Nest Record *News*

March 2011 • No 27

Monitoring milestones in 2010

Welcome to the 27th edition of *Nest Record News*. After another winter of heavy snows, many of us will be wondering how many of our resident birds will be back on territory this spring and how productive they will be. Keeping people updated about the changing fortunes of our birds is, of course, what the BTO's monitoring surveys are about. However, with the Nest Record Scheme it has traditionally taken 14 months from the end of the breeding season to publish the latest results. That changed in 2010 thanks to the rate you sent your nest records to us. By the end of October, we had received enough data to produce a preliminary report on the season for seven common species, the first time we have been able to produce figures within the same calendar year.

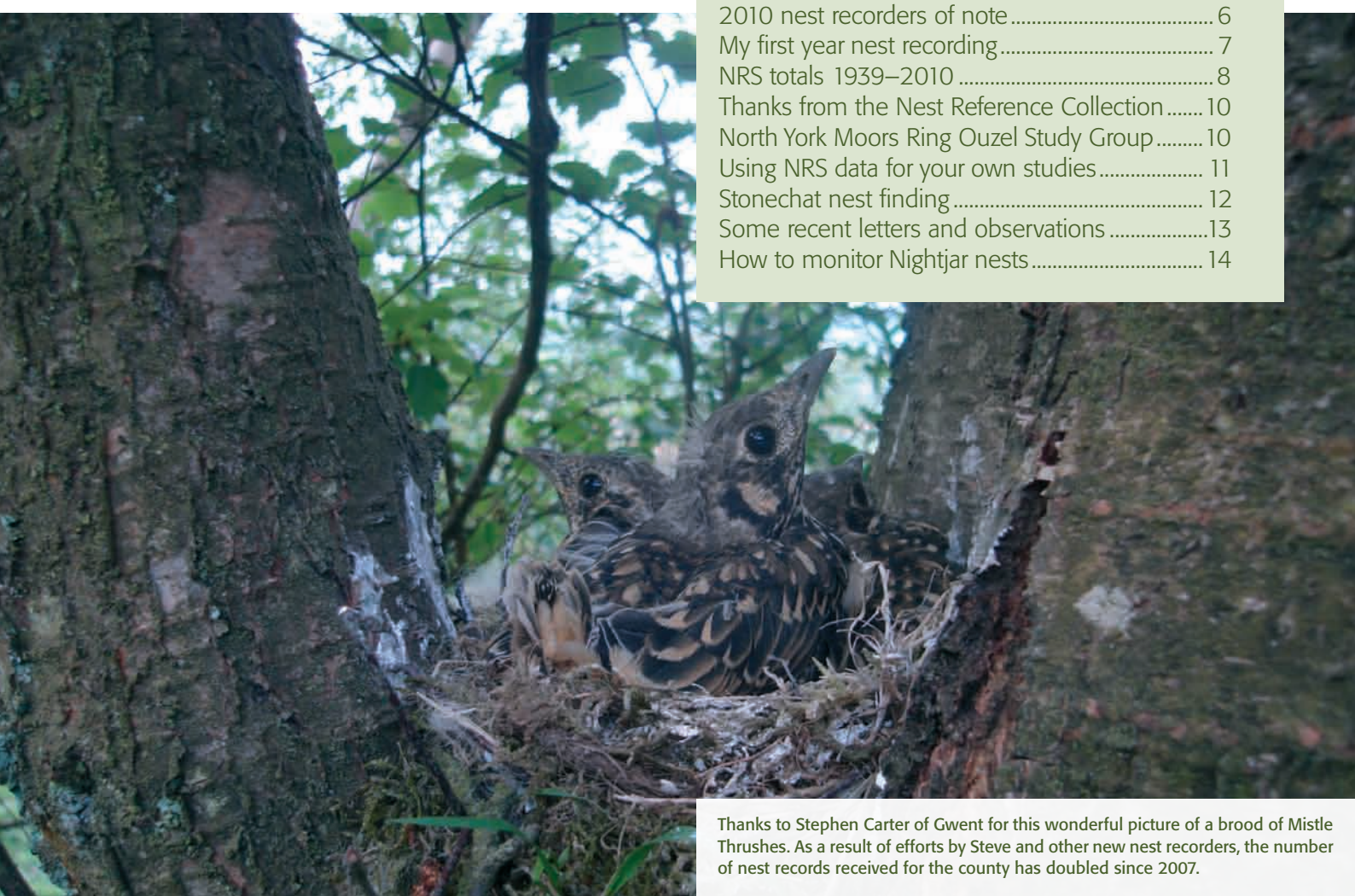
As I write, the number of nest records so far received for 2010 stands at 38,840, our highest annual total since 1999. This increase includes a welcome rise in records collected for open-nesting passerine species, such as Chiffchaff, Whitethroat and Goldfinch. As reported previously, we have been encouraging more people to monitor these target species by running residential training courses on nest finding, four more of which are available this May (www.bto.org/volunteer-surveys/nrs/taking-part/training-courses). This year, we are also delighted to introduce another resource for the aspiring nest recorder: a brand new BTO field guide to nest monitoring, which is being published this spring (see page 2). Both of these resources are ideal for new nest recorders, so if you are one of the 65 people who have joined the survey in the last year – and a warm welcome to you! – please have a look at page 2 to find out more about them.

All in all, we are delighted to see more participants sending in more records more quickly, meaning we can produce robust figures more rapidly (see pages 3 & 4). It is down to you that this is happening, of course, so thank you!

This edition of NRN has the latest news and findings from the survey (pages 2-4) as well as stories from individual nest recorders up and down the country, such as Craig Ledger's account of his first year as a nest recorder (page 7). And, of course, it has the usual suite of nest finding tips (pages 12 & 14). Most of the articles in NRN are written by nest recorders themselves, so if you would like to contribute an article, a report or a photo, please do contact us at nrs@bto.org

Carl Barimore, NRS Organiser

Inside



Thanks to Stephen Carter of Gwent for this wonderful picture of a brood of Mistle Thrushes. As a result of efforts by Steve and other new nest recorders, the number of nest records received for the county has doubled since 2007.

News from the NRS

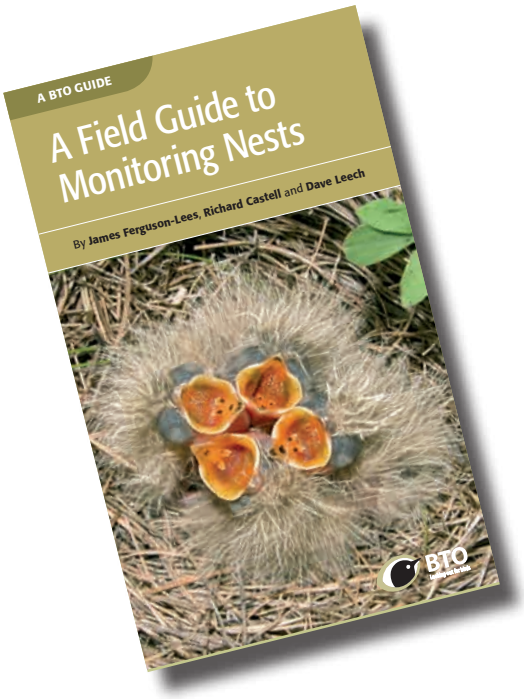
Fledgling publication

For years, the nest recorder's Bible has been the Bruce Campbell and James Ferguson-Lees 1972 publication, *A Field Guide to Birds' Nests*. Comprising detailed accounts of the nests of 234 current or historic UK breeding species, and with species-specific nest-finding notes, to date this field guide has been the only one of its kind. The BTO has long wanted to provide NRS participants with a replacement for this classic but long out-of-print book, which is tricky to find and now costs over £40 second-hand.

In 2009, Peter and Richard Castell published their DVDs, *Breeding Birds of Britain and Ireland* (see *NRN 26*) and its Western Palearctic counterpart, through Birdguides and BTO. The response to this ground-breaking project was extremely positive, and 2010 seemed like the ideal time to follow this identification guide up with a book that provided information on finding and monitoring nests. Realising this, Mike Toms, Head of Garden Ecology at the BTO, and Dave Leech, Head of the NRS, contacted James Ferguson-Lees and invited him to co-author a new field guide with Richard, already known to many recorders as leader of our Cheshire nest finding courses and a regular contributor to *Nest Record News*.

James, Richard, Mike and Dave have been hard at work through the autumn and winter months and we are very pleased to announce that the fruits of their labours, the BTO *Field Guide to Monitoring Nests*, will be published in April. The book is designed to help anyone who intends to monitor birds' nests in the field, from the novice to the expert by detailing methods for finding nests safely and efficiently and providing guidance on what data to collect so that the conservation value of their efforts can be maximized. At 256 pages, this illustrated guide contains detailed accounts of the breeding biology of 145 British and Irish species and, also features introductory sections on general nest monitoring techniques, legislation pertaining to birds' nests and an overview of the Nest Record Scheme.

This is the first time the BTO has published a guide to nest monitoring since Henry Mayer-Gross' *Nest Record Scheme* in 1970 (BTO Guide 12) and it is the most comprehensive guide the Trust has published on the subject. We thoroughly recommend it as a field guide for nest recorders and we hope it will be an enjoyable as well as a useful read. To purchase your copy for £24.99 (plus £2.00 p&p), contact BTO Sales on 01842 750050.



Nest recording courses

Last year we ran two residential field courses on how to find and monitor nests; one at our very own BTO HQ in Thetford, Norfolk, and the other in Hindhead, Surrey. We hope to run these courses and at least one more in Cheshire this year. For more information and to book a place, please see the NRS courses web-page: www.bto.org/volunteer-surveys/nrs/taking-part/training-courses

Correction

The last edition of *Nest Record News* (26) featured a wonderful front-cover photograph of a Cuckoo chick being fed by a Meadow Pipit. However, we credited the photo to the wrong person; it was actually taken by Paul Haffield. We thank Paul for the top-quality picture and apologise for the mistake.

Mentoring

This year sees the launch of our mentoring scheme, which is designed to help new participants contact and learn from other recorders in their area. More details about the course will become available on the NRS webpages in the next month, but right now we are looking for nest recorders who are willing to spend a minimum of a few hours each year mentoring other recorders in the field. If you are interested, please contact us at nrs@bto.org

Demog Blog reaches 150,000 hits

The Demog Blog is our online diary – whenever we hear interesting news from the ringing and nest recording world, it goes up on the blog. At the end of February we reached 150,000 views, so if you still haven't visited please take a look at http://btoringing.blogspot.com

WOODU believe it...

An unusual nest record has come in via recorders Vince Lea and Louise Bacon in Cambridgeshire. The two were attempting to monitor a six-metre-high Tawny Owl chimney box by using a USB 'web cam' mounted on the end of a long pole. It being their first visit to the box, Vince and Louise didn't know what to expect but, as it was March, they were hopeful for a Tawny Owl on eggs. However, what bolted out of the box and disappeared down the ride was a Wood Duck! The bird was last recorded on five eggs in mid May. The BTO has only ever received three Wood Duck records; two in 2010 and one in 2009.

