Nest Record *News*

A newsletter for supporters of the NEST RECORD SCHEME, forming part of the BTO's Integrated Population Monitoring programme funded by a partnership of the British Trust for Ornithology and the Joint Nature Conservation Committee (on behalf of English Nature, Scottish Natural Heritage, the Countryside Council for Wales, and the Environment & Heritage Service in Northern Ireland).

April 2004 Number 20

Record numbers of IPMR nest records!

Welcome to the early edition of *Nest Record News*! 2003 has turned out to be a 'bumper' season both for the number of nest records received (both cards and IPMR), and the number of new recorders registering. Considerable publicity has been generated for the Nest Record Scheme during the year and a very successful NRS Workshop was held at the BTO conference at Swanwick (see the report on page 6).

The total number of nest records received for 2003 is 27,104 of 164 species. A grand total of 1,287,756 have been received since the Scheme started in 1939.

Garden Warbler. Derek Belsey

We have been absolutely delighted with the dramatic increase in the use of IPMR, the home inputting computer program developed and continuously enhanced by BTO member Mark Cubitt. 44% of the 2003 nest records were submitted electronically. Once mastered, the program saves time, both for recorders and the Nest Records Unit alike. We are very grateful to Mark and the rest of the IPMR Advisors team for helping new users. Many recorders are now taking advantage of using the facility to do simple analyses of their own data.

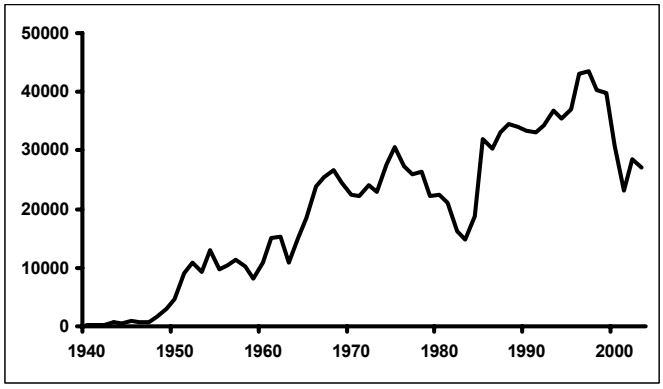
We've just received our 100,000th Blue Tit nest record – see page 11!!!

Ian Spence's new 'IPMR for Nest Recording' guide has assisted greatly in this, particularly the 'screenshots' that show precisely what you should see at each stage of data entry. Copies of the guide can be downloaded from a number of sources, including the NRS Yahoo! Forum. A copy is also included on all new IPMR discs. Thank you to Ian for producing such a useful manual, in addition to his many years of nest recording!

Once again a HUGE THANKS to all our nest recorders. Without your enthusiasm and hard work, the BTO would not be able to provide such a vital barometer to monitor the health of the UK's breeding birds.

Peter Beaven
Nest Records Officer

Number of nest records received 1939 to 2003



The number of records submitted annually as of 31/3/04. For 'Open' versus 'Cavity' nesting species see page 5.

RETURNING YOUR 2004 NEST RECORDS

To ensure that your nest records are included in the annual analyses, please try to return your records to us before Christmas 2004 or by **1 FEBRUARY 2005** at the latest. Thank you.

Properly addressed

No, we are not talking about what BTO staff wish to be called, but it is a polite reminder to ask you to include the words 'Nest Records' on your envelope! That way it doesn't need to be opened until it reaches the right desk at the Nunnery. It also saves the Post Room team time first thing in the morning as they deal with the huge mountain of BTO post. Thank you.

Who are you?

Following our appeal in the last issue of *Nest Record News* most recorders have included their contact details with their cards.

We still received a few anonymous card batches during the year. Unfortunately we have no way of acknowledging these records, nor sending out replacement materials.

Please remember to include a Summary Form with your records, as this means that we can process your records more efficiently than if we have to write one out for you and count up your cards. (This does not apply to IPMR records – we can calculate your totals from your submission file).

All 'active' nests

Please note that we are not just interested in successful nests. It is vital to send in records for all nests including those that fail so that we can calculate nest failure rates accurately.

We welcome all records for any 'active' nests, particularly those with more than one visit. However, we are unable to use records for nests that are abandoned or destroyed before the first visit.

Blackcap. L Baxter

Just one more visit?

We've said this before but we hope you don't mind us mentioning it again!

'Multiple visit' records provide us with so much more information than a single date. If the nest is visited more than once then we are able to calculate the daily failure rates of eggs and/or young.

We are aware that many recorders monitor nests in isolated locations, so returning a second time to a nest may not be easy. Perhaps you might know someone to carry out an extra check on your behalf (an enthusiastic 'trainee' ringer, or a local person, perhaps?) to make your cards even more valuable. Thank you.

Handwriting

Most nest record cards (with the exception of Schedule 1 species) are input out-of-house. To reduce inputting errors, please ensure that your handwriting is as clear as possible.

Which version of IPMR are you using?

The current version of IPMR is 2.1.75 (as of 31 March 2004). The program is constantly being developed so to stay up to date, please subscribe to the IPMR Forum (send an email to btoipmr-subscribe@yahoogroups.com) to be kept informed about upgrades. Alternatively visit the BTO website regularly where you can download the latest version.

Late records

Although the usual deadline for nest records is 1 February, we still receive records after this date. Late cards may not be included in the analyses but are added to the NRS totals table in the next edition of *Nest Record News.*

Some other important totals

Card/IPMR batches received for 2003: 446
'Starter Packs sent out (2003): 237
Number of 'active' nest recorders (as of 31/03/04): 757

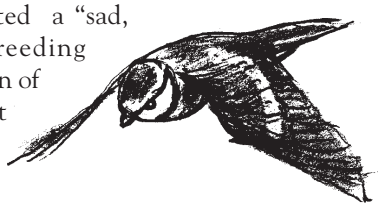
Nest Record News is sent free to all participants in the BTO Nest Record Scheme. To request further copies or obtain a 'Starter Pack', please contact the Nest Records Officer (address on back page). Articles for future issues are always welcomed!

Contents

Specific studies 2003

What did recorders think about the breeding season in 2003? Many of you wrote to us to tell us about the mixed fortunes of your study populations over the last 12 months.

Tits


A J Dalton

David Counsell's reported a "sad, even catastrophic breeding season" for the population of Blue and Great Tits that he monitors in Kent, with mean number of chicks fledged per brood as low as 1.2 and 1.1 respectively. This reflected the situation across much of Britain.

Wet and humid weather at the start of the season appeared to accelerate leaf growth and thus caterpillar development, causing a lack of synchrony between the energy requirements of nesting birds and the amount of food available to them, as reported from Wytham Woods. Many recorders, including Nigel Judson (Leicestershire), Bryan Thorne of the English Nature Devon team, Ivan Proctor (Gloucestershire) and Michael Holmes (Northumbria RG) noted that occupancy rates of tit species were relatively high at the beginning of the season. Howver, below average clutch sizes were recorded by Colin Lythgoe (Cheshire), Alan Old (Cumbria) and Nigel Judson (Leicestershire).

The situation was not helped by heavy rainfall in the third week of May resulting in high levels of clutch desertion, as noted by Heather Woodland (Devon), and increased chick mortality, leading to small brood sizes, for both Blue and Great Tits at many sites. It certainly was grim up North, with Phil May (Stirling) and Alan Old (Cumbria) both reporting a reduction in fledgling numbers, and populations did not fare much better further south. At Colin Lythgoe's site (Cheshire), Great Tits fledged an average of 2.9 young per brood compared with a mean of 7.3 during the previous season and Blue Tits experienced a drop in the mean number of fledglings from 8.7 in 2002 to just 2.5 in 2003. Ivan Proctor (Gloucestershire) observed a similar fall in brood sizes, with the number of fledglings per nest reduced to 2.5 for both species. Bryan Thorne (Devon) reported that 2003 was the worst year in terms of Great Tit productivity since 1999, although Blue Tits seemed to be less severely affected by the weather. The same could not be said of the Blue Tits at WWT (Dyfed) in Llanelli, where Tony Jenkins informs us that nearly half of all nests failed completely and fledging success fell to just 14%.

However, it wasn't all bad news and tit populations in some parts of the country appeared to escape relatively unscathed. Nestbox populations monitored by Jan Pritchard and Glynis Fenn (both in Kent), Gordon Vaughan (Devon), Dave Reed (mid-Wales) and by Ken Capps (South Yorkshire) all experienced 'normal' seasons with no serious declines in productivity. Sara Brown (North Yorkshire) observed that productivity was extremely variable even at a very local scale, with pairs in some woods fledging large broods, whilst others in nearby woods failed at the egg/small young stage.

Pied Flycatchers

Success was also mixed for Pied Flycatchers. Dave Reed (mid-Wales) and Michael Holmes (Northumbria) noted 'average' occupancy rates in 2003, whilst both David Morgan (Devon) and Tony Ormond (Merseyside) reported increased box occupancy. Elsewhere the picture was less rosy, however, with major declines in occupancy observed by Tony Crease in North Yorkshire (90% decline), Kenneth Hindmarch in Cumbria (75% decline) and Dave Fulton in Shropshire (50% decline). Tony Jenkins (Llanelli) and John Holland (Hertfordshire) also reported a drop in the number of breeding pairs.

The Pied Flycatcher breeding season appeared to be very extended in 2003, with unusually early nesting attempts reported by Tony Jenkins (Llanelli) and Alan Old (Cumbria) including a bird observed by Tony Ormond (Merseyside) laying on the 11 June. However, even in areas where occupancy rates were relatively high, heavy rain caused serious increases in chick mortality, particularly for early broods, as noted by David Morgan and Bryan Thorne (both in Devon), Dave Reed (mid-Wales) and Dave Fulton (Shropshire) where 80% of offspring died due to starvation. Exceptions were Tony Ormond's (Merseyside) site where productivity actually increased and Alan Old's (Cumbria) site where the rain fell during the incubation period, reducing losses.

