Snow Bunting	<i>Plectrophenax nivalis</i>	287	0	287	22,720	2	546
Yellowhammer	<i>Emberiza citrinella</i>	4,061	66	4,127	170,368	27	794
Rustic Bunting	<i>Emberiza rustica</i>	2	0	2	53	0	0
Little Bunting	<i>Emberiza pusilla</i>	2	0	2	158	0	2
Reed Bunting	<i>Emberiza schoeniclus</i>	7,458	181	7,639	416,759	51	2,754
Corn Bunting	<i>Emberiza calandra</i>	76	99	175	14,501	1	95
GRAND TOTAL		673,480	161,846	835,326	36,165,157	15,164	673,866

Footnotes:

Recoveries are reports of birds found dead and those found alive away from the site of ringing. For most species, reports of live birds recaptured by ringers within 5 km of the ringing site are classified as retraps and are not included in recoveries. For some species, special criteria for classification as recoveries are used. The criteria used in 2008 are listed below. In addition, a few local retraps of particularly long-lived birds are added to the national recovery files each year. Since 2005, ringers have submitted all retraps, either electronically or on paper. Electronic reports are stored on an ORACLE database at BTO HQ. Prior to 2005 many retraps were reported electronically and these are also on the HQ database; however, these data are not complete. Prior to 2008, all sightings/reports of an individual received during a particular season (eg winter) at the same location were summarised and recorded in a text field within the initial recovery details (ie the first date that the bird was caught or resighted). As many of these multiple reports were received electronically, they were stored in a recapture table. However, from 2008 these records have been stored as individual recoveries. Recoveries listed in Table 2 follow the BOU species order (prior to the 2006 Ringing Report, species were listed in Youus order). Only those species on the British List (categories A, B, C) are included, with the addition of Eurasian Eagle-Owl (category E*). This species is included because more than 20 pulli of birds breeding in the wild have been ringed, helping us to monitor the population.

*Species ringed in Britain & Ireland for the first time in 2008.

Storm Petrel

All movements over 20 km are processed, as well as movements of 5 km or more for birds that are likely to be breeding. Breeders are defined as birds retrapped four or more years after being ringed as chicks or juveniles, and three or more years after ringing as adults.

Mute Swan and Canada Goose

Sightings and retraps over 40 km are all processed. Movements between 5 km and 40 km are included if considered significant by the ringer.

Common shore waders

Oystercatcher, Ringed Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Curlew, Redshank and Turnstone: all movements between estuaries are processed, as are movements over 30 km.

Gulls

The threshold distance moved for Black-headed, Common, Lesser Black-backed, Herring and Great Black-backed Gull is 40 km. For all other species the threshold is 5 km.

Sand Martin

The minimum distance for a control to be processed is 10 km.

Other notes

Taxonomic changes

A list summarising the taxonomic changes which have affected birds ringed or found in Britain & Ireland is given in Table 7.

Rarities

British Birds Rarities Committee (BBRC) and Irish Rare Birds Committee (IRBC) rarities reported by ringers are included in this list but adjustments may be made later if any individuals are not accepted.

Corrections

Late reporting of some 2007 ringing totals meant that, for some species, the 2007 Ringing Report totals (Coiffait *et al* 2008b) required adjustment. The totals have now been amended.

The 2006 Ringing Report stated that there had been no international recoveries of Quail *Coturnix coturnix* involving Britain & Ireland (Coiffait *et al* 2008a); however, one BTO-ringed Quail was recovered in Spain in 1965 (Wernham *et al* 2002).

Table 3. Numbers of reports of foreign-ringed birds received for each species in Britain & Ireland in 2008, with grand totals for those species. Scientific names are given in Table 2.

Species	2008	Grand Total	Species	2008	Grand Total
Bewick's Swan	13	19	Common Gull	17	1,777
Whooper Swan	25	445	Lesser Black-backed Gull	50	461
Pink-footed Goose	5	2,634	Herring Gull	21	469
Greylag Goose	1	220	Caspian Gull	4	10
Barnacle Goose	5	515	Glaucous Gull	1	6
Teal	11	3,164	Great Black-backed Gull	60	612
Mallard	1	797	Sandwich Tern	6	86
Pochard	17	316	Common Tern	4	195
Tufted Duck	16	258	Guillemot	3	97
Goldeneye	1	58	Barn Owl	2	18
Fulmar	1	30	Long-eared Owl	1	47
Storm Petrel	34	901	Kingfisher	1	10
Gannet	6	176	Sand Martin	21	824
Cormorant	14	165	Swallow	4	278
Great White Egret	1	21	Waxwing	1	30
Grey Heron	2	576	Duncock	1	30
Spoonbill	47	386	Robin	12	298
Honey-buzzard	1	3	Nightingale	2	8
Marsh Harrier	1	15	Blackbird	73	1,993
Sparrowhawk	1	69	Fieldfare	1	176
Osprey	5	32	Song Thrush	3	219
Kestrel	16	211	Redwing	7	350
Merlin	1	32	Cetti's Warbler	2	7
Peregrine	3	37	Sedge Warbler	25	546
Moorhen	1	130	Reed Warbler	17	450
Oystercatcher	7	364	Blackcap	18	438
Ringed Plover	1	185	Garden Warbler	10	69
Golden Plover	2	162	Lesser Whitethroat	1	33
Grey Plover	2	15	Whitethroat	4	56
Lapwing	1	412	Chiffchaff	11	171
Knot	11	425	Willow Warbler	2	166
Sanderling	1	68	Goldcrest	8	206
Dunlin	11	4,035	Pied Flycatcher	1	41
Ruff	30	66	Starling	8	4,420
Jack Snipe	2	24	Chaffinch	15	888
Snipe	4	508	Brambling	13	232
Woodcock	13	389	Greenfinch	15	233
Black-tailed Godwit	28	48	Siskin	28	504
Bar-tailed Godwit	2	281	Linnet	1	81
Curlew	5	411	Lesser Redpoll	2	91
Green Sandpiper	1	3	Common Redpoll	1	2
Redshank	3	147	Snow Bunting	2	27
Turnstone	7	131	Yellowhammer	1	2
Kittiwake	3	158	Reed Bunting	1	71
Black-headed Gull	192	11,268		1,192	*50,801
Mediterranean Gull	156	983			

*This total is for all reports of foreign-ringed birds found in Britain & Ireland.

Table 4. Numbers of ringers registered with the BTO from 1999 to 2008.

Year	Permit class			Total
	A	C	T	
1999	1,054	670	212	1,936
2000	1,041	671	245	1,957
2001	1,062	637	268	1,967
2002	1,083	656	274	2,013
2003	1,104	678	295	2,077
2004	1,119	680	317	2,116
2005	1,152	700	279	2,131
2006	1,156	741	323	2,220
2007	1,145	728	372	2,245
2008	1,166	776	407	2,349

Table 5. Ringers resident in each country in 2008.

	England	Scotland	Wales	Northern Ireland	Republic of Ireland	Elsewhere	TOTAL
A	839	175	56	31	29	36	1,166
C	574	117	40	7	19	19	776
T	306	53	17	11	12	8	407
TOTAL	1,719	345	113	49	60	63	2,349

Table 6. Publications.

This list of publications includes analyses of recoveries of birds ringed or found in Britain & Ireland and other studies of birds trapped for ringing purposes as part of the British & Irish Ringing Scheme. Papers that were published in 2008 or were published before 2008 but not listed in earlier reports are included. This list excludes items published in local ringing group reports. Please send any additions to the Demography Team.

- Amar, A., Arroyo, B., Meek, E., Redpath, S. & Riley, H. (2008) Influence of habitat on breeding performance of Hen Harriers *Circus cyaneus* in Orkney. *Ibis* 150, 400–404.
- Broughton, R.K., Hinsley, S.A., Bellamy, P.E., Carpenter, J.E. & Rothery, P. (2008) Ageing and sexing Marsh Tits *Poecile palustris* using wing length and moult. *Ringing & Migration* 24, 88–94.
- Broughton, R.K., Hinsley, S.A. & Bellamy, P.E. (2008) Separation of Marsh Tit *Poecile palustris* from Willow Tit *Poecile montana* using a bill criterion. *Ringing & Migration* 24, 101–103.
- Coulson, J.C. & Coulson, B.A. (2008) Measuring immigration and philopatry in seabirds; recruitment to Black-legged Kittiwake colonies. *Ibis* 150, 288–299.
- Cresswell, W. & Whitfield, D.P. (2008) How starvation risk in Redshanks *Tringa totanus* results in predation mortality from Sparrowhawks *Accipiter nisus*. *Ibis* 150, 209–218.
- Deeming, D.C. & du Feu, C.R. (2008) Measurement of brood patch temperature of British passerines using an infrared thermometer. *Bird Study* 55, 139–143.
- Devereux, C.L., Fernández-Juricic, E., Krebs, J.R. & Whittingham, M.J. (2008) Habitat affects escape behaviour and alarm calling in Common Starlings *Sturnus vulgaris*. *Ibis* 150 (suppl.1) 191–198.
- Eikenaar, C., Richardson, D.S., Brouwer, L. & Komdeur, J. (2008) Sex biased natal dispersal in a closed, saturated population of Seychelles Warblers *Acrocephalus sechellensis*. *Journal of Avian Biology* 39, 73–80.
- Field, R.H., Anderson, G.Q.A. & Gruar, D.J. (2008) Land-use correlates of breeding performance and diet in Tree Sparrows *Passer montanus*. *Bird Study* 55, 280–289.
- Ferns, P.N. & Hinsley, S.A. (2008) Carotenoid plumage hue and chroma signal different aspects of individual and habitat quality in tits. *Ibis* 150, 152–159.
- Green, J. & the Welsh Records Panel (2008) Scarce and rare birds in Wales 2007. *Welsh Birds* 5, 332–359.
- Guilford, T.C., Meade, J., Freeman, R., Biro, D., Evans, T., Bonadonna, F., Boyle, D., Roberts, S. & Perrins, C.M. (2008) GPS tracking of the foraging movements of Manx Shearwaters *Puffinus puffinus* breeding on Skomer Island, Wales. *Ibis* 150, 462–473.
- Howlett, P. (2008) A report on bird ringing in Wales during 2006. *Welsh Birds* 5, 250–263.
- Hutchinson, J.M.C. & Griffith, S.C. (2008) Extra-pair paternity in the Skylark *Alauda arvensis*. *Ibis* 150, 90–97.

Table 6. Continued.

- Irwin, S., Wilson, M., Kelly, T.C., O'Donoghue, B., O'Mahony, B., Oliver, G., Cullen, C., O'Donoghue, T. & O'Halloran, J. (2008) Aspects of breeding biology of Hen Harriers *Circus cyaneus* in Ireland. *Irish Birds* 8, 331–334.
- Jones, T., Smith, C., Williams, E. & Ramsay, A. (2008) Breeding performance and diet of Great Skuas *Stercorarius skua* and Parasitic Jaegers (Arctic Skuas) *S. parasiticus* on the west coast of Scotland. *Bird Study* 55, 257–266.
- MacLeod, R., Clark, J.A. & Cresswell, W. (2008) The starvation–predation risk trade-off, body mass and population status in the Common Starling *Sturnus vulgaris*. *Ibis* 150, 199–208.
- MacLeod, R., Barnett, P., Clark, J.A. & Cresswell, W. (2005) Body mass change strategies in Blackbirds *Turdus merula*: the starvation–predation risk trade-off. *Journal of Animal Ecology* 74, 292–302.
- MacLeod, R., Lind, J., Clark, J.A. & Cresswell, W. (2007) Mass regulation in response to predation risk as a mechanism for House Sparrow declines. *Ecology Letters* 10, 945–955.
- Mallord, J.W., Dolman, P.M., Brown, A. & Sutherland, W.J. (2008) Early nesting does not result in greater productivity in the multi-brooded Woodlark *Lullula arborea*. *Bird Study* 55, 145–151.
- Marquiss, M., Hobson, K.A. & Newton, I. (2008) Stable isotope evidence for different regional source areas of Common Crossbill *Loxia curvirostra* irruptions into Britain. *Journal of Avian Biology* 39, 30–34.
- McLoughlin, D. & Cotton, D. (2008) The status of Twite *Carduelis flavirostris* in Ireland 2008. *Irish Birds* 8, 323–330.
- Merne, O. (2008) Irish Ringing Report for 2007. *Irish Birds* 8, 417–429.
- Mitchell, C. & Trinder, M. (2008) On reading colour rings. *Ringing & Migration* 24, 11–14.
- Mitchell, C., Fox, A.D., Harradine, J. & Clausager, I. (2008) Measures of annual breeding success amongst Eurasian Wigeon *Anas penelope*. *Bird Study* 55, 43–51.
- Mitchell, C., Hughes, B. & Cross, T. (2008) Goosander broods on the River Wye, 1990–2000 and a summary of Welsh ringing returns. *Welsh Birds* 5, 268–275.
- Nakagawa, S. & Burke, T. (2008) The mask of seniority? A neglected age indicator in House Sparrows *Passer domesticus*. *Journal of Avian Biology* 39, 222–225.
- Parrott, D., Henderson, I., Deppe, C. & Whitfield, P. (2008) Scottish racing pigeons killed by Peregrine Falcons *Falco peregrinus*: estimation of numbers from ring recoveries and Peregrine daily food intake. *Bird Study* 55, 32–42.
- Robinson, R.A., Balmer, D.E. & Marchant, J.H. (2008) Survival rates of hirundines in relation to British and African rainfall. *Ringing & Migration* 24, 1–6.
- Sharp, S.P., Baker, M.B., Hadfield, J.D., Simeoni, M. & Hatchwell, B.J. (2008) Natal dispersal and recruitment in a cooperatively breeding bird. *Oikos* 117, 1371–1379.
- Sharpe, F., Clark, J.A. & Leech, D. (2008) Does variation in demographic parameters account for regional variation in Northern Lapwing *Vanellus vanellus* population declines across Great Britain? *Bird Study* 55, 247–256.
- White, P.J.C., Storate, C., Szczur, J. & Norris, K. (2008) Investigating the effects of predator removal and habitat management on nest success and breeding population size of a farmland passerine: a case study. *Ibis* 150, 178–190.

Table 7. The following list summarises the taxonomic changes recommended by the British Ornithologists' Union which affect birds ringed in Britain & Ireland. Prior to the 'date of change' the species which have been split were recorded under 'Former treatment'.