The Wood Duck can be seen bolting from the chimney box, which is partially hidden on the right. In the centre is the camera pole.

Tits up in 2010

In the autumn of 2010 we asked you to help us produce the first-ever set of NRS preliminary results – and that's exactly what you did, as Dave Leech explains.

While the number of nests monitored in 2010 exceeded all expectations, in terms of the Scheme's history the record-breaking aspect of last year's submission was the speed with which you sent the information to us. Time taken to collate, input and process the data has meant that previous NRS results have been published up to 18 months after the records were actually collected. More rapid reporting would significantly increase the conservation value of the trends generated and would also increase the probability of subsequent press releases being picked up by the media, thus raising the Scheme's profile.

Mark Cubitt's work on IPMR and subsequent development of the NRS database undertaken by staff at BTO HQ have significantly reduced the time it takes to produce the annual trends. These innovations paved the way for an increase in reporting speed that was rendered possible by your fantastic response to our call for a more rapid turnaround of records in the autumn of 2010. As submission rates doubled, so our plans of producing provisional breeding success summaries before the end of the calendar year became reality. By the end of October we had received enough data to produce productivity estimates for Barn Owl, Swallow, Blackbird, Pied Flycatcher, Blue Tit, Great Tit and Tree Sparrow.

Table 1 compares the mean breeding parameters for these seven species in 2010 with the average figure across the previous five years, the same statistic that is used to report on the Constant Effort Site (CES) ringing scheme productivity measures (also included in Table 1). The results of both surveys show that it was a great year for box-nesting passerines, with large clutches and low failure rates resulting in a significant increase in the number of fledglings produced by both Great Tit and Blue Tit. This increased productivity was also reflected in the ratio of juveniles to adults caught by CES ringers. The fact that the increases recorded by CES are higher than those recorded by NRS may reflect the additional role of post-juvenile survival in determining the abundance of young birds during the summer.

Pied Flycatchers also fared well in 2010, with the number of fledglings per breeding attempt (FPBA) the third highest on record (Fig 1). These species may have benefited from a delay in the caterpillar peak resulting from a cold start to the breeding season. This meant that there was increased synchrony between chick production and food availability. The driest April–May period for 20 years may also have reduced the failure rate.

In contrast, NRS data suggest that Swallow, Blackbird and Tree Sparrow all had a very average 2010, with levels of breeding success similar to the five previous years. The CES figures for Blackbird tell a different story, however, suggesting that it was an unusually poor season. Again, differences between the results of these two schemes may be due to the reduced survival of young post fledging, possibly because the dry spring conditions mean the ground was hard and it was more difficult to forage. An alternative explanation is that the average number of breeding attempts per pair fell, which again may be linked to food availability and therefore to adult condition. While we were only able to produce figures on the average number of chicks for Barn Owl, the results again showed that it was a poor season with the average number of chicks the third lowest on record, as predicted in a year when vole numbers were low.

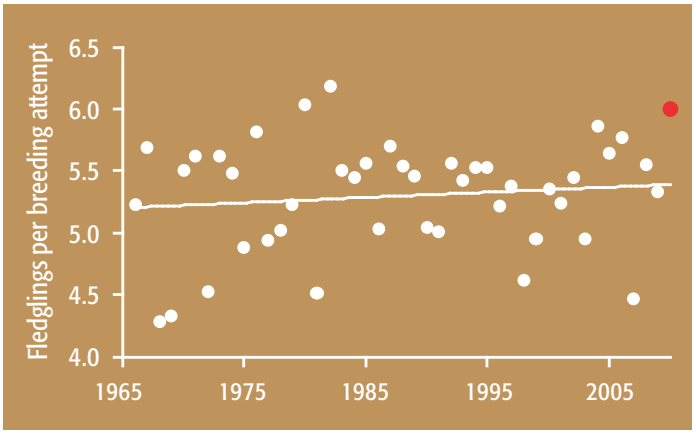


Figure 1. Long term trends in Pied Flycatcher productivity (fledglings per breeding attempt). The 2010 figure is represented by a red dot.

Long-term benefits

The advance in record submissions will also have knock-on effects on the reporting rate of the long-term productivity trends. Thanks to your efforts, we were able to start loading the full 2010 data set in February and work on data processing has already started, over four months earlier than in previous years.

The most recent trends were published as part of the online Breeding Birds in the Wider Countryside Report in November 2010. As in previous years, those species that are displaying significant declines in the number of fledglings produced per breeding attempt have been placed on the NRS Concern List. The latest list includes four Red-listed species (Nightjar, Spotted Flycatcher, Linnet, Yellowhammer) and four Amber-listed species (Dunnock, Willow Warbler, Bullfinch, Reed Bunting). Two further species, Great Tit and Chaffinch, are also displaying declines in productivity, but have not been placed on the Concern List as both are increasing in abundance.

Acknowledgements

We are incredibly grateful to everyone for submitting their data to us promptly at the end of the season. It really makes a huge difference in terms of the value of the trends and also for the profile for the NRS, allowing us to recruit yet more new recorders in 2011.

Table 1. Percentage change in breeding success in 2010 relative to the average for the previous five years. 'Ns' indicates a statistically non-significant difference.

Species	Clutch size	Brood size	Egg-stage failure	Chick-stage failure	Fledglings per breeding attempt	CES
Barn Owl	-	-10.8	-	-	-	-
Swallow	ns	ns	ns	ns	ns	-
Blackbird	ns	ns	ns	ns	ns	-21.3
Pied Flycatcher	ns	2.8	ns	-9.3	14.7	-
Blue Tit	3.5	8.6	ns	-9.6	17.6	63.3
Great Tit	7.6	5.6	-1.9	ns	12.5	37.4
Tree Sparrow	ns	ns	ns	ns	ns	-

High as a Kite: a record year for the NRS

The head of the NRS, Dave Leech, looks back on a brilliant year for nest recording, where quality and quantity were equally apparent.

It just felt like it was going to be a good nesting year, didn't it? Well, that was the case at The Nunnery, anyway, particularly for migrants such as Whitethroat and Reed Warbler, both of which seemed much more numerous than in recent memory. Conditions were favourable too, staying dry in the main with plenty of sunshine, although as was pointed out to me over many pints (of cola, disappointingly) at the Scottish Ringers' Conference in Carrbridge last November, this wasn't necessarily the case across the whole of the UK.

Whatever the weather has been, September is still a nervous time for the Demography Team, wondering how your totals will compare to those of the past few years while trying to boost our own, courtesy of the Thetford Woodpigeon population. Given our own experiences in 2010, beating the Nunnery Ringing Group personal best for Linnet and Reed Bunting, we were quietly confident that numbers of records submitted would be up on 2009, but by how much?

Millennium milestone

Well, you can all pat yourselves firmly on the back because, to date, we have received an incredible 38,840 records, an increase of almost 5,000 on the average total for the last five years and the fifth highest total in the Scheme's 70-year history (Fig 1a). This is an amazing effort, and we're extremely grateful to all of you who contributed to this nesting bonanza. It was a great breeding season for hole-nesting passerines, with a record-breaking 14,000 nests monitored. Equally welcome was a 17% increase in the number of open-nesting passerine submissions, reaching a 10-year high of 7,500. In total, submissions for 50 species were the highest for at least a decade, with those for 19 species being the largest on record.

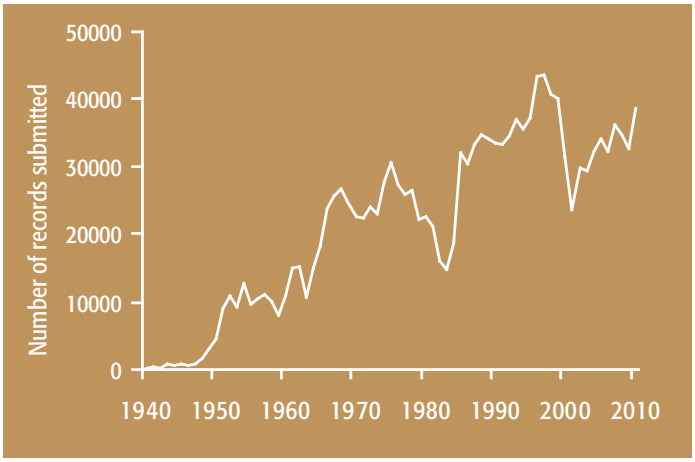
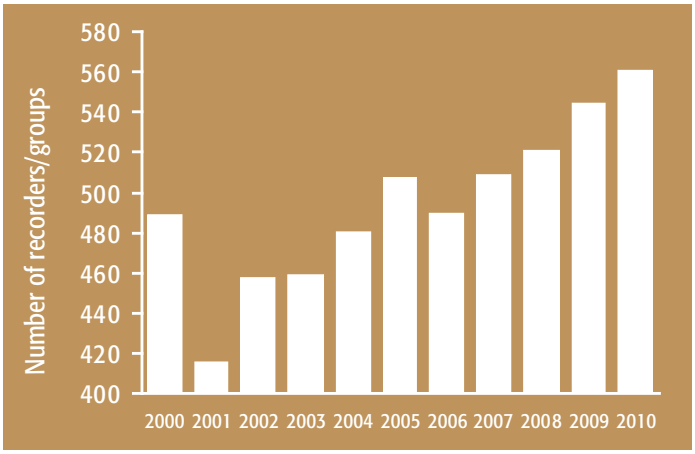
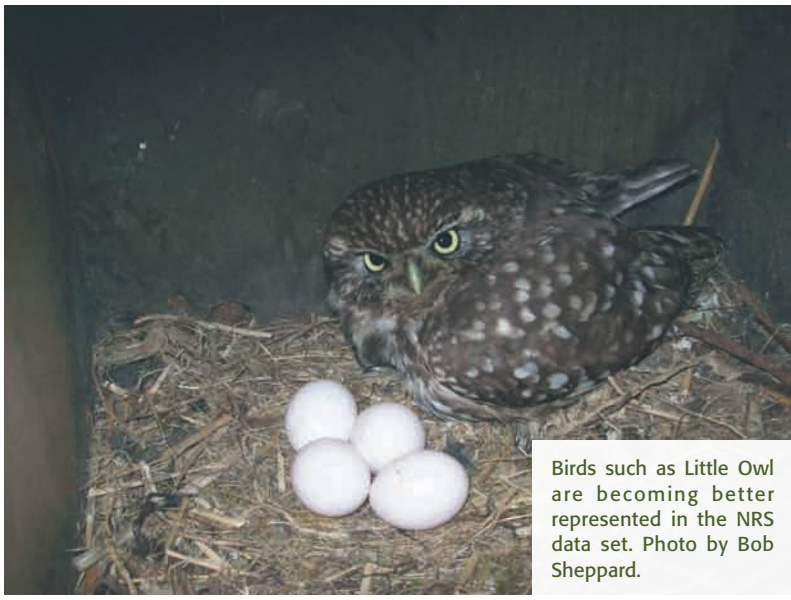


Figure 1a (above). The number of records submitted to the NRS per year.
Figure 1b (below)The number of recorders taking part in the NRS per year.