Other species

Occupancy rates and the number of broods per pair both declined in Tony Jenkins' (Llanelli) House Sparrow population, and occupancy rates and brood sizes also fell in the Tree Sparrow population monitored by David Turner (North Yorkshire). John Clarke's ongoing Spotted Flycatcher project in Worcestershire recorded a worrying decline in the number of breeding pairs in 2003. David Oliver near Fife observed a dramatic decline of over 70% in a local Swallow population.

Overall 2003 seems to have been a pretty poor season, thanks mainly to the good old British weather. However, nest predators also played their part. Dave Reed (mid-Wales) and Ken Capps (South Yorkshire) both reported widespread woodpecker damage to boxes. John Holland in Hertfordshire estimated that mice destroyed almost 90% of nests in boxes at his study site.

Dave Leech

Occupancy of the Sparrow 'terrace' at WWT Llanelli was down in 2003. Only sixteen of the compartments were used (compared with twenty in 2002). Photo: Tony Jenkins

Nest finding

Most nest recorders will have experienced difficulty in finding the nests of certain species at some time or other, but patience and experience usually overcomes this. We hope that these articles, written by two major contributors to the NRS, will assist and inspire other recorders.

Nest finding is not an exact science!

Developing knowledge of the favoured habitat and picking up the alarm calls for the species plays a large part. For example, a hen Tree Pipit might be sometimes heard when there is no male singing. She may then be seen working her way out along a branch and then dropping straight down with a tendency to parachute like the male in song flight. This is a sure sign that she is going to the nest, but then the problems often start! She may run for up to 30 metres and then sit very tight, or even run off again. The answer is to give her about 50 minutes and watch for the bird coming off to feed. If all is quiet she will almost certainly come directly off the nest, and if there are eggs she may make a 'zeep' call as she does so. If there are young, both adults may make the 'peep' alarm when going to the nest with food, but there will be much less running to the nest, and possibly more running from it. The nest is most likely to be hidden under a tuft of grass or in the bracken that this species appears to love so much.

Another bird that can cause problems for nest recorders (as well as for those counting numbers) is Nightjar. Spending time out at night can be confusing and is basically a waste of time as the males move around a great deal and will at times be a long way from the nest. They do however spend the day quite near the nest. The first calls and wing clapping of the evening (usually from about 9.30 onwards) will be near to where the nest is. If the site is in bracken or heather with birch trees, the most likely nesting place will be under a thick and bushy birch about 3 metres high where there is likely to be a bare patch. The sitting bird may be difficult to spot but what may help, especially if in conifers, is the presence of droppings. These are brown and white and about the size of a pea. If these are seen, then the nest should not be far away. A pile of droppings on a piece of wood will be one of the males' resting places.

All larks tend to run from the nest before flying. Skylark will (if the observer is not too close) come back low and fast and hover for a moment directly over the nest before dropping down.

Nests of species like Nightingale and Blackcap are usually found in brambles and nettles under a tree or bush, whilst others like Linnet and Whitethroat can be more in the open. All of these may be found by watching, listening and then tapping likely spots with a stick. Flushing a bird from a nest in this way does not cause any great distress although excessive disturbance of the nest area may cause desertion. Wearing dark clothing and keeping quiet is essential, and with some species, sitting or even lying down can help.

John Little

D A Thelwell

Nest finding on the Web

A number of (mainly) American birding websites give tips on finding nests for nest recording. Use the Google search engine www.google.com and insert "nest finding" (using the inverted commas) to find them. Happy surfing!

Open Nest Recording

There are no hard and fast rules to finding nests - it's all down to experience. I have been recording for 30 years and in my opinion the two most important factors are HABITAT and BEHAVIOUR. Know your species and its mating cycle. With the likes of Blackbird and Song Thrush keep an eye out for them picking up nesting material, and if they are on the same post or tree, the male will always be close to the nest site.

When migrants arrive, listen for the males singing to establish a nest site to attract a female. They will attract a mate and start building a nest within 2-3 weeks of arrival, and this is probably the best opportunity you will have to find the nest site. Keep a low profile and watch if they go to the same area two or three times with building material. Once you've established where you think the nest might be, move in and try to find it. A stick is very useful for parting nettles or brambles. If you can't find the nest, move back to your original position and repeat the procedure.

Once egg laying is completed and incubation is in full swing, the males will keep a watchful eye over the nest site by perching on telegraph wires or a fence post. They will become agitated if you or a potential predator gets close to the nest site.

If you have not managed to find a nest at the building stage or at egg laying, do not be too disappointed, because when both adults are feeding the young, this is your best chance to secure the nest site. The adults will visit the nest with food on a regular basis. Once again, keep a low profile, watch where they go, and after 2-3 visits to the same area, move in quietly, and BINGO! you've found the nest.

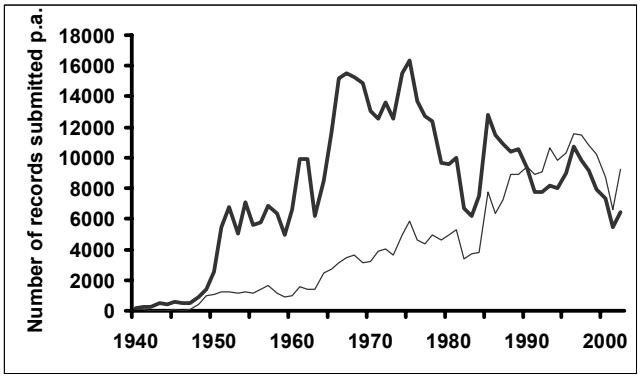
John E A Brook

Did you focus on the blackbird and almost step on the Blackcap nest? Did you check the rest of the bush after you found the Blackbird?!
Drawing by Grant Herbert.

Open versus cavity nests

While the total number of records submitted by nest recorders continues to increase annually, the overall trend masks a worrying decline in the recording of breeding attempts made by open-nesting passerine species such as buntings, finches and warblers since the 1970s (see graph). Since the early 1990s, the records submitted for the 66 species of open-nesting passerine covered by the NRS (excluding corvids and hirundines) have numbered less in total than the combined figure submitted for the 14 species of cavity-nesting passerines covered (tits, sparrows, Starling, Redstart and Pied Flycatcher).

Finding nests of many open-nesting species may be difficult at first, but armed with the relevant information about timing of breeding, typical locations, parental behaviour and searching techniques, not to mention a degree of patience, you may find yourself able to contribute a significant proportion of the national dataset! The previous articles will provide an excellent starting point for a wide range of species.



The number of records submitted annually for open-nesting (thick line) and cavity-nesting (thin line) species, 1939-2002.

Top Nest Recorders in 2003

Brook & Cooke (B&C) 1,853 records ■ National Trust, Farne Islands (NTF) 1,777 ■ Birklands RG (BRG) 960 ■ Bob Danson (RD) 798 ■ Merseyside RG (MRG) 636 ■ David Warden (DWA) 628 ■ Lancaster & District Birdwatching Society (LDBW) 434 ■ Louch & Thompson (L/T) 390 ■ Geoff Myers (GWM) 372 ■ Tees RG (TERG) 359 ■ Ivan Proctor (IPR) 350 ■ Dave Hazard (DAVH) 309 ■ Peter Roe (PER) 300 ■ John Lawton Roberts (JALR) 290 ■ Sorby-Breck RG (SOBG) 286 ■ John Lloyd (JVL) 267 ■ Bob Swann (RLS) 248 ■ Kevin Briggs (KBR) 247 ■ Northumbria RG (NRG) 240 ■ Max Meadows (MOM) 235 ■ Paul Holness (PRH) 234 ■ Spence, Stratford & Brenchley (IMS) 233 ■ Bob Stevens (RS) 229 ■ Mick Cook & Mike Netherwood (MCMN) 219 ■ Bristol Naturalists' Society (BNS) 206 ■ Michael D Russell (MDR) 206 ■ Souder RG (SDRG) 203 ■ David Oliver (DWO) 203 ■ Nigel Lewis (NJL) 202 ■ East Dales RG (EDRG) 196 ■ Jerry Lewis & Steve Roberts (JMSL/L&R) 196 ■ Nigel Westwood (NJW) 195 ■ North West Norfolk RG (NWNR) 195 ■ Dave Francis (DMF) 194 ■ Alan Old (ABO) 194 ■ Peter Robinson (PJR) 187 ■ Gordon Vaughan (GAV) 184 ■ Neville Powell (NBP) 183 ■ Julian Driver (JDR) 177 ■ Rye Meads Ringing Group (RMRG) 175 ■ David & Diane Bowes (DJB) 168 ■ Jim Hodson (JMH) 165 ■ P Goodlad (PG) 159 ■ WWT Welney (WWTW) 158 ■ R W Grainger *et al* (JR) 158 ■ Isabel, Philip & David Hildred (IPDH) 155 ■ Alan Lowe (ALA) 155 ■ Doug Trigg (DOTR) 153 ■ Clyde RG (CRG) 150 ■ David Myers (DAM) 149 ■ John & Chas Holt (J&CH) 144 ■ Euan Cameron (EDC) 141 ■ Garth Lowe (GAL) 140 ■ Derek Gruar (DEG) 140 ■ Robert J Smith (SMI) 139 ■ Treswell Wood IPM Group (TWIG) 135 ■ Peter Johnson (PEJJ) 134 ■ Derek Holman (DHOL) 133 ■ Stanford RG (MAXP) 132 ■ South Lakeland RSPB Group (GBSL) 125 ■ Gordano Valley RG (GVRG) 123 ■ English Nature Devon Team (PIR) 119 ■ Ronald Turkington (RHT) 118 ■ Rob Husbands (ROXH) 117 ■ Ruth Croger (RUCR) 116 ■ Neil Brown (NGB) 116 ■ Neil Winter (NEW) 115 ■ Mike Rogers (MHR) 113 ■ Rod Smith (ROS) 111 ■ Rye Bay RG (RBRG) 110 ■ Spurn BO (SPBO) 107 ■ National Trust, Long Nanny (NTLN) 100 ■

MOST WANTED! Can you help?