Former treatment	Current treatment	Scientific name	Date of change
Bean Goose	Bean Goose	<i>Anser fabalis</i>	1980
	Pink-footed Goose	<i>Anser brachyrhynchus</i>	1980
Red-backed Shrike	Isabelline Shrike	<i>Lanius isabellinus</i>	1980
	Red-backed Shrike	<i>Lanius collurio</i>	1980
Crossbill	Common Crossbill	<i>Loxia curvirostra</i>	1980
	Scottish Crossbill	<i>Loxia scotica</i>	1980
Lesser Golden Plover	American Golden Plover	<i>Pluvialis dominica</i>	1986
	Pacific Golden Plover	<i>Pluvialis fulva</i>	1986
Rock Pipit	Rock Pipit	<i>Anthus petrosus</i>	1986
	Water Pipit	<i>Anthus spinoletta</i>	1986
	Buff-bellied Pipit	<i>Anthus rubescens</i>	1986
Yellow-browed Warbler	Yellow-browed Warbler	<i>Phylloscopus inornatus</i>	1997
	Hume's Leaf Warbler	<i>Phylloscopus humei</i>	1997
Bonelli's Warbler	Western Bonelli's Warbler	<i>Phylloscopus bonelli</i>	1997
	Eastern Bonelli's Warbler	<i>Phylloscopus orientalis</i>	1997
Great Grey Shrike	Great Grey Shrike	<i>Lanius excubitor</i>	1997
	Southern Grey Shrike	<i>Lanius meridionalis</i>	1997
Chiffchaff	Chiffchaff	<i>Phylloscopus collybita</i>	1999
	Iberian Chiffchaff	<i>Phylloscopus ibericus</i>	1999

Former treatment	Current treatment	Scientific name	Date of change
Teal	Teal	<i>Anas crecca</i>	2001
	Green-winged Teal	<i>Anas carolinensis</i>	2001
Redpoll	Common Redpoll	<i>Carduelis flammea</i>	2001
	Lesser Redpoll	<i>Carduelis cabaret</i>	2001
Olivaceous Warbler	Eastern Olivaceous Warbler	<i>Hippolais pallida</i>	2002
	Western Olivaceous Warbler	<i>Hippolais opaca</i>	2002
Booted Warbler	Booted Warbler	<i>Hippolais caligata</i>	2002
	Sykes's Warbler	<i>Hippolais rama</i>	2002
Carrion Crow	Carrion Crow	<i>Corvus corone</i>	2002
	Hooded Crow	<i>Corvus cornix</i>	2002
Red-breasted Flycatcher	Red-breasted Flycatcher	<i>Ficedula parva</i>	2004
	Taiga Flycatcher	<i>Ficedula albicilla</i>	2004
Common Scoter	Common Scoter	<i>Melanitta nigra</i>	2005
	Black Scoter	<i>Melanitta americana</i>	2005
Herring Gull	Herring Gull	<i>Larus argentatus</i>	2005
	Yellow-legged Gull	<i>Larus michahellis</i>	2005
Herring Gull	Herring Gull	<i>Larus argentatus</i>	2007
	Caspian Gull	<i>Larus cachinnans</i>	2007

SELECTED LIST OF RECOVERIES FOR 2008

The 2006 ringing report (Coiffait *et al* 2008b) contained five-yearly summary tables of all recoveries received since the Scheme began in 1909 (listed by country of finding or origin), as well as longevity records for all species. This section of the current report includes recoveries received in 2008 that extend or confirm our existing knowledge of the movements of birds. In addition, some exceptional records and those that set new longevity records are included. This year reports of 230 individual birds are included: 153 from BTO ringing and 77 from ringing abroad. The recoveries are arranged by species with the ringing information on the first line and recovery data below (NB a few recoveries are multiple records with two or more lines of recovery information). Note that where a bird is ringed and recovered at the same site, or if it is reported at the same site on multiple occasions, site details are only listed once. Longevity records (yy.mm.dd) set during the year are given on the first line for relevant species. The symbols and conventions used are listed below:

Age when ringed: given according to the EURING code. The figures do not represent years. Interpretation is as follows:

- 1 pullus (nestling or chick)
- 2 fully grown, year of hatching quite unknown
- 3 hatched during calendar year of ringing
- 3J hatched during calendar year of ringing, still partly or completely in juvenile body plumage
- 4 hatched before calendar year of ringing, but exact year unknown
- 5 hatched during previous calendar year
- 6 hatched before previous calendar year, but exact year unknown
- 7 definitely hatched two calendar years before ringing
- 8 hatched more than two calendar years before year of ringing
- 9 definitely hatched three years before ringing
- 10 hatched more than three calendar years before year of ringing
- 11 definitely hatched four years before ringing
- 12 hatched more than four calendar years before year of ringing

Sex: M = male, F = female. When individuals are sexed on finding, this is indicated by '=M' or '=F'.

Condition at recovery:

- X found dead
- XF found freshly dead or dying
- XL found dead (not recent)
- + shot or intentionally killed by man

- +F shot or intentionally killed by man – fresh
- +L shot or intentionally killed by man – not recent
- SR sick or injured, released with ring
- S sick or injured – not known to have been released
- A alive and probably healthy – fate unknown
- AC alive and probably healthy – now captive
- V alive and probably healthy, caught and released but not by a ringer
- N alive and probably healthy, caught and released but not by a ringer – nesting
- VV alive and probably healthy, ring or colour marks read in the field but not by a ringer
- NN alive and probably healthy, ring or colour marks read in the field but not by a ringer – nesting
- R caught and released by a ringer
- B caught and released by a ringer – nesting
- RR alive and probably healthy, ring or colour marks read in the field by a ringer
- BB alive and probably healthy, ring or colour marks read in the field by a ringer – nesting
- // condition on finding completely unknown

In addition, for many recoveries, the circumstances of recovery are also known (oiled, killed by cat, road casualty etc).

Date of recovery: When the date of recovery is not precise c. (circa) is inserted before the date. When the date of recovery is unknown the date of the letter or the postmark is given in brackets.

Confidential sites: When the site either of ringing or of finding is confidential, the co-ordinates given are deliberately inaccurate.

Incomplete ring numbers: Where a full ring number is not known, the missing digits are indicated by ‘_’.

Abbreviations used for foreign ringing schemes:

CIJ	Jersey, Channel Islands	IAB	Bologna, Italy
CZP	Prague, Czech Republic	ISR	Reykjavik, Iceland
DEH	Hiddensee, Germany	LIK	Kuanas, Lithuania
DER	Radolfzell, Germany	NLA	Arnhem, The Netherlands
DKC	Copenhagen, Denmark	NOO	Oslo, Norway
ESI	Madrid (Icona), Spain	NOS	Stavanger, Norway
ESM	Madrid (SEO), Spain	PLG	Gdansk, Poland
FPP	Pretoria/Cape Town, South Africa	POL	Lisbon, Portugal
FRP	Paris, France	RUM	Moscow, Russia
FRS	Strasbourg, France	SFH	Helsinki, Finland
HGB	Budapest, Hungary	SVS	Stockholm, Sweden

Mute Swan *Cygnus olor*

W17500	1	8. 7.2006	Wandsworth: 51°27'N 0°12'W (Greater London)
	XL	3. 5.2008	Melmore Head: 55°15'N 7°47'W (Donegal) 657 km NW
X6659	5	28. 3.2007	Hogganfield Loch, Glasgow: 55°52'N 4°10'W (Strathclyde)
	VV	20. 1.2008	Watermead Country Park: 52°41'N 1° 7'W (Leicestershire) 406 km SSE

Although the British & Irish Mute Swan population is generally sedentary (Wernham *et al* 2002), a few long-distance movements are usually reported each year; in 2008 there were 15 movements exceeding 200 km and the two longest of these are shown.

Bewick's Swan *Cygnus columbianus*

RUM	6M	11. 8.2003	Yangutey, Pechorskaya Guba: 68°31'N 53°42'E (Nenets N) Russia
AA1027	XL	19. 1.2008	Cheyne Court, Lydd: 50°58'N 0°50'E (Kent) 3,477 km SW
NLA	4	18.12.2005	Wieringerwerf, Wieringermeer: 52°51'N 5°1'E (Noord-Holland) Netherlands
9509253	VV	26.12.2006	Catfield, Great Yarmouth: 52°44'N 1°31'E (Norfolk) 236 km W

Bewick's Swans arrive in Britain & Ireland in mid-October from their breeding grounds in Siberia. Most of the (relatively few) recoveries of foreign-ringed Bewick's Swan in Britain & Ireland have come from Russia or the Netherlands, which, along with Britain, is the main wintering area of the western population (Wernham *et al* 2002). NLA 9509253 was resighted several times at its wintering site in Great Yarmouth until mid-February 2007.

Whooper Swan *Cygnus cygnus*

Z82608	8M	2. 2.1995	Martin Mere: 53°37'N 2°53'W (Lancashire)
	RR	15. 3.2007	Altmarkkreis Salzwedel: 52°43'N 11°29'E (Magdeburg) Germany 963 km E
ZZ7991	8M	24. 1.2007	Caerlaverock: 54°58'N 3°29'W (Dumfries & Galloway)
	XF	28. 4.2008	Svinoy: 62°17'N 6°21'W Faeroes 830 km N

Whooper Swans breeding in Iceland winter mainly in Britain & Ireland (Garðarsson 1991), while those breeding in Fennoscandia and northwest Russia winter in continental Europe (Laubek *et al* 1999). Thus, most international exchanges of Whooper Swans involving Britain & Ireland have been of birds moving to or from Iceland; very few involve continental Europe and Z82608 is the first exchange with Germany. Despite the many Icelandic recoveries, ZZ7991 is only the third reported exchange of a Whooper Swan between Britain & Ireland and the Faeroes; a stopover in the Faeroes is thought to be unusual (Pennycuik *et al* 1996, 1999, Wernham *et al* 2002).

Bean Goose *Anser fabalis*

1390723	6M	10. 3.2004	North Slob: 52°21'N 6°25'W (Wexford)
	+F	22. 4.2006	Olkijoki, Raah: 64° 44'N 24°34'E (Oulu) Finland 1,881 km NE

Although populations of two subspecies of Bean Goose *rossicus* and *fabalis* occur regularly (Wernham *et al* 2002), the number wintering in Britain & Ireland is small, and only five have been ringed here. Only one other BTO-ringed Bean Goose has been reported in Finland, observed there in two consecutive years (Clark *et al* 2007, Coiffait *et al* 2008a) and coincidentally ringed at the same site, on the same date, as the bird reported here (which is also a new longevity record for this species from BTO ringing).

Greylag Goose *Anser anser*

5227277	6M	2. 3.2003	Ladybridge Gravel Pit, Nosterfield: 54°13'N 1°34'W (North Yorkshire)
	VV	20. 4.2006	Arnarvatn, Myvatn, Sudur-Thingeyjar: 65°35'N 17° 8'W Iceland 1,527 km NW
	VV	7. 6.2006	Hofsstadir, Laxardalur, Sudur-Thingeyjar: 65°37'N 17° 10'W Iceland 1,531 km
	VV	18. 4.2008	Arnarvatn, Myvatn
5227284	6M	2. 3.2003	Ladybridge Gravel Pit, Nosterfield: 54°13'N 1°34'W (North Yorkshire)
	+F	15. 9.2008	Lagarfljot River, Egilsstadir, Asturland: 65°15'N 14°25'W Iceland 1,418 km NNW

Most of the Icelandic-breeding Greylag Geese that move to Britain & Ireland overwinter in Scotland. However, a wild Greylag ringed at Loch Eye in October 2004 was reported in Sussex in January 2006 (Coiffait *et al* 2008b) suggesting that Icelandic birds do occasionally move further south, and these two Yorkshire records provide further evidence.

Canada Goose *Branta canadensis*

5196385	4	15. 7.1997	Regent's Park, London: 51°31'N 0°10'W (Greater London)
	XF	23. 2.2003	Veulettes-sur-Mer: 49°50'N 0°35'E (Seine-Maritime) France 195 km SSE

In their native North America, most subspecies of Canada Goose are highly migratory; introduced populations in Fennoscandia also migrate south to winter in France, Germany and the Netherlands (Wernham *et al* 2002). Some Canada Geese from Yorkshire and the West Midlands move north to the Beaulieu Firth, where they form a moulting flock of several hundred birds (Walker 1970). This mirrors the northward moult migrations in North America (Wernham *et al* 2002). Nonetheless, the Canada Goose population in Britain & Ireland is generally sedentary and this movement of a bird to France (seventh) is unusual.

Barnacle Goose *Branta leucopsis*

1294162	4M	13. 2.2004	Newfield Farm, Hollands: 54°58'N 3°30'W (Dumfries & Galloway)
	XF	15.11.2008	Byrknesoy, Gulen: 60°54'N 4°50'E (Sogn og Fjordane) Norway 822 km NE
1298250	4	24. 7.2005	near Roxton: 52°10'N 0°19'W (Bedfordshire)
	R	21. 4.2008	Pointe du Hourdel, Baie de Somme: 50°13'N 1°34'E (Somme) France 254 km SSE

The Greenland and Svalbard breeding populations of Barnacle Goose winter in Britain & Ireland, while the Siberian breeding population winters in Germany and the Low Countries (Wernham *et al* 2002). Most international recoveries of BTO-ringed Barnacle Geese have been reported in Iceland; 1294162 adds to the small number reported in Norway (twelve) and 1298250 is the first to be reported in France. It is not clear which population the bird recovered in northern France originated from, and the fact that it was ringed in eastern England (where it was ringed) in late July suggests a link to Britain's fast-expanding feral population.

Shelduck *Tadoma tadoma*

GN17699	5M	6. 3.2005	Eden Estuary: 56°23'N 2°50'W (Fife)
	V	26. 3.2008	Oyce of Quindry, South Ronaldsay: 58°48'N 2°59'W (Orkney) 269 km N

This was the longest movement reported for Shelduck in 2008. This bird may have been on passage to a more northerly breeding area when it was ringed.

Mandarin Duck *Aix galericulata*

FH04654	4F	8.10.2008	Slimbridge: 51°44'N 2°24'W (Gloucestershire)
	XF	16.12.2008	Little Houghton: 52°13'N 0°50'W (Northamptonshire) 120 km ENE

In the native range, in the eastern Palearctic, the Mandarin Duck is both migratory and dispersive (Wernham *et al* 2002), but few long-distance movements are reported in Britain & Ireland; this was the only one exceeding 100 km reported in 2008.

Pochard *Aythya ferina*

FRP	6F	5. 5.2006	Le Bonhomme, Saint-Philbert-de-Grand-Lieu: 47° 2'N 1°38'W (Loire-Atlantique) France
DA261359	RR	15.11.2006	Abbotsbury Swannery: 50°39'N 2°36'W (Dorset)
	RR	21.10.2007	Abbotsbury Swannery
	RR	15. 9.2008	Abbotsbury Swannery

Several French-ringed Pochard were reported in 2008, including the bird shown, which was reported at the same site in Dorset in three consecutive years.

Goldeneye *Bucephala clangula*

FV95258	4F	4. 5.1996	Insh Marshes, Strathspey: 57°5'N 3°58'W (Highland)
	XF	22. 5.2008	Insh Marshes. Local
NOS	4F	16. 6.2002	Odda, Trondheim: 63°24'N 10°32'E (Sor-Trondelag) Norway
4184595	+F	c.30. 1.2008	Loch of Skene: 57° 9'N 2°21'W (Grampian) 992 km SW

Goldeneye became established as a regular Scottish-breeding species in 1970 and, thanks largely to a nestbox scheme in Speyside, have since thrived (Wernham *et al* 2002), with an estimated breeding population of 200 laying females in 2006 (Holling *et al* 2009). In the winter, Goldeneye are much more abundant and widespread in Britain & Ireland (the 1994–99 population was estimated to be 25,000 individuals: Baker *et al* 2006). However, there have been very few international recoveries of Goldeneye involving Britain & Ireland; NOS 4184595 is the sixth report of a Norwegian-ringed bird. Also shown is a new longevity record for this species from BTO ringing.