Birds such as Little Owl are becoming better represented in the NRS data set. Photo by Bob Sheppard.

Recovering raptors…

One group of birds that are becoming better represented in the NRS data set is the scarcer raptors, with numbers of Red Kite, Honey-buzzard, Goshawk and Osprey records received in 2010 at an all-time high, although Hen Harrier and Merlin unfortunately continue to buck this trend. Despite showing signs of a population decline, submissions for Little Owl also peaked last year, as did those of Stock Dove and Jackdaw, both beneficiaries of the increasing number of Barn Owl boxes in the British countryside. Observers monitoring two introduced cavity-nesters, Egyptian Goose and Ring-necked Parakeet, notched up record totals, while Great Spotted Woodpecker submissions passed 150 for the first time. Meanwhile, researchers working on Whimbrel contributed more than a third of the total historic data set held for this rare breeder.

…and plenty of passerines

The 2010 season marked the momentous occasion when Blue Tit became the first species to pass the 5,000 mark in a single year which, together with record numbers of Great Tit submissions, has doubtless proved a source of immeasurable joy for ringers everywhere over the winter months. Long-tailed Tit followed suit, with totals doubling over the last three years, as did the declining Marsh and Willow Tit. Migrants also fared well, with the number of Swallow nests monitored exceeding 3,000 for the first time and the figure for Chiffchaff approaching 200. While this was the only one to break all previous records, it is worth noting that seven of the 11 warbler species recorded in 2010 registered their highest totals for at least a decade.

Nest on!

Just as encouraging as the increase in the number of records is the increase in the number of nest recorders. Over 560 groups and individuals contributed in 2010, continuing the steady rise in participation over the last decade (Fig 1b). Far from being a dying art, the figures presented here demonstrate that the enthusiasm for monitoring nests and the skills needed to do so are still very much in evidence. Extending this network and establishing the next generation of nesters is essential to the future of the NRS, so we thank you for your fantastic contribution to the data set and wish you all the best for the coming season.

Breeding birds and weather in 2010

Last season brought a roller-coaster ride of extreme weather: a severely cold winter, late-spring frosts, welcome June warmth and searing mid summer heat. BTO research ecologist David Glue looks back on the year as reported by nest recorders in the field.

New Year chill defers early nesting season

New Year 2010 brought snow-clad countryside, rock-hard soils, freezing rain and raw cold temperatures, dipping to -22°C in Sutherland and enhanced during the day by lethal wind chill. 2009/10 was the coldest winter in thirty years and there were reports of modest losses among UK resident birds, with locally severe mortality in the Highlands and certain western uplands. Reports to the BTO of unseasonable mid winter nesting were few: just eight species by mid-February compared with 14 or more in a typical recent 'mild' winter. Those species that did attempt nesting included Mallard, Egyptian Goose, Tawny Owl, Robin, Crossbill and thrushes.

Regular bitterly cold northerly 'Arctic' blasts and numbing easterly 'Siberian' chill throughout much of January (coldest in Scotland since 1914) and February (coldest since 1996), made for testing times as a wildfowl shooting suspension came into force. March maintained the uncomfortable theme, with see-sawing temperatures dipping to a destructive -18°C in Aberdeenshire early on the 5th. 'Polar' northerly winds delivered sleet and snow showers with fitful sunshine. The month closed like the proverbial lion, with blizzard conditions over the final two days of March. Snow accumulations of up to 40 cm in the Highlands were a delight to ski resorts but retarded vegetation and breeding activity. Pioneer spring migrants were in short supply.

Residents slowly engage gear

Nature slowly caught up with the time of year. Warm pulses of southerly subtropical air lifted temperatures to 20.4°C in County Tyrone over Easter. Daytime temperatures 1–2°C above average in April prompted a surge in nesting activity by grebes, Grey Heron, dabbling ducks, corvids and thrushes. However, ongoing night frosts and low rainfall (driest April since 2007) left some thrushes seemingly struggling for soil-dwelling invertebrates while others lost clutches or had small broods. Brief thundery downpours in late April and mid May caused locally heavy nest failures among coastal gulls, terns and plovers, Skylark, Meadow Pipit, Sand Martin and woodland warblers, but such losses weren't comparable with the havoc wrought by storms in recent summers, notably 2007 and 2009. The month of May – pivotal for the nesting fortunes of some species – was uncomfortably cool (coldest since 1996), with regular night frosts. Nest box scheme operators reported lower occupancy and clutches 2–4 weeks later than in some recent 'warm' springs. Nest box predation by weasel, wood mouse and Great Spotted Woodpecker was, mercifully less in evidence – perhaps numbers of predators had also been depleted by the cold winter.

Heron nest success signals changing times

Spells of hot south-easterly winds from the Continent in late May and June, topping a sticky 28°C, swept an array of 'overshoots' to the UK, such as Alpine Swift, Red-rumped Swallow and Red-footed Falcon. A Marmora's Warbler in Gwent built a cock nest, while a Great Reed Warbler in Derby was in song. A pair of Purple Herons successfully bred in Kent, a first for the UK after a nest was left half-built in Suffolk in 2007. Potential eye-catching colonists waiting in the wings in 2010 included Great White Egret and Glossy Ibis, all on suitable habitat. The Great Bustard reintroduction programme at Salisbury Plain (Wilts) gathered momentum; parents raised four chicks from eggs harvested from a stable population in Russia. Meanwhile, resurgent Red Kite, Buzzard and Raven populations defied cold-winter pressures and further extended their ranges, though late egg-laying and smaller broods were noted by nest recorders and ringers.

A first for the UK: Purple Heron bred in Kent in 2010. Photo by LG Baxter.

Dry summer helps and hinders

Anticyclones anchored over a sizzling 'high summer' June, with temperatures topping 30.9°C in Kent. Bountiful sunshine (sunniest since 1975) lifted human spirits but the rainfall shortage – it was the driest January-to-June in 80 years – had its effect on some breeding birds. Receding water levels and locally acute water shortages (hosepipe bans in the north-west) left grebe, dabbling and diving duck, Kingfisher and *Acrocephalus* warbler nests exposed, with some study populations apparently suffering high predation. Parched meadow grasslands coincided with an apparent dip in field vole abundance, causing some recorders to express concern for the nesting fortunes of Barn Owl and Kestrel, two species that had already suffered cold-winter losses. Tinder-dry sections of pine-clad Wessex heaths, supporting equally hard-hit populations of Dartford Warbler, Stonechat and Goldcrest, were scorched by fires.

Ongoing heat in July triggered thundery downpours and relieving rain belts from the Atlantic, consequent with a boost in aerial insect food supplies. Repeat broods by Swallow, House Martin, Spotted Flycatcher, Tree Sparrow and Yellowhammer were reported.

2010 nest recording highlights

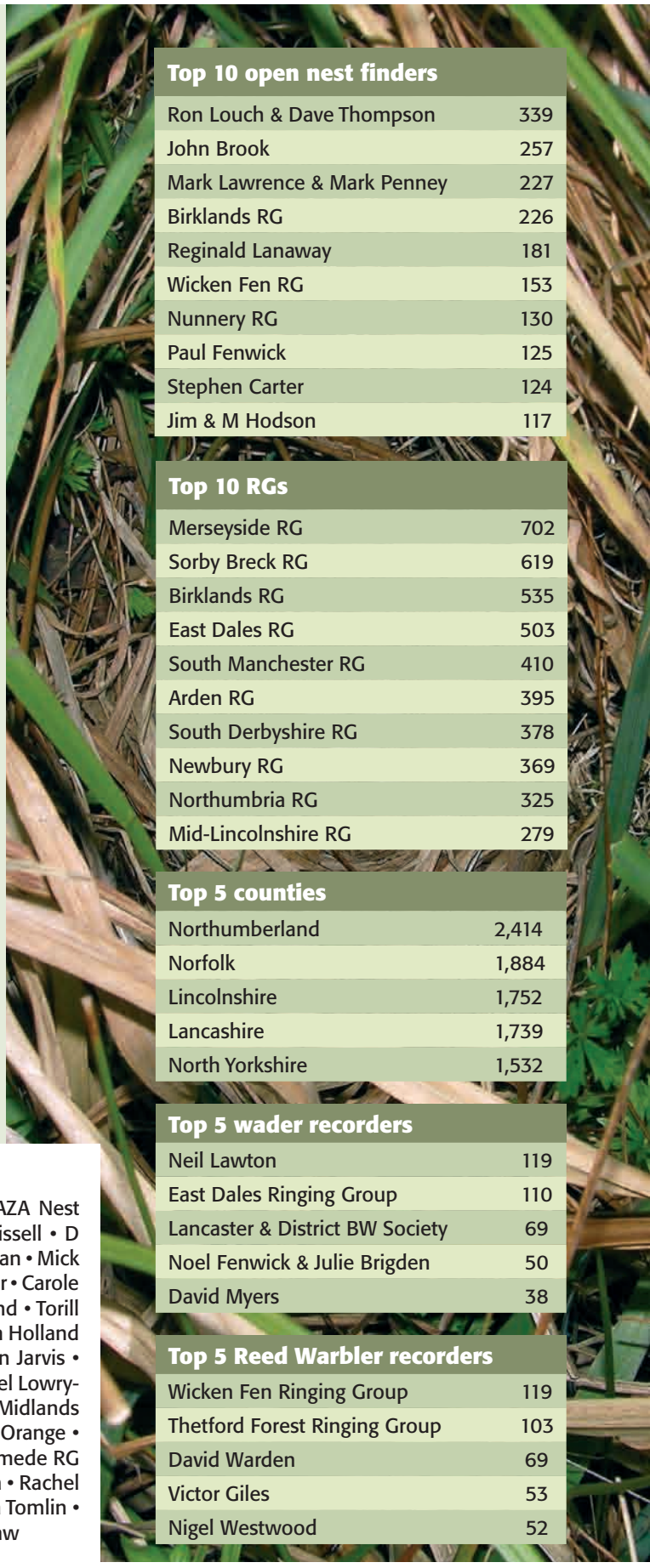
This section highlights some of the remarkable fieldwork feats of our most active nest recorders. The 'Top Participants' section shows all the nest recorders or groups who submitted 100 or more records for 2010, However, many of our nest records come from people who submit fewr than 10 nest records per year, so a big thanks is due to everyone who takes part in the survey.