Now here's a challenge for you! The species listed below form part of the BTO's Integrated Population Monitoring (IPM) programme. We need your help if we are to reach our target of 150 records, to enable us to monitor these birds effectively. If you find these birds in suitable habitat during the coming season, please have a go at locating and recording the nests.

In addition, if you are particularly adept at finding nests of these species, we would be pleased to hear about your techniques! Short articles would be particularly welcome (by email if at all possible). Your contribution will of course be acknowledged in any material produced for new recorders. Many thanks in advance.

Blackcap
Bullfinch
Carrion Crow
Chiffchaff
Collared Dove
Common Sandpiper
Common Snipe
Corn Bunting
Curlew
Garden Warbler
Goldfinch
Grey Wagtail
Jay
Lesser Whitethroat
Little Owl
Long-tailed Tit
Magpie
Marsh Tit
Mistle Thrush
Mute Swan
Nightjar
Redshank
Redstart
Reed Bunting
Ring Ouzel
Rook
Sedge Warbler
Skylark
Sparrowhawk
Stonechat
Tree Pipit
Treecreeper
Turtle Dove
Wheatear
Whinchat
Whitethroat
Willow Tit
Willow Warbler
Wood Warbler
Yellow Wagtail
Yellowhammer

Yellow Wagtail. Derek Belsey

The Nest Records Workshop

Hayes Conference Centre, Swanwick

The Nest Records Workshop took place at Swanwick, Derbyshire, in December 2003 as part of the BTO conference and was attended by 45 people. The session was chaired by Peter Beaven (Nest Records Officer) who took the notes on which this article is based. He began by introducing Dave Leech (the new Head of Nest Records) and Humphrey Crick (Senior Ecologist/Head of Demography).

Jan Pritchard followed with an excellent short presentation about her Little Egret colony study in Kent. Not only has her team generated the first BTO ring recovery for the species (and their colour-ringing has added to this), but her 2001 'LITEG' nest record cards were the first to be received by the NRS.

Lucy Wright, a PhD student from the University of East Anglia gave an equally impressive account of her Norfolk Woodlark studies. She highlighted the real advantage of being trained to find nests by an acknowledged expert (Ron Hoblyn in this instance).

The next talk was by Geoff Myers, an experienced recorder from Cleveland, who provided some very useful pointers for finding nests. One tip he mentioned is to look for the 'black hole' on Long-tailed Tit nests, which makes the well-camouflaged nests much easier to spot!

Dave Leech then reported on the latest developments with the Nest Record Scheme, including CNMP and IPMR and the excellent take-up for both. He also voiced the BTO's concern that we are receiving fewer records for open-nesting species and suggested some steps that could be taken to address this problem. This talk was designed to initiate a discussion during which the following points were raised by nest recorders and BTO staff:

1. The public perception of nest recording

Several nest recorders felt that the public perception about nests was still very much "leave well alone" and that there was a common (but erroneous) assumption amongst many birdwatchers that looking at nests causes desertion. It is vital to the conservation of Britain's birds that their productivity is monitored as well as their survival rates. This message is being increasingly conveyed to government and the general public via published articles and papers written both by recorders and BTO staff. Coverage in non-BTO publications is essential for the growth of the NRS and the recruitment of new recorders, and to this end BTO staff are constantly putting together press releases about the latest developments and interesting findings of all projects and schemes including the NRS.

Guidelines for minimizing disturbance at the nest are given in the *NRS Handbook* – provision of further information, supported by the findings of scientific studies, may help to quell some fears about nest recording and encourage more people to participate.

2. Promoting nest finding

Provision of literature

Publication of nest-finding literature, either electronically or on paper, would be very helpful for many recorders and may help to reverse the decline in the number of open-nesting records submitted. Several individuals have raised major concerns about literature such as this encouraging egg-collecting. Again, it is important to stress the need for monitoring productivity and to point out that 'eggers' have access to their own literature anyway. Limiting the publications to nest recorders would partially address these concerns, but may not encourage new people to join the scheme.

The NRS Forum

The Nest Record Scheme Yahoo! Forum, set up in 2003 (see page 14), provides a convenient means by which registered recorders who are connected to the Internet can exchange information about nest-finding. The Data Protection Act makes it difficult for BTO staff to put nest recorders in touch with each other, so we are hoping that the forum will become an increasingly useful and used resource.

Training in field skills

A 'mentoring' scheme was also discussed, whereby new recorders could be accompanied by experienced nest finders in the field, although this would require a significant investment in terms of time and effort. The possibility of running nest recording training courses was also discussed. A pilot course featuring pullus ringing and nest-finding (unfortunately already fully booked) will be run this year by Steve Piotrowski and the team at Landguard.

We should stress that it is still important that we continue to collect information on nestbox species from all over the country too, so we hope that all recorders will keep sending their box records in!

3. Encouraging new recorders

Targeting effort

Although the number of nest records submitted to the BTO annually has continued to increase and recruitment is relatively high (237 NRS Starter Packs were sent out in 2003). We are taking steps to encourage new recorders to monitor specific target species. While articles highlighting the need for information about these target species are included annually in both *BTO News* and *Nest Record News*, more widespread publicity may be beneficial. Gamekeepers, specialist groups, and nature reserve wardens were all suggested as contacts who might be particularly suitable to target for NRS recruitment.

Reaching new audiences

Providing totals for county recorders to publish in annual reports would be an excellent way to target enthusiastic and knowledgeable volunteers. We are currently looking at ways in which these data could be extracted and distributed. Steps are also being taken to put the NRS on the agenda of local/county bird groups and clubs through the RR network. BTO staff give talks about the NRS to a very wide variety of audiences.

It was suggested that recruitment could be targeted at Garden Birdwatch (GBW) participants. Past efforts at encouraging GBW participants to take part in the NRS, including the production of the Garden Nest Form a few years ago, have met with limited

success, but we are continuing to explore ways in which we can encourage this group to start nest recording.

Appealing to ringers

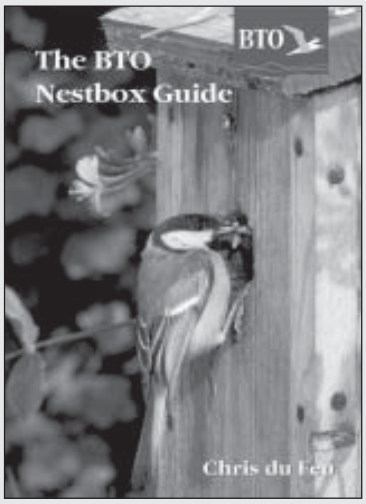
It is hoped that the development of the nest recording side of IPMR will encourage more ringers who ring pulli to submit records to the NRS.

4. Feedback to current recorders

Unfortunately, due to funding cuts several years ago it is no longer possible for us to provide the detailed acknowledgement letters that David Glue used to send to people submitting more than 100 records. Whilst the sheer number of active nest recorders necessitates the use of standard letters, we hope that the increased use of email and the NRS Forum will allow us to provide a more personal touch in our correspondence with nest recorders.

Judging by the feedback at the conference and that we have received since, we feel that the workshop was really constructive and a great help to everybody involved in the NRS. Thank you to again to the speakers, all the nest recorders who attended and everyone who provided their very valuable comments. We hope to be able to hold NRS workshops at future conferences and look forward to meeting more of you at them.

The new BTO Nestbox Guide by Chris du Feu



Previous versions of Chris' nestbox guides have always been in great demand. Released during National Nest Box Week 2004, this all-new, 78 page, full colour version is for both beginners and the more experienced. It concentrates on the commoner nestbox species and provides advice on construction and siting.

Price £8.99 (incl. p&p). Please make cheques payable to 'BTO Services', and send to BTO (Nestbox Guide), The Nunnery, Thetford, Norfolk IP24 2PU.