Red-throated Diver *Gavia stellata*

1188997	1	29. 7.1984	Hoy: 58°52'N 3°24'W (Orkney)
	XF	20. 3.2008	Myres, Sourin, Rousay: 59° 10'N 2°59'W (Orkney) 41 km NE
1440094	1	11. 7.2006	Skeld: 60°11'N 1°26'W (Shetland)
	X	12.11.2006	La Baule-Escoublac: 47°17'N 2°22'W (Loire-Atlantique) France 1,435 km S

The British Red-throated Diver population is at the southern edge of its breeding range; recoveries show that birds generally move southwards during the autumn and winter but tend to remain widely distributed around the British & Irish coasts (Wernham *et al* 2002). Immature birds tend to move furthest from their natal areas, with some travelling as far south as the coast of central France (Okill 1994), as 1440094 has done. Also shown is a new longevity record for this species from BTO ringing.

Fulmar *Fulmarus glacialis*

FA94744	1	7. 8.1998	Bride's Ness, North Ronaldsay: 59°21'N 2°24'W (Orkney)
	XF	c. 0. 6.2007	At Sea, Mulegga: 69°50'N 16°30'E Arctic Ocean 1,465 km NE
FA92147	6	23. 7.2000	Swona: 58°44'N 3° 4'W (Orkney)
	XF	25. 3.2008	De Panne: 51° 5'N 2°35'E (West-Vlaanderen) Belgium 923 km SSE
NLA	2	8. 3.2006	Hoek van Holland: 51°59'N 4° 5'E (Zuid-Holland) Netherlands
5411633	XF	c.15. 3.2006	Paignton: 50°26'N 3°34'W (Devon) 560 km WSW

The Fulmar has an extensive range encompassing vast tracts of ocean, where there is little chance of a ringed bird being reported (Wernham *et al* 2002). The BTO-ringed birds shown here add to the relatively small number recovered in Belgium and the Arctic Ocean, and NLA 5411633, found freshly dead a few days after it was ringed, is the first Dutch-ringed Fulmar to be reported in Britain & Ireland.

Storm Petrel *Hydrobates pelagicus*

2620244	4	3. 8.2008	Twinyess, North Ronaldsay: 59°21'N 2°27'W (Orkney)
	R	4. 8.2008	Isle of May: 56°11'N 2°34'W (Fife) 352 km S
ESM	6M	22. 7.2006	Isla de Izaro, Bermeo: 43°27'N 2°46'W (Vizcaya) Spain
T053880	R	4. 8.2008	Gwennap Head: 50° 2'N 5°41'W (Cornwall) 765 km NNW

Many Storm Petrels ringed in Europe are caught by tape-luring, which selects for the pre-breeding 'wanderer' class (Mainwood 1976): birds that spend two or three years visiting colonies and prospecting for potential nest sites, before they actually start breeding (Wernham *et al* 2002, Okill & Bolton 2005). Little is known about age-specific migration patterns, particularly those of adult breeding birds (Wernham *et al* 2002). Although there have been many recoveries of Storm Petrels ringed in Portugal, and a smaller number from France, ESM T053880 is only the third report of a Spanish-ringed Storm Petrel in Britain & Ireland. Also shown is a recovery of a bird that was ringed in Orkney and recovered the next day 352 km away on the Isle of May (this is the straight-line distance; the bird presumably moved a longer distance around the coast), illustrating the relatively long distances that these tiny seabirds can cover in a short space of time.

Leach's Petrel *Oceanodroma leucorhoa*

NS53629	4	8. 8.1983	Dun, St Kilda: 57°47'N 8°34'W (Western Isles)
	R	27. 7.2008	Dun, St Kilda. Local

As in this example, Leach's Petrels are sometimes recovered at the same breeding colony twenty years or more after they were ringed.

Gannet *Morus bassanus*

RUM	1	7. 8.2008	Kandalakshskiy Nature Reserve, Kharlov Island: 68°49'N 37°20'E (Murmansk) Russia
BS003069	XF	15. 9.2008	Chard Reservoir: 50°53'N 2°57'W (Somerset) 2,956 km SW
RUM	1	7. 8.2008	Kandalakshskiy Nature Reserve, Kharlov Island: 68°49'N 37°20'E (Murmansk) Russia
BS003048	XL	31.10.2008	Quendale beach, Dunrossness: 59°54'N 1°20'W (Shetland) 2,091 km WSW

Around 60% of the East Atlantic Gannet population nests in Britain & Ireland, with additional breeding colonies located in Iceland, the Faeroes, Norway, Russia, Helgoland, France and the Channel Islands (Murray & Wanless 1997, Wernham *et al* 2002). During the twentieth century the species' breeding range expanded in Europe and into Russia (Hagemeijer & Blair 1997). These are the first Russian-ringed Gannets to be reported in Britain & Ireland (although there have been two reports of BTO-ringed Gannets in Russia).

Cormorant *Phalacrocorax carbo*

5131437	1	26. 5.1996	Besthorpe Nature Reserve, near Newark: 53° 9'N 0°47'W (Nottinghamshire)
	RR	26. 7.2008	Thiendorf, Riesa-Grossenhain: 51°16'N 13°46'E (Erfurt) Germany 1,013 km ESE
SFH	1	21. 6.2007	Tammisaari: 59°53'N 22°54'E (Uusimaa) Finland
MM15061	R	21.10.2007	Dungeness Bird Observatory: 50°55'N 0°58'E (Kent) 1,700 km SW
	R	8.12.2007	Dungeness Bird Observatory
	VV	9. 1.2008	Dungeness Bird Observatory
	R	26. 2.2008	Dungeness Bird Observatory

The Cormorant ringed in Nottinghamshire is only the 10th recovery in Germany. Also shown is a Finnish-ringed Cormorant reported in Kent, where it was first reported in October 2007 (Coiffait *et al* 2008b).

Shag *Phalacrocorax aristotelis*

1417849 1 13. 7.2007 Fair Isle: 59°32'N 1°38'W (Fair Isle)
 X 7. 2.2008 Hvannasund, Vidoy: 62°18'N 6°31'W **Faeroes** 405 km NW

British & Irish Shags disperse widely, with immature birds tending to disperse much further than adults (Wernham *et al* 2002). Shown here is the fifth report of a BTO-ringed Shag in the Faeroes.

Little Egret *Egretta garzetta*

GF34831 1 18. 6.2002 Whitson Court: 51°33'N 2°55'W (Gwent)
 XF 11.12.2008 Magor Marsh: 51°34'N 2°50'W (Gwent) 7 km ENE
 GK16446 1 22. 7.2007 Terrington St Clement: 52°47'N 0°19'E (Norfolk)
 VV 8. 7.2008 Port Meadow: 51°46'N 1°17'W (Oxfordshire) 157 km SW
 VV 13. 2.2008 Coln Rogers, near Cirencester: 51°47'N 1°53'W (Gloucestershire) 187 km SW
 GC58806 1 20. 5.2008 Site Confidential, near Faversham: 51°19'N 0°53'E (Kent)
 VV 12. 8.2008 Slijk Ewijk: 51°53'N 5°46'E (Gelderland) **Netherlands** 343 km E
 GJ54711 1 8. 6.2008 Terrington St Clement: 52°47'N 0°19'E (Norfolk)
 VV 11.10.2008 Fairburn Ings: 53°44'N 1°20'W (West Yorkshire) 153 km NW
 GJ54712 1 8. 6.2008 Terrington St Clement: 52°47'N 0°19'E (Norfolk)
 VV 26.12.2008 Saltholme Pools: 54°37'N 1°14'W (Cleveland) 228 km NNW
 GH56417 1 10. 6.2008 Terrington St Clement: 52°47'N 0°19'E (Norfolk)
 VV 25. 7.2008 Potteric Carr Nature Reserve: 53°29'N 1° 7'W (South Yorkshire) 124 km NW

As the European Little Egret population has expanded, its status within Britain & Ireland has changed dramatically (Wernham *et al* 2002). The Wetland Bird Survey (WeBS) showed that the population in 2006/2007 increased by 25% from the previous year to reach the highest numbers recorded, with monthly counts reaching a maximum of 3,437 birds in September 2007 (Austin *et al* 2008). Increasing numbers of Little Egrets are being ringed, often with the addition of colour rings, resulting in a growing number of recoveries in recent years. Amongst those received in 2008 was the first report of a BTO-ringed bird in the Netherlands. Also shown are five movements exceeding 100 km, all undertaken by birds ringed as pulli at the same site in Norfolk, demonstrating the dispersive ability of this species. GF34831 is a new longevity record for this species from BTO ringing.

Great White Egret *Ardea alba*

FRP 1 12. 5.2008 Lac de Grand-Lieu, near Nantes: 47° 5'N 1°40'W (Loire-Atlantique) **France**
 CA68873 VV 27. 8.2008 The Mere, Ellesmere: 52°54'N 2°54'W (Shropshire) 653 km N

This report adds to the growing number of recoveries (21) of French-ringed Great White Egrets in Britain & Ireland, all of them ringed in the Loire-Atlantique.

Grey Heron *Ardea cinerea*

1293502 8M 12. 2.2003 Kingsnorth Power Station, Hoo St Werburgh: 51°25'N 0°35'E (Kent)
 XF 16. 5.2008 Tockfors: 59°30'N 11°50'E (Varmland) **Sweden** 1,143 km NE
 DEH 1 21. 4.2007 near Brandenburg an der Havel: 52°22'N 12°32'E (Potsdam) **Germany**
 CA10936 VV 11.10.2007 Horse Point, St Agnes: 49°53'N 6°20'W (Scilly Isles) 1,344 km W

1293502 is the first recovery of a BTO-ringed Grey Heron in Sweden (although there have been three recoveries in Norway). Also shown is the seventh recovery of a German-ringed Grey Heron in Britain & Ireland. The majority of Grey Herons breeding in Ireland, Scotland and northern and central England do not migrate, whereas some that breed in southern England migrate to the Continent, particularly western France (Rydzewski 1956, Voisin 1991), although there has also been one recovery in Iceland. Grey Herons breeding in more northerly regions of Europe also migrate, with most of the Norwegian population wintering in Britain & Ireland (Voisin 1991). The bird recovered in Sweden was probably wintering in Britain when it was ringed.

Honey-buzzard *Pernis apivorus*

NLA 1 20. 7.2006 Dieverzand, Boswachterij Smilde: 52°53'N 6°20'E (Drente) **Netherlands**
 6124986 XL 26. 8.2008 Spinney Wood, Belstead, Ipswich: 52° 1'N 1°6'E (Suffolk) 368 km WSW

The only other foreign-ringed Honey-buzzards to be recovered here were a pullus ringed in Germany in June 1967 and recovered (alive) six years later in Kent (Spencer & Hudson 1975) and a pullus ringed in Sweden in August 1976 and found dead in Yorkshire two months later (Spencer & Hudson 1978).

Red Kite *Milvus milvus*

GC18523 1F 17. 6.2007 Culbokkie, Black Isle: 57°36'N 4°21'W (Highland)
 VV 6. 1.2008 Singleton: 50°55'N 0°46'W (Sussex) 778 km SSE

Although most recoveries of BTO-ringed Red Kites are within a few kilometres of the ringing site, each year there are a number of movements exceeding 100 km. In 2008 four such movements were reported; the longest of these is shown.

Buzzard *Buteo buteo*

GN81231 1 5. 6.2008 near Armadale, Bettyhill: 58°32'N 4° 5'W (Highland)
 XL 22. 9.2008 Stove, Sanday: 59°12'N 2°41'W (Orkney) 110 km NE

Buzzards are essentially sedentary in Britain & Ireland (Wernham *et al* 2002); shown here is the only movement reported in 2008 that exceeded 100 km.

Osprey *Pandion haliaetus*

1262374 1 13. 7.2005 Balloch: 57°32'N 2°53'W (Grampian)
 X 1. 2.2008 Kafountine: 12°55'N 16°44'W **Senegal** 5,098 km SSW
 NOS 1 27. 6.1992 Minatangen, Valer: 59°24'N 10°50'E (Ostfold) **Norway**
 233609 B=F c. 1. 7.1997 near Forres: 57°33'N 3°38'W (Grampian) 865 km WSW
 B=F c. 1. 7.1998 near Forres
 B=F c. 1. 7.1999 near Forres
 B=F 26. 7.2000 Glenferness: 57°30'N 3°42'W (Highland) 871 km WSW

NOS 233609 is the second Norwegian-ringed Osprey to be recovered in Britain & Ireland. This female bird was ringed in the nest in Norway, and reported in Scotland in four consecutive years, where it is known to have reared at least two young. Also shown is a recovery of a bird ringed in Scotland and found in Senegal.

Kestrel *Falco tinnunculus*

ESI 3F 9.12.2004 Aznalcazar: 37° 6'N 6°16'W (Sevilla) **Spain**
 5082779 XF 1. 9.2005 Lyth: 58°32'N 3°15'W (Highland) 2,392 km N
 FRP 4F 20.10.2007 Etang des Mee, Saosnes: 48°19'N 0°16'E (Sarthe) **France**
 FT30318 XL 19. 6.2008 Middle Tysoe: 52° 6'N 1°31'W (Warwickshire) 440 km NNW

Unlike the large broad-winged raptors, Kestrels can migrate long distances over water and they regularly cross the North Sea. The breeding population in Britain & Ireland is partially migratory, with some birds remaining here throughout the winter, while others move to the Continent (Wernham *et al* 2002). The first

recovery of a Spanish-ringed Kestrel in Britain & Ireland was reported in 2008 (Coiffait *et al* 2008b); ESI 5082779 was ringed at the same site in Sevilla, two days prior to that bird. Also shown is the fourth report of a French-ringed Kestrel in Britain & Ireland.

Hobby *Falco subbuteo*

ER74556	1	15. 7.1992	14.10.19 Site Confidential, near Bugbrooke: 52°12'N 0°59'W (Northamptonshire)
	X	3. 6.2007	Fordham, Ely: 52°18'N 0°23'E (Cambridgeshire) 94 km E
EW23492	1	6. 8.2007	Haconby Fen, Bourne: 52°49'N 0°18'W (Lincolnshire)
	XF	15. 7.2008	Aussenhafen Hooksiel, Wangerland: 53°38'N 8° 5'E (Weser-Ems) Germany 565 km E

Hobbies breeding in the Western Palearctic migrate to tropical Africa for the winter (Wernham *et al* 2002). EW23492 is only the second BTO-ringed Hobby to be recovered in Germany. Also shown is a new longevity record for this species from BTO ringing.