Top participants by record total

Farne Islands National Trust 1,820 • John Brook 1,041 • Bob Danson 1,014 • Michael Mac 750 • Merseyside RG 702 • Sorby Breck RG 619 • Birklands RG 535 • East Dales RG 503 • Keith Seaton 489 • Matt Prior 460 • Batty & Bateman 417 • South Manchester RG 410 • Arden RG 395 • Souder RG 378 • Newbury RG 369 • Alan Ball 367 • Ron Louch & Dave Thompson 353 • Peter Roe 329 • Northumbria RG 325 • David Myers 303 • Tom Dewdney 301 • Geoff Myers 296 • Jonathan Lingard 292 • Reginald Lanaway 287 • Nagshead RSPB Reserve 287 • Gordon Priestley 285 • David Warden 283 • Mid Lincolnshire RG 279 • Lancaster & District Birdwatching Society 273 • John Lawton-Roberts 267 • Lawrence, Penney & Walters 259 • Dartford RG 242 • Dave Hazard 240 • Stephen Carter 240 • Paul Fenwick 240 • Ian Spence 237 • John Walshe 236 • Neil Croton & Mike Tyler 235 • Edward Cowley 234 • Allan Hale 226 • Nigel Lewis 223 • North West Norfolk RG 223 • Rye Bay RG 221 • Rye Meads RG 219 • Mike Russell 219 • Wicken Fen RG 218 • Paul Slater 207 • Frank Mawby 207 • Sarah & Philip Bone 204 • Noel Fenwick & Julie Brigden 202 • Derek Keates & Melvyn Preston 202 • Dave Francis 201 • Nunnery RG 192 • Food & Environment Research Agency 188 • Anne Goodall 187 • Jerry Lewis 186 • Derek Holman & Karl Ivens 185 • Mike Netherwood & Mick Cook 182 • Jim & M Hodson 179 • Stephen Lemon 170 • Jan Pritchard 170 • Paul Holness 164 • Natural England Devon Group 161 • Robert Stevens 160 • Paul Robinson 157 • Ronald Clevely 157 • Simon Cox 153 • Philip Harris 152 • Bob & Rob Swann 149 • Peter Robinson 145 • Neil Lawton 137 • John Hyde 134 • John Lloyd 134 • Robin Husbands 133 • Stanford RG 133 • Tees RG 131 • Grampian RG 129 • Victor Giles 129 • Graham Button & Richard Tomlinson 128 • Mike Rogers 128 • Cwm Clydach RSPB Reserve 127 • Colin Carter 127 • Dave Garner 126 • Garth Lowe 126 • John High 125 • Scott Jarvis 123 • Tim Ball 122 • BIAZA Nest Recording Group 121 • Thetford Forest RG 117 • Suffolk Community Barn Owl Project 116 • Michael Smith-White 115 • Lynne Lambert 115 • Kevan Brett 114 • Isabel Hildred 114 • Treswell Wood IPM Group 111 • John Allenby 111 • Spurn Point Bird Observatory 110 • Graham Uney 109 • Andrew Ramsay 108 • Peter Stevens 108 • Bristol Naturalists' Society 107 • Colin Davison 106 • Moor Piece NR Nestbox Scheme 105 • Steph Tyler 105 • Nigel Goodgame 104 • David Hill 104 • Gerald Murphy 104 • Michael Casey 103 • John Fletcher 103

And a warm welcome to...

John Allenby • Mike Ashford • Michael Barstow • Simon Bates • BIAZA Nest Recording Group • Richard Birchett • Bridget & Jenny Bird • Lorne Bissell • D Blenkinsop • Sara Bone (FERA) • Ryan Bradley • James Bray • Daniel Bryan • Mick Carroll • Barry Caudwell • Stephen Chapman • Jon Close • Terence Cooper • Carole Davis • Paul Dolman • Ann Eglington • Robert Fennelly • Tristan Folland • Torill Freeman • Michael Frith • Wendy Hall • Ian Henderson • RD Hind • Keith Holland • Samuel Hunt • Phil Ireland (Wash Wader RG) • Virginia James • Dan Jarvis • Mark Jeffery (SOBG) • Alan Kydd • Roy Levett • Michael Lindsey • Michael Lowry-Fields • Christopher Mason • Chris McGuigan • Humphrey Miller (West Midlands Bird Club) • Wendy Mumford • Rose Newsom • Tom O'Grady • David Orange • Ruth Peacey • Allan Perkins • Brian Rickett • Martin Routledge • Runnymede RG • Malcolm Samuels • Peter Short • Michael Smith-White • Ian Standivan • Rachel Stevens • Richard Taylor • Simon Taylor • Roger Tester • Beryl Tite • John Tomlin • Kevin Tutty • Hazel Wainwright • Steven Ward • Ian Wells • Lucy Wilshaw



Top 10 open nest finders	
Ron Louch & Dave Thompson	339
John Brook	257
Mark Lawrence & Mark Penney	227
Birklands RG	226
Reginald Lanaway	181
Wicken Fen RG	153
Nunnery RG	130
Paul Fenwick	125
Stephen Carter	124
Jim & M Hodson	117

Top 10 RGs	
Merseyside RG	702
Sorby Breck RG	619
Birklands RG	535
East Dales RG	503
South Manchester RG	410
Arden RG	395
South Derbyshire RG	378
Newbury RG	369
Northumbria RG	325
Mid-Lincolnshire RG	279

Top 5 counties	
Northumberland	2,414
Norfolk	1,884
Lincolnshire	1,752
Lancashire	1,739
North Yorkshire	1,532

Top 5 wader recorders	
Neil Lawton	119
East Dales Ringing Group	110
Lancaster & District BW Society	69
Noel Fenwick & Julie Brigden	50
David Myers	38

Top 5 Reed Warbler recorders	
Wicken Fen Ringing Group	119
Thetford Forest Ringing Group	103
David Warden	69
Victor Giles	53
Nigel Westwood	52

My first year as a nest recorder

Craig Ledger and his brother, Martin, attended a nest recording course in Cheshire in May 2009. As a newcomer to both the Nest Record Scheme and the BTO, Craig gives his account of what made him choose to take up nest monitoring, and how he got on in his first year.

In 2009, I retired from coal mining after almost 25 years on the coal face. Within a few months of retirement, I became bored and so decided to rekindle my childhood interest in wildlife. A friend told me that the BTO were running courses on nest monitoring for the Nest Record Scheme, so I booked a place. As a young lad, I used to collect birds' eggs, as most young boys back then did, and I also kept and showed foreign finches and canaries. I knew my brother shared my latent interest in wildlife, so I invited him to join me.

The course was based in Chester on a large dairy farm. Over the course of the weekend, we were shown how to monitor nests in various different habitat types, including field ditches and hedgerows. For me, the most interesting part of the weekend was looking for Reed Bunting nests along field ditches, which was a team effort. One person would walk on one side of the ditch, tapping the vegetation gently with a long cane, while the other person would watch for any movement. If a bird was flushed, the 'watcher' would point out the area to their colleague, who would then investigate. If a nest was found, it would be marked for the course tutor, as he would be monitoring it after the course was over. We would then cover up any tracks and move on, allowing the parent to return to its nest.

As soon as the weekend was over, Martin and I went out to try our new-found skills. Our local patch is predominantly woodland, a habitat type that didn't feature strongly in the course, but the general principles taught nevertheless carried over very well. We had soon found our first-ever Chiffchaff nest (four young fledged), and by the end of the season we had found and monitored four Blackbird nests, two Dunnock nests, two Chaffinch nests and – our most exciting find – a Red-legged Partridge nest. Not bad, given that our nest recording season had started in late May!

The course inspired both my brother and me to take a BTEC course in Countryside Management. While on the course, I took on a voluntary position with the local Wildlife Trust and I've since started a contract with the Forestry Commission as a shadow ranger. My brother, meanwhile, decided to change careers and has begun a three-year full-time degree in environmental conservation.

Craig and Martin Ledger at Idle Valley Nature Reserve, Nottinghamshire

Dave Thompson pointing out the location of a Grasshopper Warbler nest at Otmoor, Oxfordshire. The nest recording duo 'Ron Louch and Dave Thompson' have monitored over 10,000 nests for the BTO since 1977.

Dave 'Tomp' Thompson

Dave Thompson, one member of the veteran nest recording duo 'Louch & Thompson', passed away in 2008. Since 1977, the two had collected more nest records for species like Blackcap (822) and Chiffchaff (960) than any other contributor to the NRS. Ron Louch here gives a short account of his friend and fellow nest recorder.

I would like to relate one fond memory from our many years of nesting recording together. On 30 April 1988, we were driving home after a successful day, having found seven Chiffchaff nests. We would often motivate ourselves by setting targets and I remarked to Tomp that if we had only found one more that day, it would have been the 30th occupied Chiffchaff nest that month. On hearing this, Dave told me to pull up outside a nearby wood, where he said he had a 'builder' (nest at building stage) that could be checked. He emerged from the wood grinning and holding up two fingers, which meant two eggs. We had done it – 30 Chiffchaff nests being monitored before the start of May! We went on to record 90 Chiffchaff nests that year and could have done 100 were it not for my pulling us away to focus on Grasshopper Warbler. I was never quite forgiven for missing us that opportunity; Tomp would often bring it up over the years. So, with him very much in mind, I'm hoping to record 19 more Chiffchaff nests this year and reach a joint lifetime milestone of 1,000.

Max Meadows

Early this year the BTO learned of the passing of Max Meadows, a lifelong resident of Writtle, Essex, at the age of 80. Max was one of the BTO's most senior nest recorders, still submitting over 100 nest records per year when he retired from the scheme in 2008.

Max's interest in ornithology began as a child when he would acompany his father, a keen wildlife photographer, on nest finding expeditions. Max's father undertook to photograph a nest for every breeding bird species in Essex – an ambitious project even today but back in the 1930s it meant lugging a huge plate camera and wooden tripod about in the field. Max wrote a fascinating account of these early years in the centenary issue of *Ringers' Bulletin*.

Max started taking part in the Nest Record Scheme when he retired from teaching in 1982 and during the 1990s he was finding and monitoring over 500 nests per season. In 24 years of monitoring, Max collected 10,125 nest records, covering 80 species, all of them near his home town. In so doing, he has bequeathed the BTO an invaluable set of data, documenting the productivity of breeding birds in Essex over two decades.

