

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).

June 2003

Number 19

Thank you to all 2002 Nest Recorders!

Welcome to the 'new look' *Nest Record News*, which coincides with the staff changes that have taken place in the Nest Records Unit since the last issue. The number of cards received is back on track following the poor year due to Foot & Mouth Disease access restrictions in 2001.

The total number of nest records received for 2002 is 27,636 of 167 species. A grand total of 1,258,116 have been received since the Scheme started in 1939.



Susan Waghorn

Constant Nest Monitoring Plots – more volunteers needed

The Constant Nest Monitoring Plots (CNMP) scheme was introduced in 2002 and is being piloted over the 2003 and 2004 breeding seasons. At present eight recorders have registered 20 plots, covering species as diverse as Dipper, Moorhen, Stock Dove, Blackbird (see photo), Spotted Flycatcher, Tree Sparrow and Nightjar. The scheme has been designed to investigate changes in the productivity of multi-brooded species over the whole breeding season.

Participants aim to locate as many nests as possible of one or a small group of species in their defined study area throughout the breeding season. Territories are mapped to determine the number of individuals breeding in the area and to help allocate repeat breeding attempts to individual pairs, and habitat data are also collected.

We are very keen to have as many people as possible involved in testing the methodology this year and next, providing feedback to help us develop it further. A CNMP *Handbook* giving full instructions and standard recording forms are now available from the Nest Records Unit.

IPMR – Important Progress Made by Recorders

Last year saw a huge increase in the number of nest records submitted via the home inputting programme, Integrated Population Monitoring Reporter (IPMR). 7,616 records were sent to us by this method for 2002, more than double the figure for 2001, bringing the total number of IPMR nest records submitted to 12,728. The proportion of nest records submitted using IPMR also rose to 27.6% of the card total (from 14.6% in 2001), an indication that more recorders are using IPMR.

The latest version of IPMR (Version 2.1) is now available to download from the BTO website at www.bto.org/ringing/ringsoft/ipmr/index.htm. Alternatively, a copy can be obtained on CD from the Nest Records Unit. Mark Cubitt has added several additional features to the nest recording part of the program, including a function that allows nest recording group secretaries to amalgamate submission files from individual group members into a centralised file before sending them in to nrs.data@bto.org

IPMR saves time for recorders and the Nest Records Unit alike, and enables you to store and investigate your own data efficiently. So, if you're not already using it please give it a go. Nest Recorder Ian Spence is currently producing a beginner's guide to IPMR for nest recorders. If you would like a copy when this is available, please let us know.

Nest Record News No. 19, June 2003

Introduction

Since taking over as Nest Records Officer in January 2003, I have certainly had my work cut out for me! Acknowledging 2002 cards, sending out replacements and card counting have been the main priorities. By the time you read this I will be preparing the cards for inputting by our data processing agency. Once these have been returned, a number of checks have to be run on the data before the analysis can begin. Then, before you know it, the 2003 cards will start coming in!

As many of you will know, I've been a part of the Nest Records Unit since 1997, initially working with Caroline Dudley, so I have corresponded with a number of you already. One of the jobs I've been responsible for in recent years has been the computerising of past data (particularly the old 'green' cards). The nest recorders in the 1960s just could not have foreseen how invaluable their data would be for recent studies looking into declines of House Sparrow and other species.

A huge THANK YOU once again to all our 2002 nest recorders. Without your efforts the BTO would not be able to provide such a vital barometer to monitor the health of the nation's birds. Your input is very much appreciated. I apologise if any of you experienced poor feedback last year. Hopefully, this problem is now a thing of the past.

Thank you to the contributors to the articles that are featured in this issue of *Nest Record News*. If you have any queries or suggestions about the Scheme (or short articles suitable for the next edition of *NRN*) I would be very pleased to hear from you. Many thanks again for your records. Enjoy your nest recording!

Peter Beaven

Nest Records Officer (nest.records@bto.org)

Nest Record News is sent free to all participants of the BTO Nest Record Scheme. To request further copies or obtain a 'Starter Pack', please contact the Nest Records Officer (address on back page).

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Monthly temperature and precipitation data for England and Wales obtained from the Climate Research Unit website (www.cru.uea.ac.uk/cru/data).