Peregrine *Falco peregrinus*

GC29600	1	1. 6.2008	Tubby's Head, St Agnes: 50°18'N 5°15'W (Cornwall)
	VV	30. 8.2008	Penmarch: 47°47'N 4°22'W (Finistere) France 287 km SSE
	VV	8. 10.2008	Penmarch
N00	1F	14. 6.2008	Longerak, Bygland: 58°46'N 7°50'E (Aust-Agder) Norway
PB02944	XF	26.10.2008	Portlethen: 57° 3'N 2° 7'W (Grampian) 618 km WSW
NOS	1M	16. 6.2008	Amlie: 58°47'N 8°31'E (Aust-Agder) Norway
395086	S	6.10.2008	Stanton: 52°19'N 0°53'E (Suffolk) 864 km SW
SFH	1F	21. 7.2008	Pelkosenniemi: 67° 0'N 27° 0'E (Lappi) Finland
D261129	XF	15.11.2008	Cotswold Hills: 51°51'N 1°51'W (Gloucestershire) 2,321 km SW

Many Peregrines breeding in Britain & Ireland are sedentary, but juveniles and non-breeding adults can occur almost anywhere (Wernham *et al* 2002). Shown here is the second BTO-ringed Peregrine to be reported in France. This bird was colour-ringed, and was reported a number of times at the same site in Finistere; the first and last sightings are shown. Peregrines from Fennoscandia tend to migrate southwest (Wernham *et al* 2002) and also shown here are recoveries of two Norwegian-ringed birds and one from Finland.

Stone-curlew *Burhinus oedinenus*

EG88220	1	3. 6.2003	Site Confidential, near Lower Basildon: 51°30'N 1° 8'W (Berkshire)
	VV	6. 4.2008	Fanel: 46°59'N 7° 3'E (Neuchatel) Switzerland 777 km SE
EL59931	1	12. 7.2005	Site Confidential, near Compton Downs: 51°32'N 1°17'W (Berkshire)
	+F	15.10.2006	Peki: 10°48'N 2°47'W Ghana 4,528 km S

In Britain, Stone-curlews are at the northernmost edge of their world range and are confined as breeding birds to southern and eastern England. Stone-curlews breeding in northern and central Europe migrate to the Mediterranean region and West Africa for the winter (Wernham *et al* 2002). These are the first recoveries of BTO-ringed Stone-curlews in Switzerland and Ghana.

Ringed Plover *Charadrius hiaticula*

NV92810	4	26. 8.2007	River Deben, near Ramsholt Lodge: 52° 2'N 1°20'E (Suffolk)
	R	3. 4.2008	Banc d'Arguin: 19°54'N 16°17'W Mauritania 3,889 km SSW

Ringed Plovers perform a leapfrog migration, with birds breeding in Britain & Ireland showing only slight latitudinal shifts between wintering and breeding sites, while those breeding in Canada, Greenland, Iceland and Fennoscandia pass through Britain & Ireland en route to wintering grounds in Spain and West Africa (Wernham *et al* 2002). This bird, the fifth recovery of a BTO-ringed bird in Mauritania, was thus likely to have been ringed on passage from a northern breeding population.

Dotterel *Charadrius morinellus*

XR97187	1	28. 6.1993	Eastern Cairngorms: 57° 7'N 3°27'W (Grampian)
	R	8. 5.1994	Kviljodden, Farsund: 58° 4'N 6°42'E (Vest-Agder) Norway 614 km E

This is only the third reported exchange of a Dotterel between Britain & Ireland and Norway.

Golden Plover *Pluvialis apricaria*

DB95463	4	21.11.2003	Harty, Isle of Sheppey: 51°21'N 0°54'E (Kent)
	XF	28.12.2004	Bellou: 48°58'N 0°13'E (Calvados) France 270 km S
IAB	4	17. 3.2006	Invaso Conca, San Giovanni in Marignano: 43°57'N 12°41'E (Ancona Pesaro e Urbino) Italy
H135324	XL	c.1. 8.2007	Poplar Farm, Shelfanger: 52°25'N 1° 4'E (Norfolk) 1,274 km NW

In Britain & Ireland, the Golden Plover is a partial migrant (Wernham *et al* 2002). Most international recoveries involving Britain & Ireland have been of birds ringed in Iceland and the Netherlands and found here; IAB H135324 is the first recovery of an Italian-ringed Golden Plover and DB95463 is the 10th report of a BTO-ringed Golden Plover in France.

Grey Plover *Pluvialis squatarola*

DR33258	5	13. 7.1979	25.01.18 Terrington Marsh: 52°48'N 0° 17'E (Norfolk)
	R	31. 8.2004	Terrington Marsh. Local
FRP	3	20.11.2006	Reserve Naturelle, Moeze: 45°50'N 1° 4'W (Charente-Maritime) France
FS64100	VV	22. 9.2007	Spurn Head: 53°35'N 0° 8'E (Humberside) 866 km N
	VV	5. 5.2008	Spurn Head

Grey Plovers from Russian breeding populations occur in Britain & Ireland as passage migrants and winter visitors; a small population of immature non-breeding birds also occurs here in the summer (Wernham *et al* 2002). There is evidence to suggest that Grey Plovers show strong winter site fidelity, both within a season and from year to year (Townshend 1985, Wernham *et al* 2002). FRP FS64100, colour-ringed in France, was sighted twice at Spurn Head, where it may have been wintering or on passage on both occasions. Only one other French-ringed Grey Plover (a bird ringed in 1967 and recovered in 1975, Spencer & Hudson 1977) has been reported in Britain & Ireland. Also shown is a new longevity record for this species from BTO ringing.

Knot *Calidris canutus*

CK97769	5	27. 1.2001	Heysham, near Lancaster: 54° 2'N 2°55'W (Lancashire)
	R	12. 5.2008	Parque Natural Bahia de Cadiz: 36°29'N 6°15'W (Cadiz) Spain 1,967 km S
SR46075	3	10. 9.2006	Admiral's Farm, Terrington Marsh: 52°48'N 0°19'E (Norfolk)
	R=M	10.12.2007	Banc d'Arguin: 19°54'N 16°18'W Mauritania 3,930 km SSW

Almost all Knot occurring in Britain & Ireland are of the *islandica* subspecies, which breeds in northern Greenland and high-arctic Canada and migrates through Iceland to overwinter mainly in western Europe. The estuaries of western Britain provide one of the core wintering areas for this subspecies (Wernham *et al* 2002). CK97769, the fifth recovery of a BTO-ringed Knot in Spain, probably belongs to this subspecies, whereas it is possible that SR46075 is one of the few first-year birds belonging to the nominate *canutus* subspecies that breeds in Siberia and sometimes occurs on the east coast of Britain en route to their wintering

grounds in West Africa (Wernham *et al* 2002). However, recovery data suggest that few Knots of the nominate subspecies now occur in Britain & Ireland, which may reflect a decline in the Siberian breeding population, thought to have occurred in the late 1980s (Boyd & Piersma 2001). This bird was sexed by Dutch researchers using molecular techniques (Jutta Leyrer pers comm).

Sanderling *Calidris alba*

BT03005	4	3. 8.2007	Snettisham: 52°53'N 0°27'E (Norfolk)
	R	12. 5.2008	Parque Natural Bahia de Cadiz: 36°29'N 6°15'W (Cadiz) Spain 1,896 km SSW
DKC	4M	5. 9.2007	Zackenbergl: 74°28'N 20°34'W Greenland
8223222	R	30. 8.2008	Wainfleet Marsh: 53° 5'N 0°18'E (Lincolnshire) 2,565 km SSE

Sanderlings breed in the high-arctic tundra and migrate along several flyways to widespread wintering grounds; Britain & Ireland provide important staging and wintering sites for Sanderlings breeding in Siberia and northeast Greenland (Wernham *et al* 2002). DKC 8223222 is the first recovery of a Sanderling ringed in Greenland to be reported in Britain & Ireland, while BT03005 is the 10th BTO-ringed Sanderling to be reported in Spain.

Jack Snipe *Lymnocyptes minimus*

NLA	2F	4.11.2005	De Baggerputten: 53°12'N 6°48'E (Groningen) Netherlands
H248626	XF	30. 1.2008	Evesham: 52° 5'N 1°59'W (Worcestershire) 605 km W
PLG	3	1. 9.2008	Lisewo, Lichnowy: 54° 6'N 18°50'E (Gdansk) Poland
JT22635	+F	27.10.2008	Cummeen Strand, Sligo Harbour: 54°17'N 8°34'W (Sligo) 1,782 km W

Jack Snipe breed in Siberia and northern Fennoscandia and winter in western Europe, Turkey and North and central Africa. The species is a winter visitor and passage migrant in Britain & Ireland. However numbers occurring here are relatively small and widely distributed; as a consequence of this and its secretive habits, few are ringed (Wernham *et al* 2002). Shown here is the first report of a Polish-ringed Jack Snipe in Britain & Ireland and the sixth from the Netherlands.

Snipe *Gallinago gallinago*

CIJ	5	8. 3.2005	Goose Green Marsh: 49°12'N 2° 9'W Jersey, Channel Islands
T44258	+F	23. 1.2006	Exact location unknown; approx: 52°40'N 0°56'E (Norfolk) 442 km NNE

Recoveries show that Snipe breeding in northern Britain may overwinter in Ireland, while those breeding in southern Britain are more likely to be found on the Continent. Birds from more northerly breeding populations also winter in Britain & Ireland, with some continuing further south as winter progresses (Wernham *et al* 2002). Shown here is the fourth report in Britain & Ireland of a Snipe ringed in the Channel Islands.

Black-tailed Godwit *Limosa limosa*

ES28246	6	12. 8.1998	Admiralty Point, Terrington: 52°48'N 0°20'E (Norfolk)
	R	19. 2.2007	Salinas de Alhos Vedros, Setubal: 38°39'N 9° 1'W (Estremadura) Portugal 1,729 km SSW
FRP	4M	6. 9.2002	Reserve Naturelle Yves: 45°57'N 1° 7'W (Charente-Maritime) France
FS50445	V	21. 7.2008	Vange Marsh: 51°49'N 0°50'E (Essex) 668 km NNE

Black-tailed Godwits that occur in Britain & Ireland mainly belong to the Icelandic-breeding subspecies *islandica*; they are present here on passage and during the winter (Wernham *et al* 2002). The French-ringed bird shown here (one of 19 such recoveries reported in 2008) is probably of this subspecies. Also shown is the second report of a BTO-ringed Black-tailed Godwit in Portugal, which is also likely to be from the Icelandic-breeding population.

Bar-tailed Godwit *Limosa lapponica*

33.11.13

DS66917	6M	12. 8.1974	Wolferton, King's Lynn: 52°50'N 0°26'E (Norfolk)
	R	4. 8.2008	Admiral's Farm, Terrington Marsh: 52°48'N 0°19'E (Norfolk) 9 km WSW
DK13870	3	29.12.1989	Alness Bay: 57°40'N 4°18'W (Highland)
	XF	25. 7.2008	Kiby, Vadso: 70° 3'N 29°51'E (Finnmark) Norway 2,142 km NE

Recoveries of Bar-tailed Godwits indicate that birds from two breeding populations occur in Britain & Ireland as passage migrants and winter visitors: birds from northern Fennoscandia and western Russia, and birds breeding further east to central Siberia (Wernham *et al* 2002). DK13870 is the second report of a BTO-ringed Bar-tailed Godwit in Norway. Also shown is a new longevity record for this species from BTO ringing.

Whimbrel *Numenius phaeopus*

EL67751	4	12. 8.2007	Shell Ness: 51°22'N 0°56'E (Kent)
	XF	24. 6.2008	Varrion Luonnonpuisto, Salla: 67°40'N 29°40'E (Lappi) Finland 2,405 km NE

Whimbrel from the European breeding population winter mainly in West Africa (Hagemeyer & Blair 1997). Britain lies close to the southern limit of the species' breeding range (Richardson 1990) and this bird was clearly on passage when it was ringed in Kent.

Green Sandpiper *Tringa ochropus*

NLA	6	1. 7.2006	Driehoek, Castricum: 52°33'N 4° 37'E (Noord-Holland) Netherlands
H288159	XF	20.11.2008	Stainfield: 53°14'N 0° 21'W (Lincolnshire) 342 km WNW

There have been fewer than 50 recoveries of Green Sandpiper involving Britain & Ireland, where the species occurs predominantly on passage. A few remain throughout the winter, however (Wernham *et al* 2002), as this bird, the first ringed in the Netherlands to be recovered here, appears to have been attempting. The only other foreign-ringed birds to be recovered in Britain & Ireland were a bird ringed in Germany in August 1970 and recovered in Essex two months later and a bird ringed in Sweden in August 1973 and shot in Kent eight years later (Spencer & Hudson 1982).

Wood Sandpiper *Tringa glareola*

NV29332	3	20. 8.2000	near Backsand Pit, Sandwich Bay: 51°17'N 1°20'E (Kent)
	A	30. 1.2006	Harper: 4°22'N 7°43'W Liberia 5,282 km S

Small numbers of Wood Sandpiper occur in Britain & Ireland on passage and there are also a few breeding pairs in Scotland (Holling *et al* 2009). This bird may belong to the Scandinavian breeding population, which is thought to winter in West Africa (those from Russia probably winter in eastern and southern Africa) (Wernham *et al* 2002). As very few birds are ringed here, there have been only four recoveries; including this bird, the second international movement involving Britain & Ireland and the first to Africa.

Turnstone *Arenaria interpres*

22.03.19

XS24695	4	12.12.1982	Rhos-on-Sea, Conwy: 53°18'N 3°44'W (Clwyd)
	XF	c. 0. 4.2005	Templetown: 53°59'N 6°9'W (Louth) 177 km WNW

XS24695 is a new longevity record for Turnstone from BTO ringing.

Red-necked Phalarope *Phalaropus lobatus*

11.10.27

NT14343	1	19. 7.1996	Fetlar: 60°36'N 0°52'W (Shetland)
	VV=F	15. 6.2008	Loch of Funzie, Fetlar: 60°35'N 0°49'W (Shetland) Local

The breeding population of Red-necked Phalarope in Britain & Ireland was recently estimated to be 23–30 pairs (Holling *et al* 2009). This is only the second recovery of a BTO-ringed Red-necked Phalarope; both birds were ringed on the same date at the same site in Shetland. The other bird, also recovered close to the site where it was ringed, was reported in 2003 (Clark *et al* 2004). This bird is also a new longevity record for the species from BTO ringing.

Common Gull <i>Larus canus</i>		25.00.16	
EJ90782	1	4. 6.1983	Dereens Island, Carrowmore Lough: 54°12'N 9°48'W (Mayo)
	RR	20. 6.2008	Aghamore Pier, Lough Gill: 54°14'N 8°26'W (Sligo) 89 km E
PLG	8	24. 2.1994	Wladyslawowo: 54°47'N 18°25'E (Gdansk) Poland
FN03619	VV	29.12.2007	Wood Green: 51°36'N 0° 7'W (Greater London) 1,283 km WSW

Common Gulls are seen widely throughout Britain & Ireland outside the breeding season when large numbers of continental-breeding individuals occur here (Wernham *et al* 2002). PLG FN03619 is the eleventh recovery of a Polish-ringed Common Gull in Britain & Ireland. Also shown is a new longevity record for this species from BTO ringing.