Nest Record Scheme totals 1939–2010 (as of 23/02/2011)

Species	Code	2009	2010	TOTAL
Red-throated Diver*	***RETDI***	***20***	***20***	***2,486***
Black-throated Diver	*BLTDI*	*3*	*5*	*246*
Little Grebe	LITGR	57	47	2,830
Great Crested Grebe	GRCGR	93	152	4,491
Red-necked Grebe	RENGR			1
Slavonian Grebe	*SLAGR*		*2*	*200*
Black-necked Grebe	*BLNGR*			*31*
Fulmar	FULMA	12	16	7,631
Manx Shearwater	MANSH		4	633
Storm Petrel	STOPE			92
Leach's Petrel	*LEAPE*			*75*
Gannet	GANNE			33
Cormorant	CORMO	57	79	2,533
Shag	SHAG.	85	400	15,887
Bittern	*BITTE*			*39*
Night Heron	NIGHE			3
Little Egret	LITEG	42	27	159
Grey Heron	**GREHE**	**166**	**217**	**8,808**
Spoonbill	*SPOON*			*2*
Mute Swan	**MUTSW**	**194**	**136**	**7,220**
Whooper Swan	*WHOSW*	*2*		*26*
Greylag Goose	*GREGO*	*71*	*52*	*1,114*
Snow Goose	SNOGO			8
Bar-headed Goose	BAHGO			9
Canada Goose	CANGO	137	163	5,074
Barnacle Goose	BARGO	1	1	74
Egyptian Goose	EGYGO	10	16	157
Shelduck	SHELD	7	6	378
Ruddy Shelduck	RUDSH		1	4
Mandarin	MANDA	41	43	812
Wigeon	WIGEO			187
Gadwall	GADWA	13	15	253
Teal	TEAL.		1	241
Mallard	MALLA	151	204	9,990
Pintail	*PINTA*			*23*
Garganey	*GARGA*			*11*
Shoveler	SHOVE	2	5	235
Red-crested Pochard	RECPO	6	8	26
Pochard	POCHA	22	17	283
Tufted Duck	TUFDU	47	33	1,443
Scaup	*SCAUP*			*1*
Eider	EIDER	9	317	10,677
Common Scoter	*COMSC*			*43*
Goldeneye	*GOLDE*	*8*	*12*	*275*
Red-breasted Merganser	REBME	1	1	292
Goosander	GOOSA	7	10	420
Ruddy Duck	RUDDU	1		185
Honey-buzzard	*HONBU*	*15*	*20*	*181*
Red Kite	*REDKI*	*246*	*320*	*1,166*
White-tailed Eagle	*WHTEA*	*5*	*5*	*15*
Marsh Harrier	*MARHA*	*14*	*23*	*159*
Hen Harrier	***HENHA***	***24***	***33***	***2,040***
Pallid Harrier	*PALHA*			*1*
Montagu's Harrier	*MONHA*		*2*	*47*
Goshawk	*GOSHA*	*96*	*104*	*1,539*
Sparrowhawk*	**SPARR**	**62**	**64**	**5,841**
Buzzard	**BUZZA**	**211**	**245**	**7,677**
Golden Eagle	*GOLEA*	*19*	*20*	*694*
Osprey	*OSPRE*	*9*	*14*	*130*
Kestrel	**KESTR**	**408**	**413**	**10,286**

Species	Code	2009	2010	TOTAL
Merlin*	***MERLI***	***59***	***54***	***4,087***
Hobby*	***HOBBY***	***73***	***62***	***1,278***
Peregrine*	***PEREG***	***99***	***119***	***3,648***
Red Grouse	REDGR	2	3	863
Ptarmigan	PTARM			132
Black Grouse	BLAGR		1	82
Capercaillie	*CAPER*		*1*	*92*
Red-legged Partridge	RELPA	3	7	503
Chukar	CHUKA			1
Grey Partridge	GREPA	1	3	872
Quail	*QUAIL*			*16*
Pheasant	PHEAS	23	30	2,372
Golden Pheasant	GOLPH			6
Lady Amherst's Pheasant	LAAPH			1
Water Rail	WATRA	1	1	111
Corncrake	*CORNC*			*32*
Moorhen	**MOORH**	**324**	**382**	**25,280**
Coot	COOT.	676	960	22,529
Oystercatcher	**OYSTE**	**295**	**289**	**18,762**
Black-winged Stilt	*BLWST*			*4*
Avocet	*AVOCE*	*40*	*12*	*981*
Stone-curlew	*STOCU*			*425*
Little Ringed Plover	*LIRPL*	*76*	*56*	*2,878*
Ringed Plover	**RINPL**	**132**	**142**	**11,181**
Kentish Plover	*KENPL*			*19*
Dotterel	*DOTTE*		*1*	*264*
Golden Plover	**GOLPL**	**6**	**6**	**941**
Lapwing	**LAPWI**	**321**	**301**	**28,314**
Temminck's Stint	*TEMST*			*1*
Purple Sandpiper	*PURSA*			*4*
Dunlin	DUNLI	2	1	577
Ruff	*RUFF.*			*4*
Snipe*	**SNIPE**	**5**	**8**	**1,858**
Woodcock	WOODC	8		688
Black-tailed Godwit	*BLTGO*		*1*	*43*
Whimbrel	*WHIMB*		*36*	*96*
Curlew*	**CURLE**	**24**	**35**	**3,166**
Redshank*	**REDSH**	**47**	**23**	**3,489**
Greenshank	*GRESH*		*3*	*201*
Wood Sandpiper	*WOOSA*			*2*
Common Sandpiper*	**COMSA**	**17**	**38**	**1,713**
Red-necked Phalarope	*RENPH*			*163*
Arctic Skua	ARCSK		1	375
Great Skua	GRESK	6	1	440
Little Gull	*LITGU*			*3*
Mediterranean Gull	*MEDGU*	*13*	*1*	*50*
Black-headed Gull	BLHGU	66	47	10,158
Common Gull	COMGU	152	121	6,086
Lesser Black-backed Gull	LBBGU	52	24	4,766
Herring Gull	HERGU	46	56	7,787
Great Black-backed Gull	GBBGU	3	3	3,494
Lesser Crested Tern	LECTE			5
Kittiwake	KITTI		535	19,011
Sandwich Tern	SANTE			1,814
Roseate Tern	*ROSTE*	*90*		*1,433*
Common Tern	COMTE	223	188	8,828
Arctic Tern	ARCTE	75	537	13,394
Little Tern	*LITTE*	*169*	*19*	*7,091*
Guillemot	GUILL		96	1,674
Razorbill	RAZOR		30	1,649

Species	Code	2009	2010	TOTAL
Black Guillemot	BLAGU	35	44	1,841
Puffin	PUFFI		20	1,205
Feral Pigeon	FERPI	33	23	2,507
Rock Dove	ROCDO	59	55	894
Stock Dove	**STODO**	**924**	**1,045**	**14,726**
Woodpigeon	WOODP	548	814	32,425
Collared Dove*	**COLDO**	**140**	**191**	**6,317**
Turtle Dove*	**TURDO**	**3**	**15**	**2,089**
Ring-necked Parakeet	RINPA	1	56	108
Cuckoo	CUCKO	21	15	2,258
Snowy Owl	*SNOOW*			*2*
Barn Owl	***BAROW***	***1,631***	***1,577***	***18,114***
Little Owl*	**LITOW**	**149**	**152**	**3,015**
Tawny Owl	**TAWOW**	**431**	**459**	**13,637**
Long-eared Owl*	LOEOW	9	16	866
Short-eared Owl*	SHEOW	6	5	428
Nightjar	**NIJAR**	**73**	**75**	**2,210**
Swift	SWIFT	105	142	3,382
Kingfisher	*KINGF*	*18*	*14*	*815*
Hoopoe	*HOOPO*			*1*
Wryneck	*WRYNE*			*23*
Green Woodpecker*	GREWO	13	20	552
Great Spotted Woodpecker*	**GRSWO**	**120**	**151**	**2,902**
Lesser Spotted Woodpecker*	LESWO	7	6	279
Woodlark*	***WOODL***	***101***	***102***	***2,152***
Skylark*	**SKYLA**	**53**	**47**	**8,812**
Sand Martin*	**SANMA**	**295**	**330**	**4,576**
Swallow	**SWALL**	**2,772**	**3,126**	**77,826**
House Martin	HOUMA	190	283	11,395
Tree Pipit*	**TREPI**	**48**	**36**	**2,154**
Meadow Pipit	**MEAPI**	**112**	**143**	**10,419**
Rock Pipit*	ROCPI	5	3	905
Yellow Wagtail*	**YELWA**	**12**	**14**	**1,111**
Grey Wagtail*	**GREWA**	**118**	**84**	**6,921**
Pied Wagtail	**PIEWA**	**205**	**172**	**11,552**
Dipper	**DIPPE**	**328**	**365**	**11,965**
Wren	**WREN.**	**206**	**222**	**17,847**
Dunnock	**DUNNO**	**258**	**321**	**32,779**
Robin	**ROBIN**	**373**	**441**	**24,393**
Nightingale	NIGAL	5	11	506
Bluethroat	*BLUTH*			*1*
Black Redstart	*BLARE*		*1*	*183*
Redstart*	**REDST**	**98**	**131**	**7,529**
Whinchat*	**WHINC**	**25**	**45**	**2,602**
Stonechat*	**STOCH**	**177**	**135**	**4,821**
Wheatear*	**WHEAT**	**40**	**40**	**4,241**
Ring Ouzel*	**RINOU**	**13**	**28**	**1,917**
Blackbird	**BLABI**	**1,266**	**1,412**	**141,639**
Fieldfare	*FIELD*			*7*
Song Thrush	**SONTH**	**488**	**480**	**78,368**
Redwing	*REDWI*			*127*
Mistle Thrush*	**MISTH**	**71**	**82**	**8,610**
Cetti's Warbler	*CETWA*	*5*	*2*	*42*
Grasshopper Warbler*	GRAWA	4	17	450
Savi's Warbler	*SAVWA*			*4*
Sedge Warbler*	**SEDWA**	**41**	**48**	**5,196**
Marsh Warbler	*MARWA*			*170*
Reed Warbler	**REEWA**	**351**	**639**	**19,055**
Dartford Warbler	*DARWA*	*25*	*12*	*575*
Lesser Whitethroat*	LESWH	15	15	1,016