Long-tailed Tit. Derek Belsey

CNMP pilot year a success

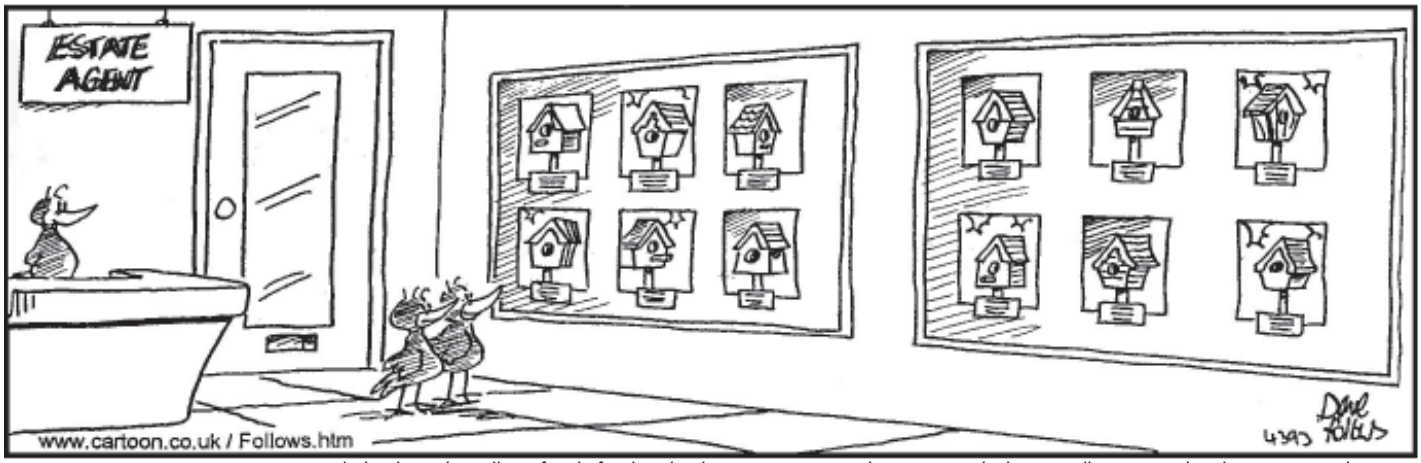
Many thanks to all nest recorders who took part in the second pilot year of the Constant Nest Monitoring Plot (CNMP) scheme during 2003. This has been developed to collect information about the number of breeding attempts that multi-brooded bird species, such as Swallow and Blackbird, make per season.

Participants are asked to select a target species and a defined area in which they aim to record all breeding attempts made throughout the potential nesting season. The methodology for recording nests is identical to that used for standard nest recording under the NRS.

The response to the CNMP project in 2003 was very encouraging, with 17 recorders covering a total of 17 species (often more than one per recorder) on 35 plots around the country. As a result of feedback from the participants and comments from other recorders, CNMP methodology has been simplified. The forms and instruction sheets have been revised in preparation for the 2004 breeding season.

If you are interested in taking part in this important pilot project, please contact the Nest Records Unit.

Thanks to the following recorders for taking part in the CNMP pilot in 2003:
Alan Burgess (ACB) ▪ John Clarke (JCKE) ▪ Ruth Croger (RUCR) ▪ John Farnsworth (SJF) ▪ Peter Goodlad (PG) ▪ Alan Hall (AGH) ▪ Sally Hall (HALL) ▪ Colin Hull (COLH) ▪ Jerry Lewis (JMSL) ▪ John Little (JAL) ▪ Jim Martin (JAMA) ▪ Geoff Myers (GWM) ▪ Mike Russell (MDR) ▪ Jim Terry (JHT) ▪ Nigel Westwood (NJW) ▪ Neil Winter (NEW) ▪ Derek Yalden (DWY).



With thanks to the Follows family for their kind permission to use this cartoon which originally appeared in the Eastern Daily Press.

Nest Record Scheme totals 1939-2003 (as of 31/03/04)

Species	Code	2002	2003	TOTAL
Red-throated Diver+	**RETDI**	**15**	**2**	**2359**
Black-throated Diver	BLTDI	3	3	220
Little Grebe	LITGR	59	32	2507
Great-crested Grebe	GRCGR	54	49	3811
Red-necked Grebe	RENGR			1
Slavonian Grebe	SLAGR			189
Black-necked Grebe	BLNGR			30
Fulmar	FULMA	155	82	6671
Manx Shearwater	MANSH	58	40	493
Leach's Petrel	LEAPE			7
Storm Petrel	STOPE			92
Gannet	GANNE			33
Cormorant	CORMO	83	96	2138
Shag	SHAG.	616	470	13397
Bittern	BITTE			39
Night Heron	NIGHE			3
Little Egret (see note page 16)	LITEG	19		26
Grey Heron	**GREHE**	**234**	**160**	**7431**
Spoonbill	SPOON			2
Mute Swan+	**MUTSW**	**122**	**111**	**6124**
Whooper Swan	WHOSW	2		19
Bar-headed Goose	BAHGO			5
Greylag Goose (Scotland)	GREGO	24	26	744
Snow Goose	SNOGO			8
Barnacle Goose	BARGO	2	4	63
Canada Goose	CANGO	116	104	4105
Egyptian Goose	EGYGO	3	2	99
Shelduck	SHELD	1	3	321
Ruddy Shelduck	RUDSH			2
Mandarin	MANDA	13	25	475
Wigeon	WIGEO			185
Gadwall	GADWA	11	9	167
Teal	TEAL.	1		229
Mallard	MALLA	142	118	8981
Pintail	PINTA			23
Garganey	GARGA			9
Shoveler	SHOVE	2	1	189
Red-crested Pochard	RECPO	1		1
Pochard	POCHA	16	9	189
Tufted Duck	TUFDU	18	11	1280
Scaup	SCAUP			1
Eider	EIDER	600	394	8535
Common Scoter	COMSC			43
Goldeneye	GOLDE	2	4	222
Red-breasted Merganser	REBME	2	1	281
Goosander	GOOSA	3	17	328
Ruddy Duck	RUDDU	13	2	162
Honey Buzzard	HONBU	10	11	84
Red Kite	REDKI	27	28	127
Marsh Harrier	MARHA	7	7	87
Hen Harrier+	**HENHA**	**34**	**34**	**1715**
Pallid Harrier	PALHA			1
Montagu's Harrier	MONHA		1	54
Goshawk	GOSHA	66	64	914
Sparrowhawk+	**SPARR**	**42**	**48**	**5389**
Common Buzzard	**BUZZA**	**249**	**230**	**6078**
Golden Eagle	GOLEA	17	20	566
Osprey	OSPRE	2	2	77
Kestrel	**KESTR**	**169**	**185**	**7666**
Merlin+	**MERLI**	**94**	**92**	**3554**

Species	Code	2002	2003	TOTAL
Hobby+	**HOBBY**	**36**	**33**	**866**
Peregrine+	**PEREG**	**131**	**129**	**2950**
Red Grouse	REDGR	5	2	845
Ptarmigan	PTARM			131
Black Grouse	BLAGR		1	80
Capercaillie	CAPER	2	3	88
Red-legged Partridge	RELPA	1	2	466
Chukar	CHUKA			1
Grey Partridge	GREPA	5	2	853
Quail	QUAIL			16
Pheasant	PHEAS	9	19	2198
Golden Pheasant	GOLPH			6
Lady Amherst's Pheasant	LAAPH			1
Water Rail	WATRA	2		100
Corncrake	CORNC			31
Moorhen	**MOORH**	**302**	**268**	**23003**
Coot	COOT.	394	462	18132
Oystercatcher	**OYSTE**	**260**	**320**	**16348**
Black-winged Stilt	BLWST			2
Avocet	AVOCE	45	66	763
Stone Curlew	STOCU	4		435
Little Ringed Plover	LIRPL	73	79	2330
Ringed Plover	**RINPL**	**163**	**216**	**9927**
Kentish Plover	KENPL			19
Dotterel	DOTTE			256
Golden Plover	**GOLPL**	**8**	**4**	**898**
Lapwing	**LAPWI**	**354**	**312**	**26020**
Temminck's Stint	TEMST			1
Purple Sandpiper	PURSA			4
Dunlin	DUNLI	3		561
Ruff	RUFF.			4
Common Snipe+	**SNIPE**	**9**	**14**	**1775**
Woodcock	WOODC	4	1	653
Black-tailed Godwit	BLTGO	1		36
Whimbrel	WHIMB			60
Curlew+	**CURLE**	**22**	**23**	**3000**
Redshank+	**REDSH**	**134**	**95**	**2999**
Greenshank	GRESH			164
Wood Sandpiper	WOOSA			2
Common Sandpiper+	**COMSA**	**17**	**16**	**1544**
Red-necked Phalarope	RENPH			167
Arctic Skua	ARCSK			368
Great Skua	GRESK		2	408
Little Gull	LITGU			3
Black-headed Gull	BLHGU	52	134	9833
Mediterranean Gull	MEDGU			18
Common Gull	COMGU	45	38	5301
Lesser Black-backed Gull	LBBGU	8	5	4605
Herring Gull	HERGU	41	51	7237
Great Black-backed Gull	GBBGU	8	5	3465
Kittiwake	KITTI	783	566	15335
Lesser Crested Tern	LECTE			5
Sandwich Tern	SANTE		1	1814
Roseate Tern	ROSTE	58	78	1002
Common Tern	COMTE	228	251	7232
Arctic Tern	ARCTE	451	341	10627
Little Tern	LITTE	107	107	6205
Guillemot	GUILL		1	1112
Razorbill	RAZOR	25	51	1363
Black Guillemot	BLAGU	30	37	1591