Month	Central England Temperature (°C)			England & Wales Precipitation (mm)		
	1960-1990	2001	2002	1960-1990	2001	2002
January	3.8	3.2	5.4	91	84	87
February	3.8	4.4	7.0	65	105	115
March	5.7	5.2	7.6	74	108	53
April	7.9	7.7	9.3	61	100	48
May	11.2	12.6	11.8	65	42	81
June	14.1	14.3	14.4	65	44	57
July	16.1	17.2	16.0	62	73	93
August	15.8	16.9	17.0	77	86	76
September	13.6	13.4	14.4	78	83	41
October	10.6	13.3	10.0	87	135	144

2002 breeding season report

As ever, extremes of weather strongly affected breeding success, but many found a general improvement over 2001, which will soon be quantified as the fieldwork results are analysed. The table opposite summarises monthly temperatures and precipitation data for 2002.

New Year 2002 did not get off to a good start with temperatures plunging to -13°C (Highlands) on 2 January. Mid-month, the UK was battered by a succession of vigorous troughs and deep depressions. 'Spring-like' spells during this period contributed to the mildest January since 1992 and prompted some premature nest building and egg laying. Feral Pigeon and Collared Dove made early breeding attempts, and free-flying broods of Blackbird (Bideford, Liverpool), Song Thrush (Bedford, Chester) and Woodpigeon (several sites) were also noted.

Early spring heat spurs on wildfowl and thrushes

Frequent gales marked a surprisingly warm and damp February, the wettest since 1990. Early nesting activity was further boosted by temperatures approaching 15°C on many days. By the month's end, 18 species had been reported to the BTO with active nests. Cases of egg laying by Grey Heron, Mallard, Egyptian Goose, doves and thrushes are not too unusual, especially in the warmer Home Counties. More surprising were the reports of well-grown or fledged broods of Robin (Leicester), Starling (Cornwall, Coleraine) and Pheasant (Devon), though most were within the protected frost-free environs of valley hamlets or suburbia, aided by supplementary feeding. Mid-month saw many auks, Gannet and Fulmar returning to colony ledges, while Lapwing, Ringed Plover and Curlew displayed at traditional inland haunts.

The first week of March saw further breeding activity, with clutches started by Peregrine (Gwent), Raven (Denbigh), Rook (Bucks) and Wren (Surrey). Warm southerly airflows mid-month caused temperatures to top 17°C in the south, prompting a surge of egg laying among grebes, dabbling duck, Robin and thrushes. Among the species for which unusually early breeding attempts were reported were Canada Goose (Surrey), Dipper (Gwynedd), Woodlark (Dorset) and Stonechat (New Forest). All was not rosy however: severe gales at times rocked treetop nesting Grey Heron, Cormorant, corvids and Mistle Thrush.

Tits and warblers slow to prosper in changeable conditions

Early breeding promise was further enhanced by the sunniest April since 1987. As temperatures climbed to 25°C mid-month, families of Grey Heron, Egyptian Goose, Woodcock and Dipper vacated nests, helping to erase memories of the somewhat unproductive, cool April of 2001. From late April vigorous Atlantic fronts brought blustery showers and localised downpours, affecting nesting raptors, doves and finches. The strong winds, combined with unusually high tides, destroyed the first clutches of many waders, Meadow Pipit and Reed Bunting nesting on coastal saltmarshes. The relatively dull, damp weather extended over into May, making foraging for caterpillars a challenging task for parent tits, Nuthatch and spotted woodpeckers. Fortunately, frosts were rare, with most days averaging 14-18°C, helping many resident insectivorous birds.

Summer migrants filtered through erratically, helped by warm southerly airflows in mid May and early June. The unsettled, changeable conditions spilled over into a contrary June, very wet in parts, with lengthy thundery downpours. Flash flooding led to

swamped nests of Sand Martin, Kingfisher and waders and saturated broods of Mute Swan, Hen Harrier, Red Kite, Nightjar and chats. Hot humid spells during the first half of June prompted a surge in nest building and egg-laying by Swallow, martins, scrub and *Acrocephalus* warblers. Tits and Pied Flycatcher suffered partial and complete brood losses during periods of lashing rain, but repeat layings were frequent. Northern conifer forests and a few gardens buzzed with the sound of Siskin families, while Redpoll started to be found in farm scrub and hedges.

Exotic stars add colour to an improved breeding season

July remained unsettled. Aerial insects were at a premium in the cool period at the beginning of the month. Many hirundines and warblers raised smaller than average broods. Study populations of Guillemot (Shetland), Lapwing (Bucks) and Spotted Flycatcher (Dorset) fell victim to heavy predation by Great Skua, mink and weasel respectively. The verdant legacy of a very damp summer (the wettest May-July since 1960) was a mixed blessing. Checking nestboxes in luxuriant vegetation became an arduous task. However, plentiful invertebrates in soil and canopy helped many Little Owl, Blackbird, Great Tit and Pied Flycatcher to rear late, if often small, broods by the close of July.