Species	Code	2009	2010	TOTAL
Whitethroat*	**WHITE**	**102**	**161**	**6,972**
Garden Warbler*	**GARWA**	**40**	**58**	**2,435**
Blackcap*	**BLACA**	**98**	**142**	**4,411**
Wood Warbler*	**WOOWA**	**63**	**76**	**2,928**
Chiffchaff*	**CHIFF**	**154**	**196**	**4,385**
Willow Warbler*	**WILWA**	**167**	**188**	**14,363**
Goldcrest*	GOLDC	4	13	961
Firecrest	*FIREC*			*9*
Spotted Flycatcher	**SPOFL**	**114**	**129**	**12,442**
Pied Flycatcher	**PIEFL**	**940**	**852**	**48,379**
Bearded Tit	*BEATI*	*13*	*13*	*382*
Long-tailed Tit*	**LOTTI**	**206**	**320**	**7,440**
Marsh Tit*	**MARTI**	**54**	**62**	**1,889**
Willow Tit*	WILTI	15	28	617
Crested Tit	*CRETI*	*2*	*3*	*466*
Coal Tit	COATI	68	88	6,145
Blue Tit	**BLUTI**	**4,470**	**5,410**	**136,401**
Great Tit	**GRETI**	**4,047**	**4,536**	**96,848**
Nuthatch	**NUTHA**	**156**	**178**	**5,061**
Treecreeper*	**TREEC**	**40**	**69**	**2,898**
Short-toed Treecreeper	*SHTTR*			*1*
Golden Oriole	*GOLOR*			*42*
Red-backed Shrike	*REBSH*			*258*
Jay*	**JAY..**	**13**	**15**	**1,674**
Magpie*	**MAGPI**	**52**	**65**	**8,558**
Chough	*CHOUG*	*30*	*26*	*1,061*
Jackdaw	**JACKD**	**383**	**494**	**10,464**
Rook*	**ROOK.**	**175**	**132**	**15,810**
Carrion Crow*	**CARCR**	**132**	**163**	**8,708**
Hooded Crow	HOOCR	10	4	1,173
Raven	**RAVEN**	**94**	**109**	**5,201**
Starling	**STARL**	**238**	**267**	**18,544**
House Sparrow	**HOUSP**	**405**	**339**	**16,624**
Tree Sparrow	**TRESP**	**1,865**	**2,125**	**34,351**
Chaffinch	**CHAFF**	**283**	**326**	**25,473**
Brambling	*BRAMB*			*2*
Serin	*SERIN*			*1*
Greenfinch	**GREFI**	**125**	**137**	**15,748**
Goldfinch*	**GOLDF**	**86**	**125**	**3,972**
Siskin	SISKI		8	102
Linnet	**LINNE**	**201**	**258**	**29,826**
Twite*	TWITE	4	3	1,240
Lesser Redpoll*	**LESRE**	**3**	**9**	**1,384**
Parrot Crossbill	*PARCR*			*4*
Crossbill	*CROSS*		*12*	*181*
Common Rosefinch	*SCARO*			*1*
Bullfinch*	**BULLF**	**54**	**76**	**6,291**
Hawfinch	HAWFI	1	3	219
Snow Bunting	*SNOBU*			*202*
Yellowhammer*	**YELHA**	**78**	**81**	**8,507**
Cirl Bunting	*CIRBU*	*89*		*535*
Reed Bunting*	**REEBU**	**72**	**92**	**8,554**
Corn Bunting*	**CORBU**	**16**	**75**	**1,126**
OVERALL TOTAL		**32,749**	**38,726**	**1,535,035**

Species in bold are incorporated in the BTO's Integrated Population Monitoring Programme. We would be particularly pleased to receive more records for those species marked with * (fewer than 150 records per year on average over the last 10 years). Schedule 1 species are in italics (please note that this list relates to GB classification and varies for the Republic of Ireland, Northern Ireland and Isle of Man).

A big thanks from the Glasgow nest reference collection

Professor Mike Hansell from the University of Glasgow has for the past two seasons been asking BTO nest recorders to collect nests at the end of the breeding season. Here, he gives an update on how these appeals are helping grow the nest reference collection.

During the 1990s, when I was writing a book on the biology of bird nests, I went looking for museum collections of them in Europe and America. I did find three good ones, but was so concerned by the general lack of a valuable source that in 1998 I started one of my own. This is now 'The National Nest Reference Collection' of the Hunterian Museum of the University of Glasgow. The collection comprises only the nests of British breeding birds and it now contains more than 1,500 nests of over 90 species. For species whose nests can't be collected for practical reasons – they are too big or amount to just a scrape – we have a growing collection of nest images.

The collection's purpose is to allow us to look at the differences between nests of different species and also the variation in nest construction within a species. Doing all this requires a sample of several nests for every species catalogued – one of each isn't enough. For this reason, we have repeatedly turned to BTO nest recorders, who see more examples of the nests we want than anybody else. After my last appeal in 2009, contributions from NRS participants meant that I was able to add three new species to the museum catalogue: Dartford Warbler, Corn Bunting and Wheatear. In 2010, an appeal for thrush nests to BTO nest recorders from colleagues at the University of St Andrews provided enough examples for their study. And last year I added 10 Cirl Bunting nests to the Glasgow collection thanks to researchers at the RSPB Cirl Bunting Project.

As you can see, the collection has grown entirely on account of responses to appeals by volunteers, especially BTO nest recorders. If you have sent me any nests over the past two years, a big thank you for your contribution. And if you are interested in helping this season, please contact me at mike.hansell@glasgow.ac.uk.

I was recently asked how to distinguish between the nest of a Chiffchaff and Willow Warbler. The former is said to line the nest with more feathers than does the latter. I was able to turn to our collection because we have 16 nests for each species. About a third of the collected nests of both species had no feathers at all and of those that did there appeared to be no distinct difference between the two species. Is that the answer then? I'm sure it isn't. The nests of some species have been recorded as containing more feathers in the more northerly part of their range and Swallows will remove feathers from the nest as breeding progresses. Collections of old nests complement descriptions in books by covering a full range of within-species variation, helping to establish the extent of this variation or the reasons for it. But as we continue to build up the National Nest Reference Collection at Glasgow it will become more and more useful for answering such questions.

Mike's top six wanted nests by current total	
Rock Pipit	0
Nuthatch	1
Nightingale	1
Collared Dove	2
Swift	3
Grasshopper Warbler	3

Rounding up Ring Ouzel records

Vic Fairbrother of the North York Moors Ring Ouzel Study Group, explains how study groups and research programs can increase the value of their nest monitoring by submitting to the Nest Record Scheme.

The Ring Ouzel provides some of the most characteristic sights and sounds which make upland Britain such a special place but, for this open-nesting species, there has been a long-term decline in numbers throughout most of its UK range. In 1998, the Ring Ouzel Study Group was formed to co-ordinate monitoring and research into the causes of this species' decline and to identify possible means of conservation.

In March 2009, at the Ring Ouzel Study Group's annual meeting in Penrith, Dr Ian Burfield, European Research & Database Manager at BirdLife International, brought to our attention the state of the BTO Nest Record Scheme's data set for Ring Ouzel and its current inability to produce annual productivity estimates for the species. Since the NRS's inception, fewer than 100 Ring Ouzel nests had been monitored per annum for the Scheme and its grand total of nest records up to 2008 stood at only 1,844. Submissions had been declining in recent years too, with only six records received in 2007 and five in 2008.

Vic Fairbrother was able to submit 37 nest records to the BTO after looking through data already collected by North York Moors Study Group. Photo by Edmund Fellowes.

BTO's low intake of nest records was not for want of monitoring effort, because intensive studies of Ring Ouzel breeding biology were ongoing in five of 14 study areas in Britain, as designated by the Ring Ouzel Study Group. The North York Moors Study was one of these and Dr Ian Burfield's appeal prompted Ken Hutchinson and me to go back through the local study group's notebooks and see what we could contribute. Subsequently, we were able to top up the 2007 total by another four records and the 2008 total by nine records. We also submitted 37 new nest record cards in 2009 and 14 in 2010, all in all giving a small but significant boost to the Nest Record Scheme's data set for Ring Ouzel.

It was a simple task for us to transfer the data we were collecting anyway onto nest record cards for the BTO and we are very pleased to know that our efforts now have wider benefits for no more time spent in the field (the difficult bit of our research!). I wonder how many nest records for Ring Ouzel and other species could be contributed to the NRS by local study groups and research projects that are already collecting data but currently have no contact with the BTO?

Plundering the archives: from NRS to MSc

As well as using your nest records to generate productivity trends for the Wider Countryside Report (www.bto.org/birdtrends) and for special BTO studies (BTO research projects), we also make it available to other professional and volunteer researchers. Here, BTO ringer Andrew Moss tells us how he was able to use Nest Record Scheme data for his MSc dissertation.

On a rather grey Friday in December 2009, I sat in the Great Hall of Birmingham University alongside many other students waiting to receive my masters degree in ornithology. This was the culmination of three years' work as a part-time student, including a year spent on my dissertation, in which I looked at trends in Blue and Great Tit first-egg dates and factors that might affect them. As a part-time student in full-time employment, I had limited time available for my dissertation and it was not feasible to design a project that involved collecting my own data in the field. Instead, I decided to use data already collected for the BTO's Nest Record Scheme. My study used records collected at Pitsford Water Nature Reserve, Northampton, for which the BTO had a continuous data set extending back to 1983. My ringing trainer, Dave Francis, had collected the lion's share of these records and recommended I make use of them.

The Nest Record Scheme card archive holds over 1.5 million nest records, approximately half of which have now been computerised.

Andrew Moss ringing in Le Havre, France, in 2009.

Because the Pitsford records extended way back into the 1980s, not all of them had been input onto the BTO's central Nest Record Scheme database. The BTO was able to provide all records from more recent years in electronic form, together with a sample from each of the earlier years, but the remainder of the records were in the nest record card archive at BTO HQ. So, in early 2009, I visited the the Nunnery in Thetford to borrow and input the cards I required. The NRS Organiser, Carl Barimore, took me to the archive, a huge room containing row after row of filing cabinets, all filled with cards dating back to the Scheme's inception in 1939. It was inspiring to think that so many dedicated nest recorders over the years had contributed to this collection of hundreds of thousands of records. Some of the species names on the cabinets caught my eye and it was tempting to while away the time perusing these instead but I resisted and turned to the task at hand. I'd brought my daughter with me and we spent the entire day searching through thousands of Blue Tit and Great Tit cards by year, taking out those relating to Pitsford Water.

Having brought home the sample of cards I wanted, I then had to examine each in turn and attempt to back-calculate the first-egg date from the contents recorded on different visit dates. With my raw data prepared I could then finally move on to analysing it. I found that at Pitsford, Blue Tits were laying on average seven days earlier in 2008 than in 1983 while for Great Tits the average first egg date had advanced by ten days. The next part of my dissertation was to explore what might be driving this change.

I obtained data for temperature, rainfall and date of bud burst for oak, ash and sycamore (three tree species that are common on the Reserve) over the study period. I also obtained data on the numbers of moths caught on the Reserve. The dates of bud burst were obtained from the Woodland Trust's website. More statistical work followed, while I looked for relationships between different factors and first egg date. Eventually I concluded that temperature had some effect on first egg dates but that the most important factor appeared to be date of bud burst. Once leaves start to appear on trees each spring, they are soon followed by the various insect larvae that are the main food source for Blue Tit and Great Tit families. Thus, for birds that rely heavily on sight it makes sense that a visual cue should trigger them to lay so that subsequent hatching of young is synchronised with the peak abundance of leaf-eating caterpillars. While oak bud burst appeared to be having the strongest effect on first-egg date for both species, it was interesting to note that sycamore – a recently introduced species and sometimes considered a 'weed' – appeared to be having an effect too.