Species	Code	2002	2003	TOTAL
Puffin	PUFFI	50	1	754
Rock Dove	ROCDO		2	513
Feral Pigeon	FERPI	46	45	2313
Stock Dove	**STODO**	**384**	**528**	**9521**
Wood Pigeon	WOODP	480	486	27963
Collared Dove+	**COLDO**	**155**	**130**	**5032**
Turtle Dove+	**TURDO**	**10**	**8**	**2038**
Ring-necked Parakeet	RINPA			49
Cuckoo	CUCKO	6	5	2166
Snowy Owl	SNOOW			2
Barn Owl	**BAROW**	**601**	**677**	**7266**
Little Owl+	**LITOW**	**80**	**67**	**2191**
Tawny Owl	**TAWOW**	**350**	**351**	**10453**
Long-eared Owl+	**LOEOW**	**6**	**6**	**749**
Short-eared Owl+	**SHEOW**	**4**	**3**	**396**
Nightjar+	**NIJAR**	**36**	**72**	**1750**
Swift	SWIFT	97	124	2152
Kingfisher+	**KINGF**	**14**	**17**	**688**
Hoopoe	HOOPO			1
Wryneck	WRYNE			23
Green Woodpecker+	**GREWO**	**16**	**15**	**438**
Gt Spotted Woodpecker+	**GRSWO**	**60**	**66**	**1499**
Les. Spotted Woodpecker+	**LESWO**	**6**	**4**	**212**
Woodlark+	**WOODL**	**66**	**55**	**1558**
Skylark+	**SKYLA**	**44**	**44**	**8162**
Sand Martin+	**SANMA**	**17**	**13**	**2356**
Swallow	**SWALL**	**1665**	**1633**	**59711**
House Martin	HOUMA	168	147	9843
Tree Pipit+	**TREPI**	**39**	**38**	**1884**
Meadow Pipit	**MEAPI**	**64**	**109**	**9683**
Rock Pipit+	**ROCPI**	**24**	**21**	**846**
Yellow Wagtail+	**YELWA**	**5**	**9**	**1046**
Grey Wagtail+	**GREWA**	**128**	**119**	**6100**
Pied Wagtail	**PIEWA**	**156**	**191**	**10113**
Dipper	**DIPPE**	**168**	**192**	**10174**
Wren	**WREN.**	**246**	**203**	**16067**
Dunnock	**DUNNO**	**245**	**260**	**30786**
Robin	**ROBIN**	**337**	**332**	**21556**
Nightingale+	**NIGAL**	**5**	**10**	**482**
Bluethroat	BLUTH			1
Black Redstart	BLARE	4	3	176
Redstart+	**REDST**	**102**	**89**	**6689**
Whinchat+	**WHINC**	**36**	**12**	**2433**
Stonechat+	**STOCH**	**159**	**65**	**3608**
Wheatear+	**WHEAT**	**45**	**33**	**3912**
Ring Ouzel+	**RINOU**	**6**	**5**	**1769**
Blackbird	**BLABI**	**1244**	**1200**	**132588**
Fieldfare	FIELD			7
Song Thrush	**SONTH**	**662**	**523**	**75049**
Redwing	REDWI	1		120
Mistle Thrush+	**MISTH**	**76**	**66**	**8126**
Cetti's Warbler	CETWA	2		30
Grasshopper Warbler+	**GRAWA**	**4**	**7**	**395**
Savi's Warbler	SAVWA			4
Sedge Warbler+	**SEDWA**	**53**	**38**	**4897**
Marsh Warbler	MARWA			168
Reed Warbler	**REEWA**	**576**	**388**	**15903**

Species	Code	2002	2003	TOTAL
Dartford Warbler	DARWA	5	4	496
Lesser Whitethroat+	**LESWH**	**17**	**19**	**914**
Whitethroat+	**WHITE**	**90**	**65**	**6267**
Garden Warbler+	**GARWA**	**58**	**41**	**2169**
Blackcap+	**BLACA**	**78**	**69**	**3697**
Wood Warbler+	**WOOWA**	**37**	**29**	**2541**
Chiffchaff+	**CHIFF**	**112**	**135**	**3405**
Willow Warbler+	**WILWA**	**123**	**145**	**13138**
Goldcrest+	**GOLDC**	**5**	**17**	**849**
Firecrest	FIREC			9
Spotted Flycatcher	**SPOFL**	**159**	**176**	**11271**
Pied Flycatcher	PIEFL	997	810	41441
Bearded Tit	BEATI	10	12	305
Long-tailed Tit+	**LOTTI**	**158**	**120**	**6061**
Marsh Tit+	**MARTI**	**22**	**24**	**1519**
Willow Tit+	**WILTI**	**7**	**6**	**488**
Crested Tit	CRETI	1	7	445
Coal Tit	COATI	96	81	5578
Blue Tit	**BLUTI**	**3605**	**3839**	**102250**
Great Tit	**GRETI**	**2908**	**2879**	**66878**
Nuthatch	**NUTHA**	**125**	**158**	**3885**
Treecreeper+	**TREEC**	**31**	**36**	**2585**
Short-toed Treecreeper	SHTTR			1
Golden Oriole	GOLOR			41
Red-backed Shrike	REBSH			256
Jay+	**JAY..**	**16**	**7**	**1582**
Magpie+	**MAGPI**	**96**	**86**	**8051**
Chough	CHOUG	61	43	854
Jackdaw	**JACKD**	**210**	**239**	**7864**
Rook+	**ROOK.**	**335**	**88**	**14707**
Carrion Crow+	**CROW.**	**132**	**109**	**7800**
Hooded Crow	HOOCR	9	1	1141
Raven	**RAVEN**	**206**	**209**	**4174**
Starling	**STARL**	**295**	**212**	**16577**
House Sparrow	**HOUSP**	**243**	**302**	**13634**
Tree Sparrow	**TRESP**	**1285**	**1335**	**21152**
Scarlet Rosefinch	SCARO			1
Chaffinch	**CHAFF**	**369**	**296**	**23290**
Brambling	BRAMB			2
Serin	SERIN			1
Greenfinch	**GREFI**	**233**	**247**	**14657**
Goldfinch+	**GOLDF**	**80**	**54**	**3360**
Siskin	SISKI		1	87
Linnet	**LINNE**	**251**	**274**	**28334**
Twite+	**TWITE**	**9**	**31**	**903**
Redpoll+	**REDPO**	**4**	**6**	**1351**
Parrot Crossbill	PARCR			4
Common/Scottish Crossbill	CROSS			154
Bullfinch+	**BULLF**	**94**	**43**	**5882**
Hawfinch	HAWFI	4		198
Snow Bunting	SNOBU			202
Yellowhammer+	**YELHA**	**87**	**148**	**7814**
Cirl Bunting	CIRBU			255
Reed Bunting+	**REEBU**	**70**	**54**	**8047**
Corn Bunting+	**CORBU**	**2**	**3**	**968**
NUMBER OF CARDS		28,410	27,104	1,287,756

Species in bold are used within the BTO's Integrated Population Monitoring Programme. We would be particularly pleased to receive more cards for those species marked with **+** (less than 150 records). Schedule 1 species are in italics.

Predator profiles

Stoats and weasels

Chris du Feu's newsletter *Twitter* (Number 43, August) featured an article about the "Weasels of Mass Destruction" at Treswell Wood. About 70% of the tit boxes at this well-monitored site failed in 2003, of which 60% fell victim to the "WMD" (compared to their usual losses of around 35%).

Stuart Sharp, who has been studying Long-tailed Tits in a wood near Doncaster over the past three years as part of his PhD, writes:

"*Nest failure in 'lottis' is always high, but in 2003 over 90% of my 130-odd nests failed. More than half of these were down to stoats and weasels. Some years, we find almost no nest depredation from mustelids, but 2003 was our worst year yet (including several years prior to my own research). We have reached the conclusion that a lack of alternative prey must be the cause. The problem is, once they get their eye in for a 'lotti' nest, they go crazy. One day a single nest gets hit; within a few days, almost none of the nests in that area are still active*".

Using the evidence left behind to identify the predators, Stuart continues:

"*Stoats and weasels chew a hole in the base of the nest, whereas mice seem to use the nest entrance. Corvids and squirrels just rip the whole nest to bits.*"

The sponsors of the BTO *Garden BirdWatch*, CJ WildBird Food produce a "Nest Box Guardian" (their product code 68066) that prevents entry to boxes by mice and weasels. It works by adding length to the entrance of the nest box. Chris Whittles, himself a keen ringer and long-time nest recorder, says that although Pied Flycatchers and Redstarts are not particularly keen on the guards, they work really well on tit boxes.

Stop me and buy one!

There was an interesting piece in *BTO News* 219 (Nov-Dec 1998) about a Swedish nestbox study that former BTO staff member Andrew Impey took part in. His article showed the novel method they used to prevent cats from predating boxes: a sliced up two litre ice cream container (see photograph). Presumably the ice cream tub 'trap door' would also make it difficult for other predators to get access to the entrance hole?

Andrew Impey

Nest predation by Grey Squirrels

Nest recorders have been able to help with a recent BTO study on Grey Squirrel nest predation. A sample of prolific recorders of woodland birds' nests were contacted, at locations throughout Britain, covering a substantial part of the squirrel's range.

We were interested to know how prevalent these recorders thought nest predation was, and under what circumstances they had noticed it occurring. The results (see box below) formed an important part of two publications: a BTO Research Report and a subsequent article for *British Wildlife* magazine (see references).

Thank you to all nest recorders who contributed – you have been formally acknowledged by name in both publications.

Summary of responses from woodland nest recorders concerning predation by Grey Squirrels:

- **Responses:** Twenty-five responses were received from nest recorders who have been nest recording in woodland for more than five years. Eleven studies involved only nests in nest boxes. Twenty-two studies had squirrels in their study areas.

- **Perceived incidence of squirrel predation:** In 13 of the 25 studies, recorders suspected squirrel predation had occurred. Of the 12 studies which were not based solely on nest boxes, and which had the predator in their study areas, nine recorders believed that predation occurred and seven of these considered they had proved it.

- **Evidence:** Of the 13 people who suspected predation, four had actually witnessed it, five thought nests pulled out or torn apart were caused by squirrel, and four provided no supporting evidence or thought it likely based on circumstances.

- **Relative importance of Grey Squirrel compared with other predators:** No-one provided quantitative evidence that Grey Squirrel was a serious nest predator, especially compared to other predators. Only one said explicitly that it was the most serious predator. In four cases, it was thought they caused a major impact, based largely on circumstantial evidence (one of these said that of all predators, squirrel had the biggest impact due to their relatively high numbers).