Mini heatwaves during August courtesy of hot subtropical air brought torrential damaging deluges from fierce electrical storms. Open-nesting waterfowl, pipits, finches and buntings endured localised heavy losses. Nonetheless, ongoing Indian summer heat extended into September (the sunniest since 1991), which enabled Great Crested Grebe, Moorhen, Reed Warbler, Greenfinch and Tree Sparrow to raise second broods.

Nest recorders were well placed to help quantify some interesting status changes during 2002. Encouragingly, Marsh Harrier, Little Egret, Cetti's Warbler and Woodlark extended further the northern and western limits of their breeding ranges. Small-scale increases among Black-throated Diver, Bittern and Corncrake records were added bonuses. Interestingly, populations of recolonist and resurgent raptors, notably Red Kite, Osprey and Peregrine, enjoyed mixed and modest breeding success, in part at least due to weather-related losses. Following the enforced 'gap year' (due to the F&M restrictions), many nest recorders expressed concerns over the declines among study populations of summer visitors such as Cuckoo, Wood Warbler and Tree Pipit (widely), Yellow Wagtail, Willow Warbler and Whinchat (on a local scale).

The year added to worries over the potential impact of global warming on breeding success. Observers scattered throughout the UK provided contrasting comments: 'improved nestbox occupancy by tits and Pied Flycatcher a bonus' (Devon), 'gulls, Lapwing, pipits and Reed Bunting repeated well after spring washout' (Merseyside), 'Great Tit, Little Owl and Reed Warbler re-lay with success' (Bucks), 'successive garden broods of Robin and Siskin a surprise' (Durham) and 'terns, Kittiwake and auk young starved by sand-eel shortage' (Shetland).

The year was enhanced by several 'flagship' rare bird success stories. The first of these was a pair of Bee-eaters at Middleham Quarry (Co Durham). Two young survived from a clutch of five eggs, only the second successful UK nesting attempt, the previous one being in Sussex in 1955. Finally, a pair of wild Chough in Cornwall, considered from arrival pattern and nesting habits to be from Brittany, was the first breeding record for the county since 1952.

David Glue (BTO Research Biologist)