In the end the dissertation was completed and my time as a part-time student came to an end with the collection of my MSc in late 2009. But my 'armchair study' would not have been possible without the availability of raw data from organisations like the BTO and the Woodland Trust. As the BTO has limited resources available for furnishing data requests, I had to complete an application form stating exactly what I needed. The application process was very simple and quick however, and in my case, because the request was relatively straightforward and the data were to be used for a non-commercial purpose, I was not charged a fee.

At the same time as I was extracting the data I needed from the nest record cards, I volunteered to input the records for loading into the Nest Record Scheme's central database. This means the records I borrowed are now computerised and more easily available to other researchers. The BTO is working hard with volunteer data inputters to get more of its older nest records computerised so, if you have a few hours to spare, why not contact the BTO and become a volunteer inputter? I know that Carl and the team at the Nunnery would be very grateful for your help.

Searching for Stonechats on Suffolk heaths

On their ringing and nest recording patch in Suffolk, Richard Tomlinson and Graham Button have really got to grips with monitoring various species in heathland habitat. Here they share some of their tips on finding Stonechat nests.

For the past few years we have been monitoring heathland birds on the southern Suffolk sandlings. The site's habitat includes managed heath with large areas of heather, bracken with scattered silver birch, and Forestry Commission plantations with Scots and Corsican Pine and patches of mixed broadleaf. The trees at Tunstall and Rendlesham Forests were planted after the great storm of October 1987, when much of the mature forest was flattened. Some of these compartments are now being felled, creating new scrub habitat.

Our primary study species in this large mixture of habitats are Woodlark, Dartford Warbler, Stonechat, Hobby, Crossbill and Goshawk, but many other breeding species are also present, such as Nightingale, Buzzard, Linnet, Redstart, Turtle Dove, Tree Pipit and Yellowhammer. In this account of our activities, I'll be focusing on the nest finding techniques for Stonechat.

One interesting thing we have noted about Stonechats on our study site is that they exhibit a very close association with Dartford Warbler throughout the breeding season; Dartford Warblers continually follow Stonechats around their breeding territories. This 'following' behaviour is well documented and has been described as a form of parasitism. However, where adjacent pairs of the two species have been feeding young at the same time, we have often seen them appear to exchange food. Because of the species' different foraging niches, birds might also individually benefit from associating. For example, the Dartford Warbler might flush moths when foraging in deeper cover and the Stonechat might push items of food from more open ground. For us, there is certainly a disadvantage to this close association: the two species have some similar calls that can easily be confused if you are not used to them.

A familiar sight early in the season, but while the female is incubating, the male Stonechat keeps a low profile, only making himself known when alarming or when the female leaves the nest to feed. Photo by Al Downie.

Nest finding tips

Stonechat nests can be very well hidden under heather or bracken. Sometimes only the mossy extension of the nest rim, which acts as a landing pad, is visible, even on close inspection. A Stonechat nest usually has a moss base, a cup made of grass or bracken and a lining of fine roots, animal fur and feathers.

The incubating Stonechat female tends to brood for periods of 45–65 minutes, sitting tight unless called from the nest by the male. While the female is on, the male will sit silently 30–50 m from the nest, hidden low in heather or on a clump of gorse. Only upon the close approach of an intruder will he start his 'chack' calls.

When the hen leaves the nest to feed, the male will join her and present himself in a very bold manner, as if looking out for the foraging female. They will feed in this way for twenty minutes or so, continually moving away from the nest via a series of short flights, to a distance of about 150 m. Stonechats tend to forage on edges of open ground, such as short grass bordering a patch of heather.

At the end of a feeding bout, the female will often perch atop a heather clump or piece of bracken and preen herself. She will then make one long flight back towards the nest site, with the male in tow watching her. Many times, at this point, we have attempted to follow the female back only to have the male cross our field of view and put us off. If that happens, there is nothing for it but to wait for another feeding session. But if the hen is kept in view then, after landing, she may be seen to get 'twitchy', which is a sure sign that she is about to return to the nest itself. What is usually seen next is a short flight, a few tail flicks, and an angled plunge into the vegetation. If the female has not reappeared after five minutes, she will be back on the nest. Later, she can be flushed with a gentle tap around the spot with a stick.

When the female is returning to the nest, the behaviour of the male is worth observing because he tends to follow her and watch her back on. Once he is satisfied that she is settled, the male will move out of the nest area and take up his low perch (see above), perhaps also feeding and preening himself.

When feeding chicks, both the male and female Stonechat will forage for food further from the nest site than during incubation, and they will make a very distinct 'wheet chack' call when in the vicinity of the nest with food.

A typical Stonechat nest, with the moss base and fur and feather lining visible. Photo by David Gregson.

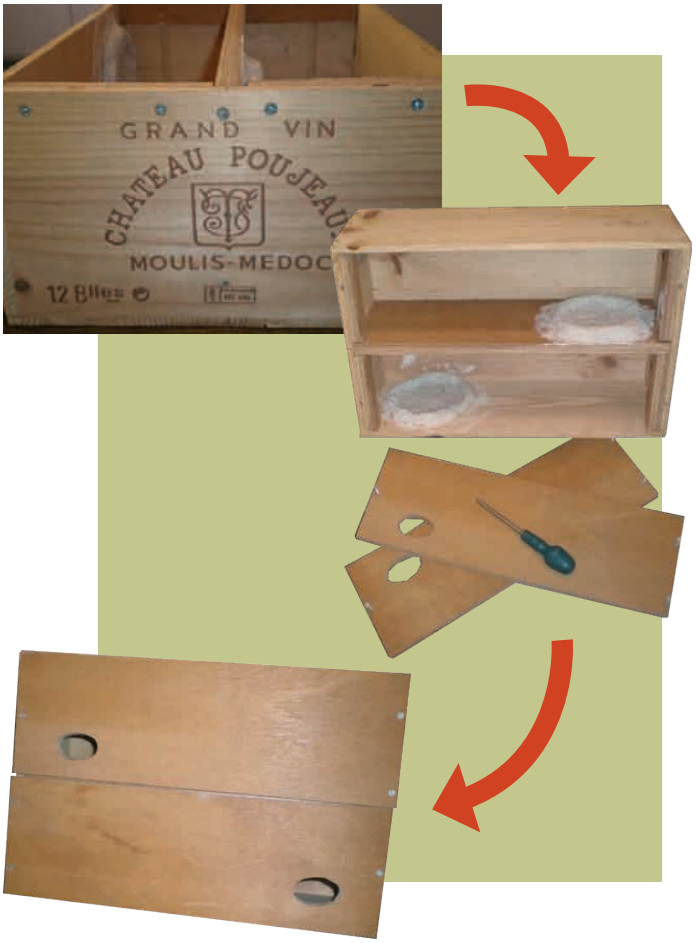
Number of Stonechat nest records submitted to the BTO since 2000

2005	170
2006	112
2007	190
2008	166
2009	177
2010	135

'Crate' a Swift box

Just a bit of fun really, but I recently got hold of a used wooden claret box from Oddbins (free!) and converted it to two nesting chambers for Swifts. It was a very easy job; the only additional bits I used were a piece of recycled plywood from a skip, a few screws and some glue. Inside the chambers, I made some artificial nest bases from papier mâché. I then treated the exterior of the box with a water-based preservative before mounting it under some eaves. If the box were exposed, I would roof it with a piece of roofing felt to prevent rain ingress.

Edward Mayer, swift-conservation.org



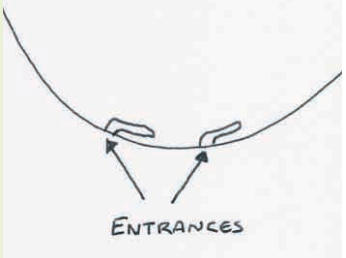
Repeat Ringed Plover

Whilst checking the nests in the Shorebird Sanctuary at Gibraltar Point National Nature Reserve on 22 May 2010, a Ringed Plover ran out from under some overhanging marram grass. On investigating, we found a nest containing four eggs about half-a-metre in along a tunnel parallel to the dune front. Unfortunately the nest was predated by the following day; tracks in the area suggested a corvid was responsible and Carrion Crows had been seen in the vicinity at the time. However, on 11 June another Ringed Plover nest was located some 4 metres along, under the overhang and again parallel to the edge of the dune. It contained a full clutch of four eggs and this time the nest was successful, with the eggs hatching on 29 June. I told Kevin Wilson, the reserve warden, of the observation and he informed me that he had not recorded this activity before in his 20 years of monitoring nests at Gibraltar Point.

Circumstantially, the same pair of Ringed Plovers were involved in both nesting attempts. Assuming an incubation time of 23–26 days and that the eggs were laid on consecutive days, the earliest possible first-egg date for the second nest is 28 May, meaning the pair started their replacement 5–6 days after the first failure.

Tim Bagworth, Gibraltar Point Field Centre

Top: The entrance, underneath a sand dune, to the first Ringed Plover nest. *Inset:* A detail from Tim's notebook, showing the nest cavities adjacent to one another. *Bottom:* The first clutch of Ringed Plover eggs, sitting in a scrape within the nest cavity. Photos by Tim Bagworth.



Nesting for Nightjar with BRG

Nighjar is a species relatively few nest recorders are familiar with. About a dozen participants regularly submit two or three Nighjar nest records but, since starting their study, Birklands Ringing Group have been monitoring over 30 nests per year. Andrew Lowe shares the group's secrets of success.

In recent years, Birklands Ringing Group has focused its studies on the local Nightjar population and, in particular, on monitoring their productivity via nest recording. In so doing, we have developed some good techniques for a species which has a reputation for being difficult and time consuming to monitor. So far we have found 500 Nightjar nests – 45 per year from a population of roughly 30 pairs.

Nightjars return to this area of Nottinghamshire in mid May, males roosting in their chosen territories until joined by the females. Pairs then roost together on their territories for a day or two, after which the females are left alone until egg-laying begins. At this early stage in the season, if flushed, a female can desert her territory before laying or even abandon part of a clutch, laying the second of her two eggs up to 100 m away. For this reason, even though clutches have been recorded as early as the 17 May, we do not begin seriously searching for nests until the first or second week in June.

We begin by staking out suitable areas of heath, clearfell or restocked conifer plantations. A single observer will visit a potential site 20 minutes before dusk, standing in a prominent position on a tree stump or other vantage point. We have discovered that this is actually better than trying to conceal yourself, which only restricts your view and causes the birds to be wary of your skulking. The male will then spend the evening hovering or perched above you in a tree instead of displaying.

Watching the male

The male Nightjar is the key to locating the nest site. When he leaves his daytime roost he will give a 'dweep' call before alighting on his favoured song-post to 'churr'. He needs to be watched closely at this point, so if he appears a distance away the observer must quickly move closer, an obvious approach again being better than skulking. By following a nearby footpath, one can avoid both disturbing the displaying bird and accidentally stepping on eggs or young. The bird will churr for about five minutes, pausing intermittently to listen for replies. If there are no distractions, he will take flight; this is the crucial time to watch him.