Herring Gull <i>Larus argentatus</i>			
GH98871	8	21.12.2000	near Astley Green, Leigh: 53°29'N 2°28'W (Greater Manchester)
	VV	16. 8.2004	Oulu Rubbish Dump: 65° 3'N 25°32'E (Oulu) Finland 2,031 km NE
GN77473	10	20. 1.2004	Hyde Farm, near Beaconsfield: 51°35'N 0°38'W (Buckinghamshire)
	V	29. 6.2006	Ammassuo, Espoo: 60°15'N 24°23'E (Uusimaa) Finland 1,825 km ENE
GN77034	10	21. 1.2004	Hyde Farm, near Beaconsfield: 51°35'N 0°38'W (Buckinghamshire)
	V	11. 8.2004	Kolskiy Bay, Gadzhievo, Murmansk: 69° 4'N 33°22'E (Murmansk) Russia 2,660 km NE
GN77038	10	21. 1.2004	Hyde Farm, near Beaconsfield: 51°35'N 0°38'W (Buckinghamshire)
	XL	15.11.2005	Kolskiy Bay, Gadzhievo, Murmansk: 69° 4'N 33°22'E (Murmansk) Russia 2,660 km NE
PLG	1	18. 5.2007	Jankowice, Babice, Malopolskie: 50° 2'N 19°28'E (Krakow) Poland
DN13971	RR	23. 2.2008	Orfordness: 52° 5'N 1°34'E (Suffolk) 1,271 km W
DEH	1	26. 6.1999	Warnemunde, Hansestadt: 54°10'N 12° 5'E (Rostock) Germany
EA109827	VV	21.12.2008	Hampton: 51°25'N 0°22'W (Greater London) 892 km WSW
SFH	1	27. 6.1999	Plumala: 61°27'N 28° 1'E (Mikkeli) Finland
HT211537	VV	14.12.2008	Burnt Hill Lane, Carlton Colville: 52°28'N 1°42'E (Suffolk) 1,873 km WSW

In northwest Europe, northerly Herring Gull breeding populations are the most migratory; those in the south are thought to be generally dispersive, with many birds remaining in the same region throughout the year (Wernham *et al* 2002). There have been many international Herring Gull movements involving Britain & Ireland (1,398), but relatively few exchanges with Finland (21), Germany (31) and Poland (15), and few recoveries of BTO-ringed birds in Russia (10).

Yellow-legged Gull <i>Larus michahellis</i>		02.04.04	
GH98558	3	12. 9.2000	Pilsworth Landfill Site, near Bury: 53°35'N 2°16'W (Greater Manchester)
	V	16. 1.2003	Miramundo Dump, Medina Sidonia: 36° 31'N 5°58'E (Cadiz) Spain 1,918 km S
GN13540	8	12.11.2003	Hyde Farm, near Beaconsfield: 51°35'N 0°38'W (Buckinghamshire)
	V	21.11.2003	Westkapelle: 51°32'N 3°26'E (Zeeland) Netherlands 281 km E
	V	17.11.2004	Westkapelle
GC84591	10	22.11.2008	near Wingmore Farm, Stoke Orchard: 51°56'N 2° 6'W (Gloucestershire)
	VV	11.12.2008	Grobby Pool: 52°40'N 1°15'W (Leicestershire) 100 km NE

Yellow-legged Gull was split from Herring Gull in 2006 (Sangster *et al* 2005); these are the first reports of international movements of BTO-ringed Yellow-legged Gulls received since the split. GH98558 is also the longevity record for this species from BTO ringing.

Caspian Gull <i>Larus cachimans</i>			
PLG	1	1. 6.2007	Przykona Reservoir, Radczyny, Turek: 52° 0'N 18°39'E (Konin) Poland
DN20646	RR	30. 7.2008	near Cley-next-the-sea: 52°57'N 1° 3'E (Norfolk) 1,196 km W
PLG	8	28. 4.2004	Jankowice, Babice, Malopolskie: 50° 2'N 19°28'E (Krakow) Poland
DN14091	RR	20. 7.2008	Orfordness: 52° 5'N 1°34'E (Suffolk) 1,271 km W
PLG	1	27. 5.2005	Jankowice, Babice, Malopolskie: 50° 2'N 19°28'E (Krakow) Poland
DN16021	VV	11. 7.2006	Gloucester: 51°51'N 2°16'W (Gloucestershire) 1,533 km W

As with Yellow-legged Gull, Caspian Gull was only recently split from Herring Gull (Sangster *et al* 2007). The first international movements involving Britain & Ireland were reported in 2007 (Coiffait *et al* 2008b).

Glaucous Gull <i>Larus hyperboreus</i>			
NOS	1	18. 7.2008	Bear Island, Barents Sea: 74°20'N 19° 5'E Bear Island
FA17715	VV	7.12.2008	Southwold: 52°19'N 1°40'E (Suffolk) 2,580 km SSW

The Glaucous Gull, which breeds from high Arctic to subarctic coasts, is predominantly a winter visitor to Britain & Ireland (Wernham *et al* 2002). This is the second Glaucous Gull ringed on Bear Island to be reported here. It remained nearby for the rest of the winter.

Great Black-backed Gull <i>Larus marinus</i>		24.11.25	
HW58179	1	15. 7.1983	Auskerry: 59°2'N 2°34'W (Orkney)
	XF	10. 7.2008	Burray Ness, Burray: 58° 51'N 2°52'W (Orkney) 27 km SW
FRP	1	15. 6.2005	Le Havre: 49°30'N 0° 7'E (Seine-Maritime) France
DA249246	R	12. 4.2007	Dungeness: 50°55'N 0°55'E (Kent) 168 km NNE
FRP	1	28. 6.2008	Manneville-es-Plains: 49°51'N 0°45'E (Seine-Maritime) France
DB100897	R	19.10.2008	Dungeness: 50°55'N 0°57'E (Kent) 120 km N

Although Great Black-backed Gulls breeding in Britain & Ireland are mainly sedentary, first-year and immature birds tend to range further than adults (Wernham *et al* 2002). The two birds ringed as pulli in France bring the total number of recoveries from that country to nine birds. Also shown is a new longevity record for this species from BTO ringing.

Little Tern <i>Stemula albigifrons</i>			
NW19018	1	1. 7.2006	North Beach, Great Yarmouth: 52°37'N 1°44'E (Norfolk)
	XF	23. 6.2008	Port du Collet, Les Moutiers-en-Retz: 47° 3'N 2° 0'W (Loire-Atlantique) France 674 km SSW

There have been relatively few international recoveries of Little Terns ringed in Britain & Ireland; this is the eleventh in France.

Sandwich Tern <i>Sterna sandvicensis</i>			
DK50254	1	23. 6.1993	Lady's Island Lake: 52°12'N 6°23'W (Wexford)
	XF	14. 3.2007	Taliarte, Telde: 28° 1'N 15°22'W Gran Canaria, Canary Islands 2,790 km SSW

DD09350	1	4. 6.2002	Forvie, Newburgh: 57°19'N 1°59'W (Grampian)
	VV	11. 9.2008	Krynica Morska: 54°22'N 19°26'E (Elblag) Poland 1,375 km ESE
ESI	4	14. 9.2001	Parque Nacional Marismas del Odiel: 37°16'N 6°55'W (Huelva) Spain
4068620	RR	8. 5.2008	Brownsea Island: 50°41'N 1°59'W (Dorset) 1,542 km NNE
FPP	4	1.12.2007	Rufane Beach, Port Alfred: 33°35'S 26°56'E (Cape Province) South Africa
4H18572	RR	11. 5.2008	Brownsea Island: 50°41'N 1°59'W (Dorset) 9,790 km NNW

Amongst the Sandwich Tern recoveries reported in 2008 was the third of a BTO-ringed bird on the Canary Islands and the first in Poland. Most foreign-ringed Sandwich Terns recovered in Britain & Ireland have come from the Netherlands, Germany, Belgium or Denmark; FPP 4H18572 is only the second from South Africa and ESI 4068620 is the third from Spain.

Common Tern *Sterna hirundo*

SR15903	1	29. 6.2005	Rockabill: 53°35'N 6° 0'W (Dublin)
	XF	15. 5.2008	Tazacorte: 28°40'N 17°50'W La Palma, Canary Islands 2,934 km SSW
CIJ	1	6. 7.1997	Grand Brecc, Les Ecrehous: 49°17'N 1°56'W Jersey, Channel Islands
B11708	RR	24. 5.2008	Brownsea Island: 50°41'N 1°59'W (Dorset) 156 km N

Considerable interchange between Common Tern colonies is likely (Wernham *et al* 2002), as appears to be the case with CIJ B11708, the second bird ringed in the Channel Islands and subsequently reported in Britain & Ireland. Also shown is the second report of a BTO-ringed bird on the Canary Islands.

Roseate Tern *Sterna dougallii*

SR14895	1	22. 7.2004	Rockabill: 53°35'N 6° 0'W (Dublin)
	B	20. 6.2008	Heist: 51°21'N 3°14'E (West-Vlaanderen) Belgium 673 km ESE

Roseate Terns breed patchily in coastal areas of northwest Europe, which account for a tiny proportion of the species' global breeding range (Burfield & van Bommel 2004). This recovery of a Roseate Tern ringed in Ireland is exceptional because it is the first to be reported in Belgium, where it was found hybridising with a Common Tern.

Arctic Tern *Sterna paradisaea*

SX59795	1	1. 7.1994	Whalsay: 60°21'N 0°59'W (Shetland)
	XF	16. 6.2008	Livadiavej, Hvide Sande: 56° 2'N 8° 6' E (Jylland) Denmark 716 km SE
SX93330	6	2. 9.1995	Seal Sands, Teesmouth: 54°37'N 1°12'W (Cleveland)
	VV	28. 6.2006	Haven, Delfzijl: 53°19'N 6°57'E (Groningen) Netherlands 552 km ESE
	VV	11. 5.2007	Haven, Delfzijl
	B	2. 6.2008	Haven, Delfzijl
SV16443	6	17. 6.1998	Fair Isle: 59°32'N 1°38'W (Fair Isle)
	XF	12. 6.2008	Kliitheden, Lyngby, Bedsted, Thy: 56°48'N 8°29'E (Jylland) Denmark 666 km ESE
SV57408	1	6. 7.2002	Craig Loch, Westray: 59°20'N 2°59'W (Orkney)
	X	7. 7.2008	Gjuvsjaen, Vinje: 60° 4'N 7°50'E (Telemark) Norway 612 km E
SV68168	6	26. 7.2003	Seal Sands, Teesmouth: 54°37'N 1°12'W (Cleveland)
	B	2. 6.2008	Haven, Delfzijl: 53°19'N 6°57'E (Groningen) Netherlands 552 km ESE
SV48907	1	7. 7.2004	Big Copeland Island: 54°40'N 5°33'W (Down)
	+F	c.15. 7.2004	Delken, Bonthe: 7°37'N 12°44'W Sierra Leone 5,268 km S
SR04794	1	7. 7.2005	Big Copeland Island: 54°40'N 5°33'W (Down)
	A	16.11.2005	Douala: 4° 2'N 9°42'E Cameroon 5,796 km SSE

A number of notable recoveries of BTO-ringed Arctic Terns were reported in 2008. These included two birds ringed at the same site in Cleveland (but eight years apart) and recovered on the same date at the same site in the Netherlands (eighth and ninth), one of which has been reported there in several consecutive years (Coiffait *et al* 2008a,b), as well as two birds in Denmark (10th and 11th) and individuals in Cameroon (seventh), Sierra Leone (eighth) and Norway (fifth).

Guillemot *Uria aalge*

R16438	1	6. 7.2004	Isle of Canna: 57° 3'N 6°33'W (Highland)
	V	4. 5.2007	At sea: 54°33'N 19°10'E Baltic Sea 1,630 km E

Guillemots are dispersive rather than migratory, with many adults present in neighbouring seas throughout the year (Cramp 1985). This bird was found tangled in a drift-net in the Baltic Sea, but was assumed to be healthy and subsequently released.

Black Guillemot *Cephus grylle*

EG60162	1	30. 6.2003	Bangor: 54°40'N 5°40'W (Down)
	VV	20. 7.2008	Rockabill: 53°35'N 6° 0'W (Dublin) 123 km S
EG60187	1	13. 7.2004	Bangor: 54°40'N 5°40'W (Down)
	VV=F	21. 5.2008	Giles Quay: 53°59'N 6°15'W (Louth) 85 km SSW

The Black Guillemot is sedentary throughout most of its range (Wernham *et al* 2002); shown here are the only two recoveries exceeding 50 km in 2008.

Puffin *Fratercula arctica*

EB61097	4	24. 7.1975	Sule Skerry: 59°5'N 4°24'W (Orkney)
	R	13. 7.2007	Sule Skerry. Local

EB61097 is a new longevity record for this species from BTO ringing

Collared Dove *Streptopelia decaocto*

EL73586	3	1.11.2005	Ripley: 51°18'N 0°30'W (Surrey)
	XF	1. 4.2008	Bodmin: 50°28'N 4°44'W (Cornwall) 311 km WSW

The range expansion of the Collared Dove across Europe in the twentieth century has been remarkable (Hagemeijer & Blair 1997), and demonstrates the dispersive ability of the species; nevertheless, analysis of recoveries has shown that dispersal distances of Collared Doves ringed in Britain & Ireland have decreased since the mid-1970s (Wernham *et al* 2002). Shown here is the only movement exceeding 100 km to be reported in 2008.

Barn Owl *Tyto alba*

NLA	1	4. 6.2007	Oude Zevenaarsweg, Zevenaar: 51°59'N 6° 6'E (Gelderland) Netherlands
5377733	B=F	27. 6.2008	near Brandon Creek: 52°30'N 0°21'E (Norfolk) 396 km W
	X	12. 7.2008	A10, near Southery, Downham Market: 52°31'N 0°22'E (Norfolk) 395 km W
GC78409	1	10. 7.2008	near Dairy House, Little Clacton: 51°50'N 1°11'E (Essex)
	XF	8.11.2008	Pals: 41°59'N 3°10'E (Gerona) Spain 1,105 km S

This is the first report of a BTO-ringed Barn Owl in Spain and one of only twenty international recoveries involving Britain & Ireland. Although Barn Owls in Britain & Ireland are generally sedentary, some birds breeding in parts of continental Europe tend to disperse over greater distances (Wernham *et al* 2002).

However, such a long-distance movement for a bird fledged in Britain is unusual. It was found dead by a ringer, who believed it had been recently predated (the head and neck had been eaten). Since there were no major roads close to the finding site, it seems unlikely that it was moved by a vehicle. Also reported in 2008 was the eighth recovery of a Dutch-ringed Barn Owl in Britain & Ireland. Interestingly, this bird was of the dark-breasted *guttata* subspecies.

Long-eared Owl *Asio otus*

GN59580 6M 10. 4.2006 Ickleford: 51°58'N 0°17'W (Hertfordshire)
 XF 7. 2.2008 Wexford: 52°20'N 6°28'W (Wexford) 424 km W

In Britain & Ireland the Long-eared Owl occurs as both a resident breeding bird and a regular and semi-irruptive winter visitor from more northerly and easterly breeding populations (Wernham *et al* 2002). There have been fewer than 300 recoveries; this was the only long-distance movement reported in 2008.