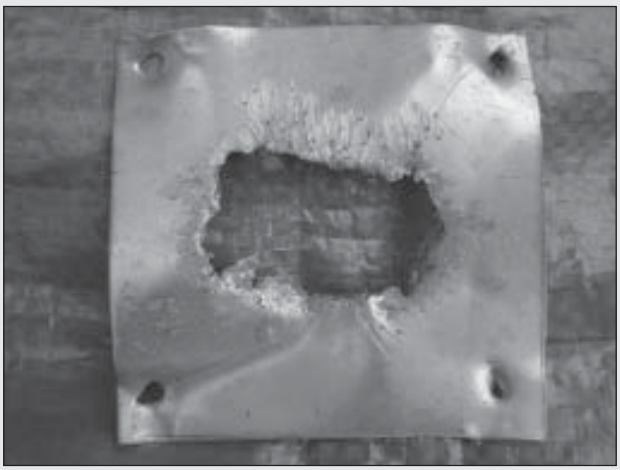
- **Estimated levels of predation by squirrels:** varied widely, in relation to the abundance of squirrels and the nest sites of each species in particular.

References:
Hewson, C.M. and Fuller, R.J. (2003) Impacts of Grey Squirrels on woodland birds: an important predator of eggs and young? *BTO Research Report* No. 328.
Chris Hewson, Rob Fuller, Brenda Mayle and Ken Smith (2004) Possible impacts of Grey Squirrels on birds and other wildlife. *British Wildlife* 15(3), 183-191.

Chris Hewson
(BTO Research Ecologist, Terrestrial Ecology Unit)

Squirrels have really sharp teeth!

To illustrate this, take a look at this photograph of a metal hole 'plate' after a Squirrel had chewed on it!



Jan Pritchard

Ringed Plovers re-using scrapes and Oystercatchers hatching despite disturbance

For the past three years I have monitored a population of 12-15 pairs of Ringed Plovers nesting on an old slag bank on the edge of RSPB's Morecambe Bay Reserve, Lancashire. The population of Ringed Plover nesting here is now the largest colony in Lancashire. Over the past few years, areas have been cleared of vegetation to provide suitable breeding habitat. Early in 2003, five new areas were scraped using a JCB making a total of 450 square metres of new habitat, doubling the area available for nesting.

In 2003 I located as many nests as possible to ascertain productivity and the use of the newly scraped areas. A total 11 nests of Ringed Plover, 10 Lapwing and nine Oystercatcher were found. Hatching success of the whole slag bank population was 85% for Lapwing, 65% for Ringed Plover, but only 34% for Oystercatcher.

I carefully marked each nest using a large stone as the main marker about 15 metres from the nest in a standard direction, then putting a line of smaller stones towards the nest, with the last one only 20 cm from the nest. This enabled me to locate the scrape accurately. I was very surprised to find that three pairs of Ringed Plover used exactly the same scrape for both the first and second broods. All three successfully hatched their first clutches. That they were the same birds using the scrape for a second time could not be proved as they were not colour ringed, but it does seem likely, particularly as there was no shortage of apparently suitable nesting habitat in the area. Three other pairs had their second nest within 15 metres of the first nest. I wondered if any other nest recorders have had a similar experience with this species?

Just off the reserve there is a stock car race track on a piece of similar slag bank and races are held usually every two weeks. A pair of Oystercatchers nested on one of the gravel islands 3.5 metres from the edge of the race track. A bird was located incubating three eggs on June 13th. There was a race two days later and the birds were kept off from around 9.00am to certainly 5.30pm on that day; however they were still incubating on the 18th. There was another stock car race on the 22nd and again the birds were kept off for a similar length of time. On the 24th a bird was still incubating, but on the 25th it had two young! On both the days that they were disturbed it was warm and I should imagine that the temperature so close to the track was quite high during the races, but it does show the tenacity of this species. Another pair in a similar situation at the other end of the stock car track survived one race but not a second.

John Wilson

April 2004

Following the chicks after fledging

Since our last update in *Nest Record News* we've had a great response from nest recorders, with a number of recorders wanting to start training to ring their nestlings. The training process isn't at all onerous, and you can train within a season (if you get enough practice in!). You'll obviously need more experience to ring open-nesting species such as thrushes, but ringing nestbox species is generally quite a simple procedure.

Recently, we've heard of quite a few interesting movements of birds ringed in the nest. The absolute highlight was a Little Ringed Plover chick ringed by nest recorder Gordon Priestley in 1998 in Lincolnshire that was found dead in October 2003 in Ouagadougou in Burkina Faso. This is only our second recovery from the wintering grounds of this enigmatic bird. Other migrants found en route to fairer climes included Redstart pulli recovered in Portugal and Morocco. A Willow Warbler ringed in the nest in Fife by nest recorder Jim Cobb was recaught by ringers in Mauritania in September.

Young Willow Warblers. Tommy Holden

A slightly more unusual movement was that of a Sedge Warbler ringed in the nest in Buckinghamshire. It was caught by ringers 50 days later in Glamorgan. Who knows where this bird was heading!

If you are interested in training to ring (or finding someone to ring your nestlings), please drop me a line and I'll put you in touch with a ringer in your area.

Mark Grantham, BTO Ringing Unit
mark.grantham@bto.org

Nest Record milestones passed in 2003

A number of milestones were reached for many species in 2003 including the following:

900th Twite - Ros Berrington & Brian Leecy (LEBE)
1,000th Roseate Tern - Tom Cadwallender (TACA)
4,000th Raven – Julian Driver (JDR)
5,000th Collared Dove – Max Meadows (MOM)
6,000th Buzzard – Bob Swann (RLS)
6,000th Grey Wagtail – Merseyside RG (MRG)
6,000th Long-tailed Tit – Dave Hazard (DAVH)
7,000th Barn Owl – Nigel Lewis (NJL)
8,000th Magpie - Brook & Cooke (B&C)
8,000th Reed Bunting – Rye Meads RG (RMRG)
9,000th Stock Dove – Bob Danson (RD)
10,000th Dipper – Northumbria RG (NRG)
10,000th Pied Wagtail – Iain Inglis (II)
15,000th Kittiwake – National Trust, Farne Islands (NTF)
20,000th Tree Sparrow - Cook & Netherwood (MCMN)
65,000th Great Tit – Dave Francis (DMF)
75,000th Song Thrush – Louch & Thompson (L/T)
100,000th Blue Tit – English Nature Devon Team (PIR)
132,000th Blackbird – Derek Gruar (DEG)

Stones in nests

It is not unusual for stones to be a part of a Lapwing's nest material, as can be seen from this photograph. However, the photographer, Noel Elms, reports on the first Lapwing nest, from over 30 years of his nest recording, where he has found a stone incorporated as part of a clutch (and actually being incubated).

Lapwing eggs. Noel Elms

"…I made the first visit to the Lapwing nest in a beet field in Norfolk in June (2003). The nest contained one chick, recently hatched and still wet, three eggs and an egg-shaped pebble forming part of the normal circular arrangement of a wader clutch. The pebble and the eggs were warm to the touch and all were clearly being incubated. Visiting the nest the following day, I found that nothing had changed. The hen Lapwing was still on the nest and both the pebble and the eggs were warm to the touch. A visit the following day revealed that both adults and the single chick were well away from the nest area and the nest contents were cold, the female's attempts to hatch the remaining eggs had failed…"

Noel continued:

"…The reason for this unusual behaviour can only be conjecture, as is the failure of the other eggs to hatch. It is not unknown for eggs laid on or among stones to be damaged while being turned during incubation. This may well have been the reason for failure in this instance when the eggs come up against an unusually heavy and immovable nest companion."

Coincidentally, we also received a second report of this phenomenon in 2003. Alan Martin wrote to say that whilst checking some gull and Common Tern nests, also in June, he found some that had stones in the nest cups: *"…At least one nest had a mixture of eggs and stones, but the rest just had stones. We found the same situation last year and assumed that it was egg collectors. We have improved the security at the site this year to the extent that I think it is highly unlikely that any egg collectors could get to these nests without us knowing. Is it possible that the birds are doing it themselves when for example the eggs are predated?"*

About this, Humphrey Crick comments:

There is a reference in Irish Birds (vol 4:561) about a Little Tern "incubating" a stone, although they didn't know how it had got there. But they mention an article in Auk (97:898-899) in which a study found that pebbles the size of eggs occurred in 15-20% of nests, with clutches of one or two eggs of Common Terns. This, they suggested, provided a stimulus for incubation by a species that usually has three incubation patches for three eggs. The author (Coulter) provided a little bit of evidence that the birds actively rolled egg-sized stones into their nests: he moved an egg from one nest to another, reducing the clutch to two, then found that the bird was restless and that a stone was rolled into the nest.

If any other nest recorders have come across stones in nests please could they let us know, as it would be interesting to see how widespread this phenomenon is among different groups of birds.

What's going on in there?

So what happens when a bird sits on an egg? Although at first glance it appears that incubation is quite simple, the transference of heat from the adult to the egg is actually an extraordinarily complex process. It is regulated by the adult's own heat production and the blood flow to the brood patch. The temperature of the egg is also influenced by the amount of heat generated by the metabolic processes of the embryo.

During incubation, eggs lose approximately 16% of their original weight. Under most conditions this weight loss is fairly constant, being mainly caused by the loss of water vapour from the developing embryo. Incubation time and the daily changes in egg density are influenced by egg shape, nest situation and the incubation behaviour of the parent.

The porous egg shell enables oxygen to pass into the egg and allows carbon dioxide to be excreted. As the embryo develops, it absorbs protein and water from the albumen (the 'white') and fat and protein from the yolk.