Sometimes the male will fly high across the site to a second song-post, from where he will resume churring. Then he will drop from the song-post with slow wing beats – or wings raised over his back – to less than a metre above the vegetation, flapping in a circle and returning with strong wing-beats to his song-post. In doing so he will encircle the area where both the female and the nest site may be found.

At other times, the male will drop from the song-post and circle down onto the nest site itself to brood while the female goes off to feed. It is easy to miss this change-over in low light because the female immediately leaves in the same direction the male arrives, so the two can appear to be one bird continuing on its course. Occasionally, the male may drop close to the sitting female and display by opening and closing his wings over his back – looking like a large butterfly – and uttering a soft but easily audible bubbling call. This display is more often seen away from the nest site, however.

Flushing the adults

Upon observing either behaviour from the male Nightjar, we will leave the site and come back a day or two later in good light to search for the sitting female. A good tip is to look out for hatched egg shells; these are not removed from the nest scrape and so can give it away. Normally, the female will flush when the observer is 1–2 m from the nest but some birds will sit tight to a few centimetres or even refuse to flush altogether. However, in mature conifer plantations, the female may flush at 5 metres. Males with young will also flush early.

Locating the nest by flushing an adult can also work where the type of vegetation or stage of tree growth makes it difficult to see where the male drops. In such cases, birds can be flushed by carefully and systematically walking up and down the whole territory.

If you are already close to the nest

If the position the observer takes up to observe the male's display happens to be very close to the nest site, the male's behaviour will be different. His churring may be hesitant and punctuated by short flights from his song-post. After a while, the male may fly directly at the observer and quickly drop towards him with wings raised and body moving erratically from side-to-side, before circling and returning to his song-post. Such behaviour means that the female is almost certainly sitting close by and could imminently flush straight off the nest, which can be heard if not seen. If the female does flush, the male will end his churr with a characteristic 'dreerr-dreerrr-dreerrrdreerrrr', sounding like the winding down of a clockwork toy. Excited flight calls and wing clapping may then follow. The female often returns to the area of the nest, flying slowly to look at the

Egg shells are not removed from the nest scrape and so can give away recently hatched young. Photo by Christopher Rowe.

Chicks will sometimes move several metres, so don't immediately assume the nest has failed if you find the scrape empty. Photo by Kevan Brett.

Finding the chicks

It is amazing the distance a female will move her chicks from the nest scrape. Sometimes this happens because of disturbance, but other times there is no apparent reason. Recently we watched from a hide as a female returned to her single day-old chick. Landing over a metre away, she called softly to beckon the chick and by day eight both were over 10 m away from the original nest scrape. The maximum distance recorded was about 15 m, but most of the time chicks are found within a few centimetres of the nest scrape. For this reason, when returning to ring pulli and finding an empty scrape, we won't conclude the nest has failed without first checking for signs of failure such as plucked feathers and also walking out from the nest scrape in concentric circles.

observer and uttering a croaking alarm call. If the nest has not been found by the time she returns, it is best to leave and try again another day.

Identifying unpaired males

We have found that up to 20% of displaying males can be unpaired early in the season. These birds will also display, approaching the observer closely, hovering and dropping to the ground in apparently suitable nest sites. It is important to distinguish these unpaired males, or else hours can be wasted investigating their false visits. Unpaired males tend to begin churring earlier in the evening than paired birds. The churring is clear and constant, can be up to 30 minutes long, with pauses only to listen for answering males or flight calls, and can continue well after dark. The churr of a paired male, by contrast, is shorter in length – five to 10 minutes – begins later in the evening and ends with the distinctive winding-down call described earlier, which is uttered when the female is on the wing. A paired male will, however, start churring earlier if disturbed, if the observer is close to the sitting female, or if the male is answering another within its territory. As the season progresses, the churr of the paired male becomes shorter, deeper and quieter. Sometimes it is less than a couple of minutes in length and can be easy to miss with background noise. Paired males begin churring more intensely again in late July, when most successful pairs are about to lay their second clutch.

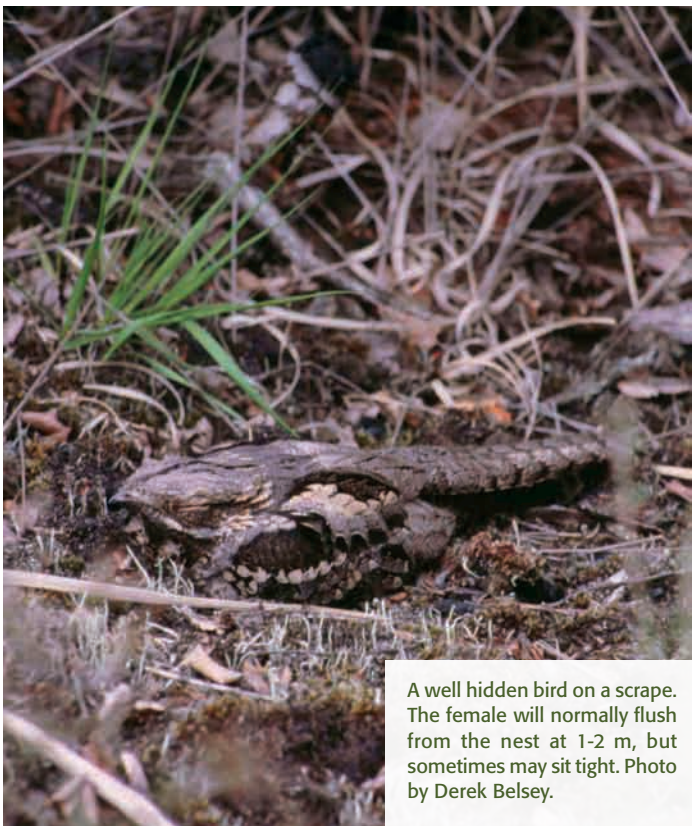
Second clutches

Second or replacement clutches are often 70–80 m from the first. Distances greater than 400 m have been recorded but these are usually on sites that suffer a high level of disturbance, *eg* bracken rolling. If, when looking earlier in the season for the first nest, the observer flushes the male, the spot is noted but not revisited, so as not to disturb the bird again. Later in the season, several days after either the male has taken over parental responsibility for the first brood of chicks (usually after the chicks are 14 days old) or else the first nest has failed (females relay after about eight days), we check the spot from where the male was flushed. If it has remained undisturbed, the female will often be sitting close by on her second clutch of eggs.

The next season

Each year, we check the previous year's nest sites in the order they were used because many Nightjar pairs will return to them even if the female is a different bird or if the nest failed previously.

These notes come from years of observations made in Birklands Ringing Group study areas, which may be different to your own sites. Observe your birds closely, as 10 minutes of watching the male's behaviour can save many man-hours walking to and fro across featureless heaths or clearfells. Please don't hesitate to get in touch if you have any queries or wish to come out for an evening's nightjaring with Birklands Ringing Group.



A well hidden bird on a scrape. The female will normally flush from the nest at 1-2 m, but sometimes may sit tight. Photo by Derek Belsey.

Species protected under the Wildlife and Countryside Act 1981

The species listed in italics in the tables on pages 8 and 9 are specially protected under Schedule 1 of the Wildlife and Countryside Act 1981, as amended by the Environmental Protection Act 1990 (list also available at www.bto.org/survey/schedule1.htm). You must obtain a Schedule 1 licence to visit the nests of these species and any such nests that are found by accident should not be visited a second time without a licence. NO SCHEDULE 1 NEST MAY BE VISITED WITHOUT PRIOR APPROVAL.

To obtain a Schedule 1 Licence for nest recording and/or bird ringing on behalf of the BTO, please contact the BTO Licensing & Sales Manager, Jez Blackburn (jez.blackburn@bto.org), for an application form. A first-time licence application must be accompanied by two references from respected ornithologists (*eg* County Recorder, BTO Regional Rep, Bird Club Chairman, BTO Ringer etc).

Licences are issued annually and must be renewed each season by submitting a renewal application and a Schedule 1 Report of monitoring activities the previous season. No Schedule 1 Licence can be renewed without the receipt of a report on the previous season. Please note that applications submitted after February may take longer to process owing to the volume of applications received.

To obtain a Schedule 1 Licence for approaching protected nests for other purposes, such as nest photography or consultancy work, please contact the relevant Government body (*eg* Natural England).

Kingfishers are specially protected at the nest under Schedule 1 of the Wildlife and Countryside Act 1981. A licence is required to monitor their nests. Photo by John Bowers.

British Trust for Ornithology
The Nunnery, Thetford, Norfolk IP24 2PU
Tel: (01842) 750050, Fax: (01842) 750030
Email: info@bto.org
Web site: www.bto.org
Registered Charity No 216652 (England & Wales)
No SC039193 (Scotland)

Nest Record News

Nest Record News is the annual newsletter for supporters of the Nest Record Scheme (NRS), which is part of the British Trust for Ornithology's (BTO) Integrated Population Monitoring Programme.

The views expressed by the contributors to this newsletter are not necessarily those of the Editor, the Council of the BTO or its Committees.

Nest Record News is written by you, so please send your ideas and contributions by 31 January to: *Carl Barimore, NRS Organiser, Nest Record Scheme, BTO, The Nunnery, Thetford, Norfolk IP24 2PU*
Tel: *(01842) 750050*
Fax: *(01842) 750030*
Email: *nrs@bto.org*

Desk-top publishing by Carl Barimore and Jane Waters. Printed by Page Bros, Norwich. Thanks to the proof readers for all their efforts!

The Nest Record Scheme is funded by a partnership of the British Trust for Ornithology and the Joint Nature Conservation Committee (on behalf of Natural England, Scottish Natural Heritage, the Countryside Council for Wales, and the Council for Nature Conservation and the Countryside).

The British Trust for Ornithology is a charity dedicated to researching birds found in the UK. For membership details please contact Chris Morley at info@bto.org

Useful addresses

BTO website: www.bto.org
NRS webpages: www.bto.org/nrs
IPMR webpage: www.bto.org/software/ipmr
Wider Countryside Report: www.bto.org/birdtrends
Online NRS forum: http://groups.yahoo.com/group/nrsforum

Useful emails

General NRS enquiries: nrs@bto.org
Submission of IPMR data files: nrs.data@bto.org

The NRS team

Carl Barimore, NRS Organiser
The main point of contact for nest recorders, provides IPMR support and is the person to whom your records should be sent.

David Glue, Research Ecologist
Provides advice based on a long involvement with the Scheme.

Dr Dave Leech, Head of Nest Record Scheme
Oversees the running of the NRS and undertakes research using the data collected.

Debbie Nicholls, NRS Secretary
Provides secretarial support to the Scheme, including processing records and sending out materials.