Nightjar *Caprimulgus europaeus*

XN46692 3F 21. 8.2008 Abercarn: 51°39'N 3° 8'W (Gwent)
 XF 16. 9.2008 Saignac, Candresse: 43°42'N 0°58'W (Landes) **France** 898 km S

Eastern and southern Africa probably hold most of the wintering population of Nightjars of the nominate subspecies *europaeus*, although there are some records from West Africa and a few as far north as Morocco (Wernham *et al* 2002). This bird brings the total number of international recoveries involving Britain & Ireland to 15.

Kingfisher *Alcedo atthis*

SB60945 3M 24. 9.2006 Icklesham: 50°54'N 0°40'E (Sussex)
 XF 9. 1.2008 Winchester: 51° 3'N 1°18'W (Hampshire) 139 km W
 DEH 1 29. 6.2008 Aken, Kothen: 51°51'N 12° 3'E (Magdeburg) **Germany**
 SA23039 R 29.10.2008 Saltfleet Haven: 53°25'N 0°11'W (Lincolnshire) 819 km WNW

Kingfishers breeding on the Continent are partially migratory (Hagemeijer & Blair 1997), whereas few long-distance movements of BTO-ringed birds have been reported. Shown here is the fifth report of a German-ringed Kingfisher in Britain & Ireland, along with the only movement within Britain exceeding 100 km that was reported in 2008.

Sand Martin *Riparia riparia*

HGB 4 10. 6.2006 Kiskundorozsma (Hosszu-hat): 46°18'N 20° 1'E (Csongrad) **Hungary**
 F96181 R 14. 6.2008 Flint Farm, Pinchbeck Marsh: 52°49'N 0° 7'W (Lincolnshire) 1,619 km WNW
 IAB 4 19. 4.2008 Canton Magistrix: 45°56'N 8°30'E (Novara Vercelli) **Italy**
 AX87868 R=F 19. 6.2008 Radley Gravel Workings: 51°41'N 1°14'W (Oxfordshire) 956 km NW

IAB AX87868 is the seventh recovery of an Italian-ringed Sand Martin in Britain & Ireland. Also shown is the first Sand Martin ringed in Hungary to be reported in Britain & Ireland. The Italian Sand Martin was probably on passage when ringed (as in 2007, when several exchanges with Italy were reported (Coiffait *et al* 2008b), this bird was caught in Italy in April) whereas the bird ringed in Hungary appears to have dispersed to a new breeding site.

Swallow *Hirundo rustica*

P312986 3 13. 8.2000 Watten: 58°28'N 3°18'W (Highland)
 R=M 24. 5.2001 Lista Fyr, Farsund: 58° 6'N 6°34'E (Vest-Agder) **Norway** 578 km E
 V780475 3 4. 9.2007 near Gressingham: 54° 7'N 2°42'W (Lancashire)
 XL 21. 7.2008 Ihla da Deserta Grande: 32°30'N 16°30'W **Madeira** 2,641 km SSW

Swallows are generally faithful to both their natal and breeding sites (Wernham *et al* 2002), so P312986 may have been on passage from Norway when it was ringed in Scotland. Also shown is the first report of a BTO-ringed Swallow on Madeira, where the species occurs as a vagrant (Clarke 2006).

Rock Pipit *Anthus petrosus*

2446405 4M 15. 11.2002 Low Newton-by-the-Sea: 55°30'N 1°37'W (Northumberland)
 R 9. 11.2008 Low Newton-by-the-Sea. Local
 NB85483 1 1. 6.2006 Belhaven: 55°59'N 2°33'W (Lothian)
 R 17. 9.2006 Low Newton-by-the-Sea: 55°30'N 1°37'W (Northumberland) 80 km SE
 R 23.11.2008 Low Newton-by-the-Sea

It is thought that Rock Pipits breeding in Britain & Ireland are essentially resident, with only local dispersive movements occurring (Wernham *et al* 2002). NB85483 was first controlled at the same site in Northumberland in 2006 (Coiffait *et al* 2008a). Also shown is the longevity record for this species from BTO ringing.

Grey Wagtail *Motacilla cinerea*

V775908 6 22. 1.2008 Marston Sewage Farm, Grantham: 52°58'N 0°40'W (Lincolnshire)
 B=F 17. 5.2008 Konsmo, Audnedal: 58°17'N 7°21'E (Vest-Agder) **Norway** 776 km NE
 R997226 3 9. 9.2008 Landguard Point, Felixstowe: 51°56'N 1°19'E (Suffolk)
 R 9.10.2008 Zandvoort Duinen: 52°21'N 4°32'E (Noord-Holland) **Netherlands** 225 km E

Grey Wagtails are resident or locally dispersive in Britain & Ireland, as well as France, Belgium, Iberia and the Mediterranean, while populations in other parts of the species' range are wholly or partially migratory (Hagemeijer & Blair 1997). There have been very few international recoveries of Grey Wagtails involving Britain & Ireland; shown here is the first reported exchange with Norway and the fourth with the Netherlands. The female moving to Norway, where it was reported as breeding, presumably overwintered in Britain, while the bird moving to the Netherlands was probably on passage when it was ringed in Suffolk.

Pied Wagtail *Motacilla alba*

T798924 4M 13. 8.2008 Brynmawr: 51°47'N 3°10'W (Gwent)
 R 24. 8.2008 Abbotsbury Swannery: 50°39'N 2°36'W (Dorset) 132 km SSE
 V159674 3 19. 8.2008 Fair Isle: 59°32'N 1°38'W (Fair Isle)
 R 31. 8.2008 Kennemer Duinen: 52°25'N 4°33'E (Noord-Holland) **Netherlands** 879 km SSE
 V434717 3 2. 9.2008 East Kilbride: 55°47'N 4°12'W (Strathclyde)
 XF 19.12.2008 Davenham, Northwich: 53°14'N 2°31'W (Cheshire) 304 km SSE

V159674 is the second BTO-ringed Pied Wagtail reported in the Netherlands. The southeasterly movement, which is unusual for a BTO-ringed bird, suggests that it is most likely to be of the subspecies *alba*, many of which breed in Iceland. Also shown are the two longest movements within Britain reported in 2008 (and the only ones exceeding 100 km).

Waxwing *Bombycilla garrulus*

BV65482 5F 9. 1.2006 Walkley, Sheffield: 53°23'N 1°30'W (South Yorkshire)
 R 18. 2.2008 Ojanpera, Rovaniemi: 66°28'N 25°44'E (Lappi) **Finland** 2,084 km NE

Most BTO-ringed Waxwings recovered overseas have been found in Norway; this is the eleventh report in Finland.

Dipper *Cinclus cinclus*

RT75199 1 29. 4.2006 Gogin, Newcastle: 52°27'N 3° 8'W (Shropshire)
R=F 5.12.2008 Tal-y-Bont, Aberystwyth: 52°29'N 3°59'W (Dyfed) 58 km W

Dippers breeding in Britain & Ireland are largely sedentary, with the exception of some altitudinal movements in upland regions (Wernham *et al* 2002); shown here is the only movement reported in 2008 that exceeded 50 km.

Wren *Troglodytes troglodytes*

9U0401 3 19. 6.2004 Insh: 57° 5'N 3°58'W (Highland)
R 6.11.2004 Hallyards: 55°56'N 3°25'W (Lothian) 133 km SSE

Although British & Irish Wrens are mostly sedentary, they are capable of long-distance movements (Wernham *et al* 2002) as this recovery (the longest movement reported in 2008) shows.

Dunnock *Prunella modularis*

V934744 3 3.10.2007 Gibraltar Point, Skegness: 53° 6'N 0°19'E (Lincolnshire)
R 30.10.2008 Bosjes bij de Sluizen, Kornwerderzand: 53° 4'N 5°20'E (Friesland) **Netherlands** 335 km E
T948705 3 30. 9.2007 Isle of May: 56°11'N 2°34'W (Fife)
R 22. 9.2008 Sandgard, As: 59°39'N 10°47'E (Akershus) **Norway** 877 km ENE
NLA 6 8. 4.2008 Borgsweer: 53°18'N 7° 1'E (Groningen) **Netherlands**
AP37731 XF 22.11.2008 Kingston: 50°51'N 0° 1'W (Sussex) 552 km WSW

Over much of its range, the Dunnock is migratory, while in Britain & Ireland it is largely sedentary (Wernham *et al* 2002). The BTO-ringed birds shown here (eighth in the Netherlands and ninth in Norway) were probably on passage when ringed. Also shown is the second Dunnock from the Netherlands to be reported in Britain & Ireland.

Robin *Erithacus rubecula*

R747301 4 31. 3.2008 Calf of Man: 54° 3'N 4°49'W (Isle of Man)
R 17.10.2008 Vale Marais: 49°30'N 2°32'W Guernsey, **Channel Islands** 530 km SSE

Most Robin populations are partially migratory, especially those breeding in northern and central Europe (Wernham *et al* 2002). This bird, the sixth report of a BTO-ringed Robin on the Channel Islands, may have originated from a breeding population in Scandinavia.

Nightingale *Luscinia megarhynchos*

T717924 4M 21. 4.2007 Temple End: 51°56'N 0°19'W (Hertfordshire)
R 17. 8.2008 Creting St Mary: 52° 9'N 1° 3'E (Suffolk) 97 km ENE
V463403 3 12. 8.2007 Beachy Head: 50°44'N 0°15'E (Sussex)
R=M 8. 5.2008 Nazeing Mead: 51°45'N 0° 0'E (Essex) 115 km N
E969564 4F 5. 6.2008 Bainton Gravel Pits: 52°38'N 0°22'W (Cambridgeshire)
R 31. 8.2008 Plaisance, Saint-Froult: 45°57'N 1° 7'W (Charente-Maritime) **France** 745 km S
TE41643 1 8. 6.2008 Tugley Wood: 51° 5'N 0°36'W (Surrey)
R 4. 9.2008 Plaisance, Saint-Froult: 45°57'N 1° 7'W (Charente-Maritime) **France** 572 km S
FRP 3 25. 8.2006 Villeton: 44°21'N 0°16'E (Lot-et-Garonne) **France**
CB22174 R=M 10. 6.2008 Haddon Hall: 52° 4'N 1°19'E (Suffolk) 861 km N
FRP 4M 22. 8.2007 Plaisance, Saint-Froult: 45°57'N 1° 7'W (Charente-Maritime) **France**
SC18318 R 2. 5.2008 near Pentney: 52°41'N 0°32'E (Norfolk) 758 km N

Over the last few decades, the British-breeding Nightingale population has undergone marked range contraction, and numbers outside the core areas in southeast England have declined (Wilson *et al* 2002). There have been few international Nightingale recoveries involving Britain; the only other exchanges with France were reported in 2006 (Coiffait *et al* 2008a). Since adult Nightingales (particularly males) tend to show strong fidelity to their breeding sites (Wernham *et al* 2002) the relatively long movements shown here may be due to the birds being caught on passage between breeding sites in Britain and their wintering quarters in Africa.

Song Thrush *Turdus philomelos*

RT27472 3 11.10.2004 Middle Barn, Bawdsey: 51°59'N 1°24'E (Suffolk)
XF=M 19.10.2008 Kaunas: 54°52'N 23°54'E **Lithuania** 1523 km ENE
SVS 3 29. 7.2005 Handol, Are: 63°16'N 12°27'E (Jamtland) **Sweden**
4513683 S 18. 2.2008 Bourne: 52°46'N 0°23'W (Lincolnshire) 1387 km SSW

The Song Thrush is a partial migrant (Wernham *et al* 2002) and recent analysis of recoveries has shown that Song Thrushes from different European breeding populations follow different migratory routes (Milwright 2006). For example, birds from Scandinavia and northwest Russia move down the northwest coast of continental Europe, arriving in large numbers in southwest France in October, with many adults subsequently moving on to winter in west Iberia. In contrast, some Song Thrushes breeding in the Netherlands and north Germany disperse through Belgium and northwest France, moving on to England and Wales in late winter. This may explain why there have been relatively few exchanges between Britain & Ireland and Fennoscandia and even fewer with Russia. Shown here is the seventh report of a Swedish-ringed bird and, more unusually, the third BTO-ringed Song Thrush to be reported in the Baltic States (the other two were reported in Estonia).

Redwing *Turdus iliacus*

ISR 6 28. 3.2007 Einarslundur, Hofn, Hornafjordur: 64°15'N 15°13'W (Austur-Skaftafells) **Iceland**
884063 XF 12.11.2008 Weynor Gardens, Kelling: 52°56'N 1° 7'E (Norfolk) 1,568 km SE

Although there have been a number of recoveries of Icelandic-ringed Redwings, this one is unusual, because it was recovered in England. Birds of the Icelandic-breeding subspecies *coburni* are thought to winter mainly in Scotland, Ireland, France and Iberia (Milwright 2002, Wernham *et al* 2002). There has only been one other report of an Icelandic-ringed Redwing in England (Clark *et al* 2007).

Cetti's Warbler *Cettia cetti*

N482152 3M 20. 6.1999 Chew Valley Lake: 51°19'N 2°38'W (Avon)
R 18.10.2008 Chew Valley Lake. Local
T928334 2F 9. 9.2006 Filsham, Hastings: 50°51'N 0°31'E (Sussex)
R 27. 4.2008 Sewage Treatment Works, Chalton: 51°56'N 0°30'W (Bedfordshire) 140 km NNW
V911467 2F 7.10.2007 Cauldwell Hall Farm, Hollesley: 52° 3'N 1°27'E (Suffolk)
R 15. 3.2008 Great Meadow Pond, Windsor: 51°25'N 0°37'W (Berkshire) 159 km WSW
FRP 3F 27. 8.2008 Saint-Vigor-d'Ymonville: 49°29'N 0°21'E (Seine-Maritime) **France**
6028182 R 8.10.2008 Icklesham: 50°54'N 0°40'E (Sussex) 159 km N
FRP 2 21. 9.2008 Dunes de Slack, Wimereux: 50°46'N 1°36'E (Pas-de-Calais) **France**
6009718 R=F 14.10.2008 Icklesham: 50°54'N 0°40'E (Sussex) 68 km WNW

09.03.28

N482152 is a new longevity record for Cetti's Warbler from BTO ringing, while the other recoveries shown here provide evidence of immigration from the Continent and the dispersive ability of this species. The two French-ringed birds were controlled at Icklesham six days apart.

Grasshopper Warbler *Locustella naevia*

R586596	3	23. 8.2005	Titchfield Haven, Hill Head, Fareham: 50°49'N 1°15'W (Hampshire)
	X	30. 6.2008	Enstone: 51°57'N 1°27'W (Oxfordshire) 127 km N
V118617	3	6. 9.2006	Icklesham: 50°54'N 0°40'E (Sussex)
	R=M	26. 7.2008	Greystoke Forest: 54°41'N 2°57'W (Cumbria) 486 km NNW
V507918	3	25. 7.2007	Icklesham: 50°54'N 0°40'E (Sussex)
	XF	15. 5.2008	Kilfian: 54°12'N 9°17'W (Mayo) 766 km WNW

Grasshopper Warblers are small, secretive and well-camouflaged birds, and relatively few are ringed. Consequently, the species has one of the lowest recovery rates of any British- & Irish-breeding bird (Wernham *et al* 2002). Shown here are the only long-distance movements reported in 2008; some of these birds may have been on passage when ringed.