Of course, as nest recorders will know, the length of the incubation varies considerably between species. Incubation periods of species monitored by the NRS vary from 8-13 days in Garden Warbler to 30-34 days in Barn Owl. Birds of prey and owls start incubating shortly after the first egg is laid, and hatching is staggered over several days. Small birds often wait until the clutch is complete before incubating so that the chicks all hatch on the same day.

Towards the end of incubation, the developing chick within the egg may start calling to the parents. This is particularly noticeable in waders (and at this stage nest recorders will be able to record 'PE' 'pipping/calling from the egg'). When the chick is ready to hatch, it will use its egg tooth to 'star' the egg, and 'saw' and peck its way out...

…then the chick takes its first breath of fresh air!

Common Tern chick. George Candelin

2003 weather report

Early spring warmth, extreme summer heat, and growing drought through the year posed challenging nesting conditions for many birds. David Glue summarises the 2003 breeding season in relation to the weather.

Barn Owl and Robin nesting attempts span the New Year

The mild winter of 2002/03 aided successful late nesting attempts by Stock Dove, Barn Owl and Greenfinch, among others (October-December 2002). New Year surprises included free-flying broods of Robin, Woodpigeon and Tawny Owl (see *BTO News* 246).

Unseasonal warmth over Christmas week, when temperatures lifted to a balmy 15°C, then a record-topping 18°C at Aboyne (Grampian) in the third week of January, prompted surprise egg-laying by Tawny Owls as widely as Cheshire, Gwent, Nottingham and Aberdeen. Pairs were fuelled by an abundance of small rodents, themselves bolstered by a bumper crop of beech mast and other wild fruits. Other early clutches started in the New Year were confined mainly to the milder protected environments of suburbia and sheltered hamlets, including those by Mallard (Herts, Central London), Robin (York, Leicester) and Blackbird (Southampton, Surrey, Pembroke). By the close of a dry, sunny February, further clutches had been laid by thrushes, corvids and Egyptian Goose, among others.

Tits and flycatchers falter in chilly May downpours

Spring proper arrived from 12 March. Anticyclones anchored over or close to, the UK heralded a 40-day-long largely rain-free spell for many parts. Consistent warmth by day prompted a surge in egg-laying among grebes, Grey Heron, dabbling duck and thrushes in the third week, with clutches started by Woodcock (Wilts), Dipper (Gwynedd), Long-eared Owl (Derbys), Woodlark (Norfolk) and Stonechat (Dorset) by the month's end. April maintained the pleasantly warm theme with daytime temperatures 2°C above average (warmest April since 1987), but brood losses among Robin, Song Thrush and Pied Wagtail were attributed to sharp frosts under clear night skies. Growing drought conditions took their toll, remarkably the quarter February-April the driest since the notorious 1976. Corvids struggled with parched spring soils, Rook and Chough deferring egg laying in advanced lined nests. Tinder dry sections of heath, moor and forest, in active use by breeding waders, game birds, pipits and chats, were seriously damaged by fires in SW Scotland, N England, Wales and S Scotland. Occupied nests of Hen Harrier, Short-eared Owl, Curlew and Twite, among others, were destroyed in blazes. In sharp contrast, temperatures see-sawed in May, to the detriment of many UK songbirds, notably nestbox-users. Successive Atlantic fronts moving slowly across the UK brought prolonged 'tropical' deluges. Sharp frosts (temperatures dipping to -4.3°C at Glascarnoch on 16th) hit nesting tits, Pied Flycatchers, certain finches, leaf and scrub warblers (in contrast to the essentially frost-free May 2002), with heavy losses in parts at all stages of the nesting process.

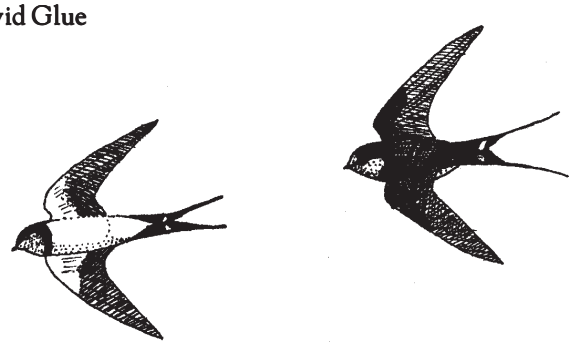
Migrants and residents slow to repair early losses

Pioneer pairs of Blackcap, Chiffchaff and Swallow, back promptly at some traditional sites, enjoyed early successes. However, many spring migrants were delayed by adverse cyclonic wet weather in North Africa and Iberia, as detected by BTO Migration Watch. Heavy downpours throughout the UK from mid May, causing flash flooding and swollen water courses, led to locally high losses among upland plovers, Merlin and Ring Ouzel, inland colonies of Black-headed Gull and Common Tern, and streamside nesting wagtails, Kingfisher and Reed Bunting. As ever, seabirds enjoyed mixed fortunes. Many, including Kittiwake and certain auks, were slow to return to their breeding ledges. Little Tern and Roseate Tern, in Wales and NE England respectively, achieved their highest breeding success in recent times. In contrast, Arctic Tern on Shetland endured another disastrous year, once again attributed to a lack of sand eels and over-fishing. Conditions generally improved in June, a persistent warm subtropical airflow across the UK lifting daytime temperatures 1.7°C above normal values. Encouragingly, Little Egret, Mediterranean Gull, Bittern and Firecrest were all successful at new sites. Avocet bred for the first time in South Wales, Peregrine as far east as Lincolnshire and, while the UK's newest gannetry comprising five nests, was established on The Noup, Westray (Orkney).

Corncrake and Nightjar profit from midsummer scorcher

Consistent heat in July, when day and night temperatures were 1.1°C and 1.7°C above average, helped to boost aerial and soil-invertebrate food supplies and, initially, boosted late-breeding species. Checks at nest boxes revealed welcome replacement broods among Great Tit, Nuthatch and Pied Flycatcher, if invariably small in size. Searing midsummer heat, with temperatures topping 30°C countrywide during 9-10th and 13-16th July, brought mixed fortunes. Swift raised many broods of two and three young before quickly departing south. The hot steamy tropical heat of August may have improved insect food supplies, enabling Nightjar, Reed Warbler and Spotted Flycatcher to fledge second broods (much as in 2002) with a few granivorous Linnet, Yellowhammer and Tree Sparrow going on to rear third families. Progressively more parched conditions, as searing temperatures touched 100°F in SE England for the first time in the UK on 10 August, finally took their toll. Exposed broods of Robin, Swallow and House Martin, normally heat tolerant in the garden and farm environments, perished while clutches of Great Crested Grebe, terns and diving duck, exposed by falling water levels, fell victim to roving foxes, feral cats and badgers. Dry, hot conditions meant certain flying insects (including aphids) and soil invertebrates (notably earthworms) were in short supply, possibly to the detriment of hirundines and thrushes respectively. Nesting activity remained low among waterfowl, doves, Swallow and House Martin, despite clement late Indian summer warmth in September and a balmy early October, as a season that initially had promised so much, drew to a close.

David Glue



T H J/BTO Collection

News roundup

David Glue is the 2003 Tucker Medallist

We are delighted to report that long-term staff member David Glue was awarded the prestigious BTO Tucker Medal in 2003. This was presented for his services to the Trust over 35 years, during which time he has been at the forefront of developing schemes such as GBFS, WeBS and, of course, our own NRS. Before having to be discontinued his very detailed feedback letters were eagerly awaited by many nest recorders.

We feel sure that you will want to echo the Nest Records Unit's appreciation to David for his unceasing support of the NRS over the years, and his continuing enthusiasm. Congratulations, David. This medal is very well deserved.

Don't miss out!

No fewer than four articles about the Nest Record Scheme featured in *BTO News* during 2003. This full-colour publication provides an excellent overview of the considerable fieldwork that BTO members and staff carry out. We notice that back issues of *BTO News* are always 'snapped up' when we take them to conferences. So avoid the rush and contact Chris Morley chris.morley@bto.org for a sample copy!

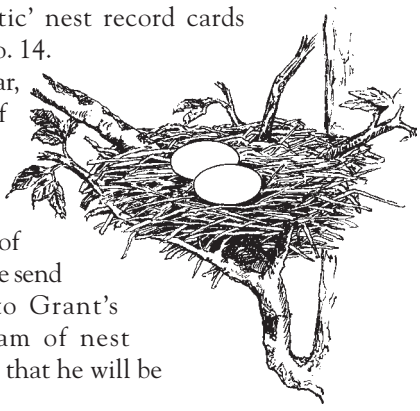
(Very) early birds (and 'National Nest Box Week' 2005)

Every year during 14-21 February the BTO runs 'National Nest Box Week'. Media coverage this year has been exceptional, and the NRS has been given a good 'plug' several times. The Nest Records Officer was interviewed on 'Drive Time' on 'Radio 5 Live' in February, and early nesting was featured as part of the main news on Radio 4.

Many nest recorders assist us with NNBW each year by sending in their reports of early nesting birds. The most bizarre of these in 2004 was a report (which was so weird that we had to check it carefully) of four young Blue Tits that fledged in January!

If you come across any really early nesters in 2005, please let the Nest Records Officer know straight away. Thank you.

We are very sad to report the death of nest recorder Grant Herbert after a long illness. You may remember that a couple of his 'artistic' nest record cards appeared in NRN No. 14. Back in June last year, Grant sent us a file of his drawings to use in *Nest Record News*. You will notice that we have used two of them in this issue. We send our condolences to Grant's family and his team of nest recorders. We know that he will be greatly missed.



Collared Dove nest. Grant Herbert

Thank you

Thank you to those nest recorders who have enclosed a donation to the work of the Trust with their card submissions this year. This is very much appreciated.