Sedge Warbler *Acrocephalus schoenobaenus*

T009160	4F	25. 6.2004	Woolston Eyes, Warrington: 53°23'N 2°32'W (Cheshire)
	//	(9.10.2008)	Site unknown; approx: 12° 8'N 1°49'W Burkina Faso 4,584 km S
T676866	4	5. 6.2007	Bardsey Island: 52°45'N 4°48'W (Gwynedd)
	R	19. 1.2008	Parc National de Diawling, approx: 16° 33'N 16° 22'W Mauritania 3,692 km S
V621011	3	2. 8.2007	Icklesham: 50°54'N 0°40'E (Sussex)
	R	19. 1.2008	Parc National de Diawling, approx: 16° 33'N 16° 22'W Mauritania 3,611 km SSW
V869852	3	5. 8.2008	Walberswick: 52°18'N 1°38'E (Suffolk)
	R	13. 8.2008	Uebersyren: 49°38'N 6°17'E Luxembourg 440 km SE
NOS	4	28. 5.2006	Jomfruland, Kragero: 58°52'N 9°36'E (Telemark) Norway
5E55645	R	20. 8.2006	Marston Sewage Farm, Grantham: 52°58'N 0°40'W (Lincolnshire) 915 km SW
DER	3	14. 8.2007	Feldstation Radolfzell-Metttau, Freiburg: 47°43'N 8°59'E (Sudbaden) Germany
B2P4712	R	26. 7.2008	Haddiscoe Island: 52°33'N 1°37'E (Norfolk) 751 km NW

Shown here are movements of three BTO-ringed Sedge Warblers recovered on the West African wintering grounds, along with two birds ringed on the Continent and recovered in Britain & Ireland, and the third recovery of a BTO-ringed Sedge Warbler in Luxembourg. Note that the two birds reported in Mauritania were caught at the same site on the same day by French ringers. Recoveries suggest that Sedge Warblers breeding in different parts of Britain & Ireland may winter in different parts of Africa; trans-Saharan recoveries of Irish-ringed Sedge Warblers have all occurred in western Senegal, whereas most of the birds recovered in more easterly parts of West Africa were ringed in eastern Britain (Wernham *et al* 2002).

Marsh Warbler *Acrocephalus palustris*

R996375	4M	3. 6.2008	Landguard Point, Felixstowe: 51°56'N 1°19'E (Suffolk)
	R	23. 7.2008	Lapscheure: 51°17'N 3°20'E (West-Vlaanderen) Belgium 157 km ESE

Marsh Warblers occur in Britain & Ireland as a rare breeding bird and as a passage migrant (Wernham *et al* 2002). This is the first BTO-ringed Marsh Warbler to be reported in Belgium.

Reed Warbler *Acrocephalus scirpaceus*

NOS	3	19. 8.2008	Smukkevatnet, Time: 58°43'N 5°39'E (Rogaland) Norway
9E03637	XF	28. 8.2008	Southend-on-Sea: 51°32'N 0°44'E (Essex) 857 km SSW

There have been relatively few exchanges of Reed Warblers between Britain & Ireland and northern and central Europe; this is the eleventh Norwegian-ringed Reed Warbler to be reported here.

Blackcap *Sylvia atricapilla*

H968344	3M	6.12.1992	Sheffield: 53°22'N 1°30'W (South Yorkshire)
	X	7. 1.1993	Torridal, Kristiansand: 58°12'N 7°55'E (Vest-Agder) Norway 796 km NE
V463786	3F	5. 9.2007	Beachy Head: 50°44'N 0°15'E (Sussex)
	R	5.10.2007	Jews Gate: 36° 8'N 5°20'W Gibraltar 1,683 km SSW
R161410	3F	1.10.2007	Flamborough Head: 54° 7'N 0° 6'W (Humberside)
	R	8. 9.2008	Vrhnik, Ljubljansko Barje: 45°58'N 14°18'E Slovenia 1,368 km SE
V584292	3M	13. 9.2008	Orfordness: 52° 5'N 1°34'E (Suffolk)
	XF	29.11.2008	Yekepa, Nimba: 7°31'N 8°31'W Liberia 5,038 km S
V683611	3M	13.10.2008	Fair Isle: 59°32'N 1°38'W (Fair Isle)
	R	15.10.2008	Titran, Froya: 63°40'N 8°19'E (Sor-Trondelag) Norway 698 km NE
CZP	4M	24. 8.2008	Kunratice: 50° 1'N 14°30'E (Praha) Czech Republic
TC54390	XF	30.10.2008	between Boat of Garten and Conon Bridge: 57°20'N 4° 0'W (Highland) 1,461 km NW

Shown here are the first recoveries of BTO-ringed Blackcaps in Liberia and Slovenia (although note that one bird has previously been recovered in the former Yugoslavia), the eighth in Gibraltar, the second report in Britain & Ireland of a Blackcap ringed in the Czech Republic, and two BTO-ringed birds that moved to Norway in the autumn and winter. Migrant Blackcaps from Scandinavia and west-central Europe occur in Britain & Ireland in spring and autumn (Wernham *et al* 2002), and some from central Europe remain here for the winter (eg Robinson 2005). Blackcaps breeding in Britain & Ireland are thought to winter in southern Iberia and northwest Africa, with some crossing the Sahara (Cramp 1992, Wernham *et al* 2002), as the bird recovered in Liberia appears to have done.

Garden Warbler *Sylvia borin*

ESI	3	12. 8.2007	Rambla del Tuerdo, Tarazona de la Mancha: 39°14'N 1°56'W (Albacete) Spain
N663605	R	10. 5.2008	near Lyndon, Oakham, Rutland Water: 52°38'N 0°41'W (Leicestershire) 1,492 km N
	R	9. 8.2008	near Lyndon, Oakham
ESI	3	15. 8.2005	Penaflo de Zaragoza: 41°46'N 0°48'W (Zaragoza) Spain
N231350	R=M	13. 6.2008	Centre Tree, Birklands, Edwinstowe: 53°12'N 1° 6'W (Nottinghamshire) 1,271 km N
FRS	3	9. 8.2007	Villeton: 44°21'N 0°16'E (Lot-et-Garonne) France
BC96227	R	10. 5.2008	Sevenoaks Wildfowl Reserve, Sevenoaks: 51°17'N 0°11'E (Kent) 771 km N
NOS	3	17. 8.2008	Jomfruland O-Runda, Kragero: 58°52'N 9°36'E (Telemark) Norway
9E27523	R	7. 9.2008	The Headland, Hartlepool: 54°41'N 1°12'W (Cleveland) 805 km SW
NOS	2	23. 9.2008	Lista Fyr, Farsund: 58° 6'N 6°34'E (Vest-Agder) Norway
8E70402	R	26. 9.2008	Quarry House, Low Newton: 55°30'N 1°38'W (Northumberland) 577 km WSW

A number of foreign-ringed Garden Warblers were reported in 2008, all within Europe. Recoveries and observations indicate a substantial passage of Garden Warblers through Britain in both spring and autumn (Wernham *et al* 2002) and the two Norwegian-ringed Garden Warblers reported here were clearly on passage when they were controlled in Britain. The Spanish- and French-ringed birds were also probably ringed while on passage from more northerly breeding populations.

Lesser Whitethroat <i>Sylvia curruca</i>		09.00.02
N439903	4	29. 5.1999 Snettisham Coastal Park: 52°52'N 0°26'E (Norfolk)
	R	31. 5.2008 Snettisham Coastal Park. Local
V172160	3	Hodgson's Fields, Skeffling: 53°39'N 0° 4'E (Humberside)
	R=M	24. 4.2008 Vrhnika, Ljubljansko barje: 45°58'N 14°18'E Slovenia 1,329 km SE

The easterly migratory route of the Lesser Whitethroat, along with the species' core wintering grounds in Sudan, Chad, Eritrea and Ethiopia, distinguish this species from most other British-breeding warblers, which generally tend to migrate through Spain to wintering grounds in West Africa (Wernham *et al* 2002, Robinson 2005). V172160 is the first BTO-ringed Lesser Whitethroat to be reported in Slovenia (although note that one bird has previously been recovered in the former Yugoslavia). Also shown is a new longevity record for Lesser Whitethroat from BTO ringing.

Chiffchaff <i>Phylloscopus collybita</i>		
5G1688	3	26. 9.2000 North Sands, Hartlepool: 54°42'N 1°13'W (Cleveland)
	R	4. 4.2001 Lista Fyr, Farsund: 58° 6'N 6°34'E (Vest-Agder) Norway 610 km NE
BLK859	3	6.11.2006 Sandwich Bay Estate: 51°16'N 1°23'E (Kent)
	R	5. 4.2008 Lohsa: 51°23'N 14°24'E (Dresden) Germany 904 km E
1Y1950	4	22. 4.2008 Seacroft, Skegness: 53° 6'N 0°20'E (Lincolnshire)
	R	25. 9.2008 Rohel Tjeukemeer: 52°55'N 5°50'E (Friesland) Netherlands 369 km E
BTE453	3	28. 9.2008 Waterhay, Ashton Keynes: 51°38'N 1°55'W (Wiltshire)
	R	29. 9.2008 Icklesham: 50°54'N 0°40'E (Sussex) 198 km ESE
POL	3	6.10.2007 Vilamoura, Faro: 37° 4'N 8° 7'W (Algarve) Portugal
094054	R=M	5. 5.2008 Kilpaison Marsh, Rhoscrowther: 51°40'N 5° 3'W (Dyfed) 1,640 km N
ESI	3	21.10.2007 Penafior de Zaragoza: 41°46'N 0°48'W (Zaragoza) Spain
DX6802	XF	5. 5.2008 Kingsbridge: 50°17'N 3°47'W (Devon) 974 km NNW
DEH	4	13. 4.2008 Greifswalder Oie, Ostvorpommern: 54°15'N 13°55'E (Rostock) Germany
3X737	R	4.11.2008 Sandwich Bay Estate: 51°16'N 1°23'E (Kent) 906 km WSW
POL	5	28. 2.2008 Salinas do Samouco, Setubal: 38°43'N 9° 2'W (Estremadura) Portugal
075454	R=M	12. 4.2008 Winterset Reservoir, Wakefield: 53°37'N 1°26'W (West Yorkshire) 1,754 km NNE

Some British- & Irish-breeding Chiffchaffs overwinter in southern Portugal, Spain and Morocco, while others continue across the Sahara to occupy wintering grounds that extend from Mauritania south to Guinea Bissau (Wernham *et al* 2002). Shown here are recoveries of BTO-ringed birds in Norway (fourth), Germany (sixth) and the Netherlands (12th). Amongst the 2008 reports of birds ringed overseas and recovered in Britain & Ireland were two birds from Portugal (fourth and fifth), and individuals from Germany (sixth) and Spain (12th). Those ringed in Portugal and Spain and the bird BTO-ringed bird moving to the Netherlands may have been on passage when recovered. However, some Chiffchaffs are winter visitors to Britain & Ireland, as BLK859 and DEH 3X737 appear to be. This is not a recent phenomenon, but the number of birds involved has increased since the 1940s (Dennis 1992, Wernham *et al* 2002). Also shown is one movement (BTE453) within Britain of almost 200 km in one day.

Willow Warbler <i>Phylloscopus trochilus</i>		
BEA929	4M	5. 5.2007 Cowers Lane, Belper: 53° 1'N 1°33'W (Derbyshire)
	+F	(24. 2.2008) Issia: 6°29'N 6°35'W Cote d'Ivoire 5,191 km S
9Z6999	3	13. 7.2008 West Everleigh Down: 51°18'N 1°45'W (Wiltshire)
	R	14. 8.2008 Bierwart: 50°33'N 5° 1'E (Namur) Belgium 482 km E

The main wintering areas for British & Irish Willow Warblers appear to be countries in West Africa, particularly the Cote d'Ivoire and Ghana (Wernham *et al* 2002). Shown here is the eighth recovery of a BTO-ringed Willow Warbler in the Côte d'Ivoire, and a bird caught in Belgium while on passage (10th).

Goldcrest <i>Regulus regulus</i>		
CBY016	3M	29. 9.2007 North Dunes, Winterton: 52°44'N 1°40'E (Norfolk)
	R	29. 3.2008 Lista Fyr, Farsund: 58° 6'N 6°34'E (Vest-Agder) Norway 672 km NNE
CAA318	3F	26.10.2007 Dunwich: 52°16'N 1°37'E (Suffolk)
	R	7. 4.2008 Greifswalder Oie, Ostvorpommern: 54°15'N 13°55'E (Neubrandenburg) Germany 847 km ENE
CNA572	3F	25. 9.2008 St Margaret's at Cliffe: 51° 8'N 1°22'E (Kent)
	XF	27. 9.2008 Higher Willingcott Farm, Woolacombe: 51°10'N 4°10'W (Devon) 386 km W
CLJ665	3M	9.10.2008 Greenstraight, Hallsands: 50°14'N 3°40'W (Devon)
	R	18.10.2008 Vale Marais: 49°30'N 2°32'W Guernsey, Channel Islands 115 km SE
BTN863	3M	22.10.2008 Meols, Wirral: 53°23'N 3° 9'W (Merseyside)
	R	10.11.2008 Helgoland: 54°10'N 7°55'E (Helgoland) Germany 732 km E
BER985	3M	25.10.2007 Theddlethorpe St Helen, Mablethorpe: 53°22'N 0°13'E (Lincolnshire)
	V	6. 4.2008 Jomfruland, Kragero: 58°52'N 9°36'E (Telemark) Norway 843 km NE
FRP	4F	12. 1.2008 Bailleval: 49°20'N 2°27'E (Oise) France
RC7995	R	4.11.2008 Sandwich Bay Estate: 51°16'N 1°23'E (Kent) 228 km NNW
FRP	3M	19.10.2008 Dunes de Slack, Wimereux: 50°46'N 1°36'E (Pas-de-Calais) France
RH7220	R	24.11.2008 South Rauceby: 52°59'N 0°28'W (Lincolnshire) 285 km NNW

Recoveries of Goldcrests reported in 2008 included two BTO-ringed birds reported in Norway (seventh and eighth), and individuals that moved to Germany (seventh) and the Channel Islands (sixth), as well as two French-ringed Goldcrests reported in Britain & Ireland (eighth and ninth). Also shown is one particularly rapid movement within Britain (CNA572).

Firecrest <i>Regulus ignicapilla</i>		
BNL309	5M	26. 3.2008 Kessingland, Lowestoft: 52°24'N 1°43'E (Suffolk)
	R	9. 4.2008 Helgoland: 54°10'N 7°55'E (Helgoland) Germany 457 km ENE

There have been fewer than 20 international movements of Firecrests involving Britain & Ireland; shown here is the first BTO-ringed Firecrest to be recovered in Germany.

Pied Flycatcher <i>Ficedula hypoleuca</i>		
X113161	1	5. 6.2008 Cwm Clydach: 51°44'N 3°55'W (Glamorgan)
	XF	27.10.2008 near Senjay, Ground Cape Mount County: 7° 5'N 10°50'W Liberia 5,002 km S
NOS	1	17. 6.2007 Matkroni, Evje og Hornes: 58°31'N 7°33'E (Aust-Agder) Norway SW
5H44071	R=F	25. 5.2008 The Headland, Hartlepool: 54°41'N 1°12'W (Cleveland) 684 km

The report of a Pied Flycatcher ringed in Wales and recovered in Liberia (first) is an important addition to the handful of recoveries of this species on the wintering grounds. Also shown is the ninth report of a Norwegian-ringed Pied Flycatcher in Britain & Ireland, which may have been on passage when controlled in Hartlepool.

Bearded Tit *Panurus biarmicus* 07.00.22
 H555051 3JM 19. 6.1992 Leighton Moss: 54°10'N 2°48'W (Lancashire)
 R 11. 7.1999 Leighton Moss.

H555051 is a new longevity record for this species from BTO ringing.

Blue Tit *Cyanistes caeruleus*
 V399857 5F 14. 1.2007 Leiston: 52°13'N 1°34'E (Suffolk)
 R 5. 3.2008 Marsh Barn Carr, near Burnham Deepdale: 52°58'N 0°42'E (Norfolk) 102 km NW

Blue Tits tend to be more dispersive than the socially dominant Great Tit (Lack 1966, Burgess 1982), but long-distance movements are unusual; this was the only one exceeding 100 km that was reported in 2008.

Great Tit *Parus major*
 P881969 4F 17.11.2004 near Nettleton: 53°29'N 0°20'W (Lincolnshire)
 XF 21. 3.2008 Desford: 52°37'N 1°18'W (Leicestershire) 116 km SW
 V263755 3 8. 7.2007 Eyebrook Reservoir: 52°32'N 0°46'W (Leicestershire)
 XF=M 14. 4.2008 Pebmarsh, Halstead: 51°58'N 0°42'E (Essex) 118 km ESE

The Great Tit is largely sedentary across much of its range, including Britain & Ireland (Wernham *et al* 2002), although irregular irruptions do occur in more northerly areas (eg Cramp & Perrins 1993). In 2008 only two Great Tit movements exceeding 100 km were reported; one bird died after flying into a window (V263755), while the other was killed by a cat.

Coal Tit *Periparus ater*
 R399860 2 25. 9.2008 Cape Clear: 51°26'N 9°31'W (Cork)
 R 22.11.2008 Edenderry: 53°20'N 7° 5'W (Offaly) 268 km NE

In September and October 2008 there was an unprecedented fall of Coal Tits on Cape Clear (BirdWatch Ireland 2009) and more birds were ringed during these months (n=124) than in all previous years combined (n=91) (BTO unpublished data); shown is one exceptionally long movement. Surprisingly, the majority of the birds ringed on Cape Clear were from the Irish breeding population, rather than immigrants from the Continent, indicating that the species had an exceptional breeding season in Ireland (BirdWatch Ireland 2009).

Magpie *Pica pica*
 ES68293 3 19. 7.2007 Portland Bill: 50°31'N 2°27'W (Dorset)
 X (7. 4.2008) Claydon Pike, Lechlade on Thames: 51°41'N 1°44'W (Gloucestershire) 139 km NE

Magpies are sedentary and show minimal dispersal (Wernham *et al* 2002). This recovery of a bird ringed in Dorset and found dead 139 km away in Gloucestershire is therefore exceptional.

Tree Sparrow *Passer montanus*
 TJ50604 1 5. 6.2008 Kilnsea: 53°37'N 0° 8'E (Humberside)
 R 28.11.2008 Mildenhall Fen: 52°22'N 0°26'E (Suffolk) 141 km S

Tree Sparrows in Britain & Ireland are generally sedentary, although a proportion does disperse, generally in a southerly direction during the winter (Wernham *et al* 2002), as illustrated by this recovery, the only Tree Sparrow movement exceeding 100 km that was reported in 2008.

Chaffinch *Fringilla coelebs*
 V935134 3F 26.10.2007 Lundy Island: 51°10'N 4°40'W (Devon)
 X 17. 2.2008 Le Chene, Saint-Colomban: 47° 0'N 1°34'W (Loire-Atlantique) **France** 515 km SSE

Chaffinches breeding in Britain & Ireland are generally sedentary. The winter population is roughly doubled by migrants, mostly from Scandinavia, but with smaller numbers from Finland and Russia (Lack 1986, Wernham *et al* 2002). Thus it seems likely that this bird (the 10th recovery of a BTO-ringed Chaffinch in France) originated from a northerly breeding population and was on passage when ringed.

Brambling *Fringilla montifringilla*
 LIK 3M 7.10.2006 Ventes Ragas, Silute: 55°21'N 21°13'E **Lithuania**
 VT99301 XF 19. 4.2008 Oil Production Vessel FPSO Uisge Gorm: 56° 6'N 3°11'E North Sea 1,132 km W
 RUM 3F 8. 9.2007 Luvenga, Kandalakshskiy: 67° 6'N 32°41'E (Murmansk) **Russia**
 XK89942 R 1.12.2007 New Farm, Besford: 52° 7'N 2° 9'W (Worcestershire) 2,541 km SW
 SVS 3M 2.10.2007 Nidingen, Onsala: 57°18'N 11°54'E (Halland) **Sweden**
 1EN93549 R 19. 4.2008 Uppertown, near Matlock: 53°10'N 1°32'W (Derbyshire) 967 km WSW

Bramblings are winter visitors to Britain & Ireland from their northern breeding grounds, although the species does breed sporadically in northern Britain (Wernham *et al* 2002). Most foreign-ringed Bramblings recovered in Britain & Ireland have come from Norway, the Netherlands and Belgium; shown here are the first recoveries from a Baltic State, the second from Russia and the 12th from Sweden. Note, however, that the bird ringed in Lithuania was found offshore (on a floating oil production vessel in the central North Sea), just less than halfway to Norway.

Greenfinch *Carduelis chloris*
 NLA 5M 5. 3.2008 Westkapelle, Zeedijk: 51°33'N 3°28'E (Zeeland) **Netherlands**
 V347892 R 29. 4.2008 Dunwich: 52°16'N 1°37'E (Suffolk) 150 km WNW

In most parts of its range the Greenfinch is a partial migrant (Wernham *et al* 2002). In Britain & Ireland, many Greenfinches remain close to the natal site in subsequent years, although some birds make extensive seasonal movements (Boddy & Sellers 1983, Main 1996). Most international exchanges have been between Britain & Ireland and Norway, Belgium, France and the Channel Islands; this is the ninth report of a Dutch-ringed Greenfinch in Britain & Ireland.

Goldfinch *Carduelis carduelis*
 V766279 3F 20.11.2007 Kingsteignton: 50°33'N 3°37'W (Devon)
 R 10. 2.2008 Woodlands Farm, St Helier: 49°13'N 2° 7'W Jersey, **Channel Islands** 183 km SE

Most international recoveries of BTO-ringed Goldfinches have been of birds moving to Belgium, France and Spain; V766279 is the first report in the Channel Islands.

Siskin *Carduelis spinus*
 V084703 5M 12. 3.2006 East Grinstead: 51° 7'N 0° 1'W (Sussex)
 R 9. 4.2008 Miedzdroje, Zachodniopomorskie: 53°55'N 14°27'E (Szczecin) **Poland** 1,026 km ENE
 T450389 5M 20. 1.2008 Gleadthorpe Grange, Meden Vale, Warsop: 53°13'N 1° 7'W (Nottinghamshire)
 R 7. 4.2008 Gdynia-Whitomino, Pomorskie: 54°29'N 18°30'E (Gdansk) **Poland** 1,294 km E
 V776373 5F 18. 2.2008 Shillingford St George: 50°40'N 3°33'W (Devon)
 R 13. 4.2008 Miedzdroje, Zachodniopomorskie: 53°55'N 14°27'E (Szczecin) **Poland** 1,275 km ENE

T629405	6F	9. 3.2008	Gleadthorpe Grange, Meden Vale, Warsop: 53°13'N 1° 7'W (Nottinghamshire)
	R	10. 4.2008	Miedzzydroje, Zachodniopomorskie: 53°55'N 14°27'E (Szczecin) Poland 1,031 km E
V699430	5M	18. 3.2008	Dunwich: 52°16'N 1°37'E (Suffolk)
	R	14. 4.2008	Miedzzydroje, Zachodniopomorskie: 53°55'N 14°27'E (Szczecin) Poland 876 km ENE
DKC	4M	6. 3.2007	Pandrup, Brønderslev: 57°13'N 9°40'E (Jylland) Denmark
9D22661	R	2. 3.2008	Edenderry: 53°21'N 7° 3'W (Offaly) 1,141 km WSW
PLG	3M	14.10.2001	Bukowo-Kopan, Stacja: 54°27'N 16°25'E (Koszalin) Poland
KV76829	R	17. 2.2008	Thetford Lodge Farm: 52°26'N 0°41'E (Suffolk) 1,065 km WSW
DKC	4F	7. 3.2007	Pandrup, Brønderslev: 57°13'N 9°41'E (Jylland) Denmark
9D22792	R	17. 2.2008	Chilworth: 51°13'N 0°32'W (Surrey) 940 km SW
DKC	3M	26. 9.2007	Gedser Odde, Gedser, Falster: 54°34'N 11°58'E (Lolland Falster Maribo) Denmark
9D31702	R	27. 3.2008	Moorsholm Mill, Moorsholm: 54°31'N 0°57'W (Cleveland) 833 km W

Siskins have a discontinuous breeding distribution across much of Europe and Russia. They breed in the conifer forests of Britain & Ireland, but are more widespread during the winter months (although their numbers and distribution vary greatly from year to year) (Wernham *et al* 2002). Shown here are five movements to Poland (fourth to eighth), four of them recovered at the same site, along with one Polish- (seventh) and three Danish-ringed (fifth to seventh) Siskins in Britain & Ireland.

Twite *Carduelis flavirostris*

V465735	3F	23.12.2006	Walberswick: 52°18'N 1°38'E (Suffolk)
	R	5.11.2008	Heysham Harbour, Heysham: 54° 2'N 2°55'W (Lancashire) 360 km W/NW

Recent Twite colour-ringing projects led to an increase in the number of recoveries in recent years (Coiffait *et al* 2008a,b) and reports of ringed Twite suggest that east-coast birds originate from the south Pennines, whilst birds on the northwest coast originate from breeding sites on the islands off western Scotland. This record is unusual because it is one of very few records of a Twite on both the west and east coast of England and suggests that there may be interchange between the two populations (Andy Brown pers comm).

Common Redpoll *Carduelis flammea*

NLA	3	22.11.2007	Castricum, Driehoek: 52°33'N 4°37'E (Noord-Holland) Netherlands
AN84924	R=F	19. 2.2008	South Stoke, near Goring: 51°32'N 1° 9'W (Oxfordshire) 410 km WSW

The taxonomy of Redpolls is complicated; Lesser and Common Redpoll (*Carduelis cabaret* and *C. flammea* respectively) were elevated to species level in 2001 (BOU 2001); prior to this, recoveries of all Redpolls were reported together (and when the species was subsequently split, were all assumed to be of the more common Lesser Redpoll). The Common Redpoll occurs in Britain on passage and as a winter visitor (eg Robinson 2005). Relatively few have been ringed or recovered in Britain & Ireland; this bird is the second from the Netherlands.

Snow Bunting *Plectrophenax nivalis*

NLA	4F	4. 3.2006	Lauwersoog-Haven: 53°24'N 6°12'E (Friesland) Netherlands
V110561	R	15.12.2007	Caister-on-Sea: 52°39'N 1°43'E (Norfolk) 311 km WSW
NLA	5F	14. 1.2008	Tzummarum, Waddenzeedijk: 53°15'N 5°31'E (Friesland) Netherlands
V377874	VV	19. 3.2008	Cley: 52°58'N 1° 2'E (Norfolk) 301 km W

The circumpolar breeding range of the Snow Bunting is the most northerly of all songbirds (Cramp & Perrins 1994). The limited number of Snow Bunting recoveries suggests that Britain & Ireland is not a major wintering site for birds of Scandinavian origin. Instead, the majority of overseas movements have been to or from Iceland (Wernham *et al* 2002). These two birds bring the total of Dutch-ringed Snow Bunting recoveries in Britain & Ireland to five.

Yellowhammer *Emberiza citrinella*

NLA	3M	5.11.2007	Westenschouwen Strand: 51°41'N 3°41'E (Zeeland) Netherlands
V346326	R	5. 3.2008	Moorbridge Farm, Harleston: 52°12'N 0°57'E (Suffolk) 196 km W/NW

This is only the second foreign-ringed Yellowhammer to be recovered in Britain & Ireland. The other bird was ringed in Norway in October 1985 and caught in Kent a year later (Mead & Clark 1991). Yellowhammers breeding in Britain & Ireland are generally sedentary, but in other parts of the breeding range the species is a partial migrant and small numbers occur here on passage, with birds occasionally overwintering in the Northern Isles (Wernham *et al* 2002).

Reed Bunting *Emberiza schoeniclus*

N263735	4M	5.12.1999	Cholsey: 51°35'N 1° 9'W (Oxfordshire)
	X	13. 2.2004	Bourbourg: 50°57'N 2°12'E (Pas-de-Calais) France 244 km ESE
R250125	5M	11. 4.2003	Woolston Eyes, Warrington: 53°23'N 2°32'W (Cheshire)
	R	6.12.2008	The Wilderness, near Kintbury: 51°24'N 1°26'W (Berkshire) 233 km SSE
R326892	3M	23.10.2005	near Lower Lewell Farm, West Stafford: 50°42'N 2°22'W (Dorset)
	XF	26. 3.2008	Crabtree Farm, Armscote: 52° 6'N 1°40'W (Warwickshire) 163 km NNE
V452029	3F	5.11.2006	South Milton Ley: 50°16'N 3°51'W (Devon)
	R	2. 2.2008	Sewage Treatment Works, Swindon: 51°34'N 1°50'W (Wiltshire) 203 km NE
X227181	3F	8.10.2008	Leighton Moss, near Silverdale: 54°10'N 2°48'W (Lancashire)
	R	3.11.2008	Meadow Bank Farm, Broxton: 53° 4'N 2°47'W (Cheshire) 123 km S

Ringling data have shown that almost all individuals from the British-breeding population of Reed Buntings winter within Britain; those breeding in Ireland are also likely to be resident, although ringling data are inadequate to confirm this. Small numbers of birds from other breeding populations, predominantly from Scandinavia, also winter in Britain & Ireland (Wernham *et al* 2002). The recovery of a BTO-ringed Reed Bunting in France (fifth) therefore seems unusual, although it is possible that it was a winter visitor to Britain from a more northerly breeding population. Also shown are several movements within Britain that exceed 100 km.