A 'Collection' of Nest Recorders? What are you called?

Every year we get asked a few questions that stump us! This year we were asked what somebody who nest records is called. Humphrey Crick came up with 'Nidiologist', but strictly speaking this would be someone who studies the nests themselves. (Don't forget to read the 'National Nest Reference Collection' info opposite!) Peter Beaven came across an old book on nests which referred to the subject as 'Caliology'. If you know or can suggest any other names, please let us know!

How your Nest Record data are used

Ever wondered what happens to your nest record cards after they arrive at the Nunnery? Amongst many other things, your valuable nest record data are used to produce the tables in the *Breeding Birds in the Wider Countryside: Their Conservation Status* report www.bto.org/birdtrends

This report provides a wealth of information about the trends in numbers and breeding performance for the UK's birds. (The graphs to look at are the clutch size, brood size, egg stage failure rate, chick stage failure rate and laying date). We hope to show how we get the data ready for analysis in future editions of *Nest Record News*!

The NRS Yahoo! Forum

We have now set up an email discussion group for nest recorders, using the well-established Yahoo! Groups website. The purpose of the NRS Forum is to promote discussion and to allow the exchange of ideas and news amongst BTO nest recorders. The site has been operating since July 2003 and all nest recorders that we had an email address for were invited to join.

Membership of the groups is free, and both registered BTO nest recorders and ringers are welcome to join the NRS Forum. Please note that all messages are moderated by the Nest Records Officer before they are posted.

If you are not already a member of the Yahoo! Groups you will have to join before you can subscribe to the NRS Forum. Joining is easy: visit the website at http://uk.groups.yahoo.com and click on the New Users' link and follow the on-screen instructions. To subscribe to the group simply send an email to nrsforum-subscribe@yahoogroups.com To post a message send it to nrsforum@yahoogroups.com Since the site was set up some really interesting (and very useful) discussions have been started on a very wide range of subjects. Recent 'Threads' have included information on finding Chaffinch nests, safe recording of Nuthatch nests, and creating Willow Tit boxes to name but three. Other nest recorders have used the opportunity to discuss the results and observations from their 2003 breeding season. This is something that has not really been possible before now (except at conferences and through personal contacts). We hope you find the Forum enjoyable and informative. We always welcome new messages on nest-related subjects at any time, particularly those that generate enthusiasm and encouragement for those taking part in the Nest Record Scheme!

The BTO is you! (and please tell your friends!)

Over 70% of nest recorders are already BTO members. Whilst, of course, we always welcome nest records from non-members, we do recommend that you join if you have not already done so. Not only does this provide valuable financial support to the work of the Trust, but you will also benefit by receiving (amongst other things) *BTO News* six times a year. This now contains regular reports and articles based on the work of the Nest Record Scheme. Please contact Chris Morley, the Membership Secretary chris.morley@bto.org at Thetford for a membership application form.

Photos of chicks of known age

We are trying to improve the quality of our instruction materials for nest recorders and would be very pleased to hear from anyone who has photographs of nestlings of known age. If you have (or can take) photographs of chicks that would help other nest recorders, please let the Nest Records Officer know. However, please don't bombard us with images yet. Just let us know what you have available (we need to have a structure in place to deal with all of the returns!).

The Barn Owl Monitoring Programme (BOMP)

The programme continues and over 800 Barn Owl sites are now being monitored. The second *Barn Owl Bulletin* has just been published. If you would like a copy, please contact the Nest Records Officer.

How many young are produced in nestboxes each year in the UK?

As part of the publicity produced for National Nest Box Week 1997, the late Chris Mead estimated that in excess of 1,000,000 young birds were produced in nestboxes in the UK each year. As the slogan for NNBW this year was "Britain Still Needs More Holes", please show your copy of the new *Nestbox Guide* to your friends!

Green Jiffy bags!

As many of you will have noticed, we are attempting to cut down on the use of Jiffy bags. The record so far is a bag that has been used for eight postal journeys (although it is now starting to look a little tired). If possible, please use an envelope that can be reused when sending in your nest record cards to the Nunnery. Thank you.

Alternatively (and preferably!) please consider using IPMR for your nest recording, in which case you'll save on both paper and postage!

Cleaning out nestboxes and the Law

Section 1(1)(c) of the Wildlife and Countryside Act 1981makes it an offence for anyone to take or destroy the egg of any wild bird. However, following an article published in *Nest Record News* in 1995, the Department of the Environment made special provision for those who need to clean out nestboxes containing abandoned eggs. This is now legal provided it is carried out between 1 August and 31 January. The eggs must be destroyed promptly and cannot be kept or sold. (These details originally appeared in *Nest Record News* No. 11, pages 16-17 and No. 12, page 18).

The National Nest Reference Collection (Glasgow University Hunterian Museum)

Since my appeal in the last issue of Nest Record News, significant additions have been made to our collection both of nests and photographic images of nests. Very many thanks to all those nest recorders and others who sent us either of these. The collection now comprises about 700 nests of 64 species, and nearly 100 photographic images of a further 33 species – a total of 800 or so 'specimens' of nearly 100 species.

Exciting acquisitions this season have been Black Redstart, Crossbill (both Scottish & Common), Crested Tit, and a Magpie nest from Portsmouth made almost entirely of wire 'wall ties' from a nearby building site. However, we are keen to be able to show local and regional variation. We are therefore pleased to have been sent small groups of nests of some species, including House Sparrow, Tree Sparrow, and Yellow Wagtail.

Our aim is to create a reference collection of the nests of British breeding birds that will be a research and educational resource for anyone who cares to visit. I regularly make use of the collection for undergraduate student studies. This year it is on the selectivity of moss species by Chaffinch and Long-tailed Tit and its possible significance. We are beginning to become better known, and have had two visitors this autumn wishing to publish information on bird nests, one an artist and book illustrator from Japan.

The collection is still growing. If you would like to help, or would like more information about the collection, please contact me:

Dr Mike Hansell
Division of Environmental & Evolutionary Biology
University of Glasgow
Glasgow G12 8QQ
Tel. 0141 330 4779
e-mail: M.Hansell@bio.gla.ac.uk

[Mike happened to mention to me that their current nest 'wish' list includes Bearded Tit, Corn Bunting and Wheatear. Maybe some of our nest recorders can help them with these? Ed]

Corn Bunting. Nicholas Watts

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 the Wildlife and Countryside Act 1981, as amended by the Environmental Protection Act 1990. You will require a licence to visit the nests of these species.

All applications for Schedule 1 licences (for nest recording and/or ringing) are dealt with by the BTO Licensing Officer, Jez Blackburn jez.blackburn@bto.org who can send you an application form.

The majority of licences issued during the breeding season are renewals for the same workers who held the appropriate approval during the previous season. Recorders who have not held such a licence before can apply for the relevant approval through the BTO. However, it is necessary to provide two references from 'respected' ornithologists (eg County Recorder, BTO Regional Representative, Bird Club Chairman, BTO Ringer etc). Please note that applications must be received before the end of February to be given priority and no renewal can be granted until a form has been submitted (including nil returns) for the previous season. Schedule 1 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. For very rare breeding species (ie any species not currently in the NRS table), please contact the BTO Licensing Officer for further advice.

All other requests (to handle eggs, nest photography* of Schedule 1 species) should be directed to the Licensing Teams at the appropriate Country Agency.

**By nest photography we refer to 'hide-based' work. We understand that 'snap-shots' taken at nests are permitted under your ringing or nest recording Schedule 1 licence, provided that this does not significantly extend the length of your visit.*

Confidentiality of Schedule 1 Records

We would like to assure all nest recorders that the locations of nest sites for Schedule 1 species are kept confidential and will not be released to any third parties without the observer's permission.

All requests for nest record data for any species from external sources are carefully considered by senior BTO staff (and if necessary, by one of the Trust's scientific committees). If a significant amount of the data has been gathered by particular recorders they will be contacted before the data are released. Although the usual BTO policy is that data can be supplied, there are certain important exceptions. One of these exceptions covers data requests for Schedule 1 species: '…data that have been submitted to the BTO 'in confidence' and the donor is unwilling to release them, or the data are particularly sensitive from a conservation standpoint…' would not be supplied (taken from the BTO's 'Policy and Conditions for Data Requests').

For clarification (or for further reassurance) about this, please contact Su Gough datarequests@bto.org.

Little Egret

Please note that Little Egret is not currently on Schedule 1 and is unlikely to be added for the foreseeable future. We would recommend that any BTO nest recorder who is lucky to come across LITEG nests treats them as if they were a Schedule 1 species. For further guidance about this, please contact the BTO Licensing Officer.

Little Egret. Kevin Carlson

Nest Record Scheme contacts

Peter Beaven (Nest Records Officer) - The main point of contact for nest recorders (including IPMR queries) to whom your nest records should be sent. Peter manages the NRS data archive and also edits *Nest Record News*. He can be contacted at nest.records@bto.org He is also the Coordinator for the Barn Owl Monitoring Programme (BOMP).

Dr Dave Leech (Head of Nest Record Scheme) - Oversees the NRS and nest record, BOMP and Winter Mammal Monitoring data analyses.

Dr Humphrey Crick – (Senior Ecologist/Head of Demography Unit) - In charge of the Demography Unit responsible for schemes such as the NRS, CES and RAS that seek to understand what makes populations rise or fall.

David Glue (BTO Research Biologist) - Provides invaluable advice based on a long involvement with the Scheme.

Angela Rickard (Secretary) - Provides vital support to the Scheme. She also typesets *Nest Record News* and other mailings. Angela is reponsible for sending out acknowledgements and also the NRS 'Starter Packs'.

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