Nest Record Scheme totals 1939-2002

Species	Code	2001	2002	TOTAL	Species	Code	2001	2002	TOTAL
Red-throated Diver●	RETDI	9	15	2354	Hobby●	HOBBY	34	36	830
Black-throated Diver	BLTDI	2	3	216	Peregrine●	PEREG	63	104	2793
Little Grebe	LITGR	45	59	2474	Red Grouse	REDGR		5	843
Great-crested Grebe	GRCGR	52	52	3726	Ptarmigan	PTARM			131
Red-necked Grebe	RENGR			1	Black Grouse	BLAGR	1		79
Slavonian Grebe	SLAGR	2		189	Capercaillie	CAPER		2	85
Black-necked Grebe	BLNGR			30	Red-legged Partridge	RELPA	3	1	464
Fulmar	FULMA	155	155	6589	Chukar	CHUKA	1		
Manx Shearwater	MANSH	57	58	453	Grey Partridge	GREPA	4	5	851
Leach's Petrel	LEAPE			7	Quail	QUAIL			16
Storm Petrel	STOPE			92	Pheasant	PHEAS	22	9	2179
Gannet	GANNE			33	Golden Pheasant	GOLPH	6		
Cormorant	CORMO	37	83	2042	Lady Amherst's Pheasant	LAAPH	1		
Shag	SHAG.	683	616	12927	Water Rail	WATRA	7	2	100
Bittern	BITTE			39	Corncrake	CORNC			31
Night Heron	NIGHE			3	Moorhen	MOORH	290	301	22714
Little Egret	LITEG	7	19	26	Coot	COOT.	364	389	17591
Grey Heron	GREHE	106	234	7271	Oystercatcher	OYSTE	178	260	15909
Spoonbill	SPOON			2	Black-winged Stilt	BLWST			2
Mute Swan●	MUTSW	105	120	5986	Avocet	AVOCE	3	45	697
Whooper Swan	WHOSW		2	19	Stone Curlew	STOCU		4	435
Bar-headed Goose	BAHGO	1		5	Little Ringed Plover	LIRPL	63	73	2237
Greylag Goose	GREGO	19	24	718	Ringed Plover	RINPL	176	163	9686
Snow Goose	SNOGO	8			Kentish Plover	KENPL			19
Barnacle Goose	BARGO	5	2	51	Dotterel	DOTTE	1		256
Canada Goose	CANGO	140	116	3944	Golden Plover●	GOLPL	1	8	894
Egyptian Goose	EGYGO	5	3	97	Lapwing	LAPWI	137	354	25660
Shelduck	SHELD	1	1	318	Temminck's Stint	TEMST			1
Ruddy Shelduck	RUDSH			2	Purple Sandpiper	PURSA			4
Mandarin	MANDA	5	11	441	Dunlin	DUNLI		3	561
Wigeon	WIGEO			185	Ruff	RUFF.			4
Gadwall	GADWA	4	11	158	Common Snipe●	SNIFE	11	9	1761
Teal	TEAL.	1	1	229	Woodcock	WOODC	6	4	651
Mallard	MALLA	105	142	8846	Black-tailed Godwit	BLTGO	5	1	36
Pintail	PINTA			23	Whimbrel	WHIMB			60
Garganey	GARGA			9	Curlew●	CURLE	6	22	2975
Showeler	SHOVE	1	1	187	Redshank●	REDSH	74	134	2903
Red-crested Pochard	RECPO		1	1	Greenshank	GRESH	1		164
Pochard	POCHA	9	16	180	Wood Sandpiper	WOOSA			2
Tufted Duck	TUFDU	11	18	1269	Common Sandpiper●	COMSA	9	17	1523
Scaup	SCAUP			1	Red-necked Phalarope	RENPH			167
Eider	EIDER	545	600	8141	Arctic Skua	ARCSK			368
Common Scoter	COMSC			43	Great Skua	GRESK			406
Goldeneye	GOLDE	1	2	218	Little Gull	LITGU			3
Red-breasted Merganser	REBME	1	2	280	Black-headed Gull	BLHGU	4	52	9699
Goosander	GOOSA	2	3	294	Mediterranean Gull	MEDGU			18
Ruddy Duck	RUDDU	4	13	160	Common Gull	COMGU	15	45	5263
Honey Buzzard	HONBU	10	10	73	Lesser Black-backed Gull	LBBGU	13	8	4600
Red Kite	REDKI	15	26	98	Herring Gull	HERGU	42	41	7186
Marsh Harrier	MARHA	8	7	80	Greater Black-backed Gull	GBBGU	17	8	3460
Hen Harrier●	HENHA	35	31	1678	Kittiwake	KITTI	846	783	14769
Pallid Harrier	PALHA			1	Lesser Crested Tern	LECTE			5
Montagu's Harrier	MONHA			53	Sandwich Tern	SANTE			1813
Goshawk	GOSHA	40	66	849	Roseate Tern	ROSTE	44		837
Sparrowhawk●	SPARR	47	42	5340	Common Tern	COMTE	200	228	6971
Common Buzzard	BUZZA	153	249	5843	Arctic Tern	ARCTE	462	451	10286
Golden Eagle	GOLEA	12	17	545	Little Tern	LITTE	214	107	6098
Osprey	OSPRE		2	74	Guillemot	GUILL			1111
Kestrel	KESTR	117	166	7472	Razorbill	RAZOR	59	25	1312
Merlin●	MERLI	44	103	3470	Black Guillemot	BLAGU	33	30	1554

Species	Code	2001	2002	TOTAL	Species	Code	2001	2002	TOTAL
Puffin	PUFFI	50	50	753	Dartford Warbler	DARWA	5	5	492
Rock Dove	ROCD0			511	Lesser Whitethroat	LESWH	17	17	895
Feral Pigeon	FERPI	29	46	2268	Whitethroat	WHITE	121	90	6202
Stock Dove	STODO	265	383	8967	Garden Warbler	GARWA	35	58	2128
Wood Pigeon	WOODP	497	479	27464	Blackcap	BLACA	64	78	3627
Collared Dove	COLDO	138	155	4901	Wood Warbler	WOOWA	32	37	2512
Turtle Dove	TURDO	6	9	2029	Chiffchaff	CHIFF	99	112	3270
Ring-necked Parakeet	RINPA	1		49	Willow Warbler	WILWA	126	120	12988
Cuckoo	CUCKO	15	6	2161	Goldcrest	GOLDC	10	5	832
Snowy Owl	SNOOW			2	Firecrest	FIREC			9
Barn Owl	BAROW	368	547	6512	Spotted Flycatcher	SPOFL	138	159	11090
Little Owl	LITOW	35	78	2113	Pied Flycatcher	PIEFL	481	977	40589
Tawny Owl	TAWOW	262	344	10077	Bearded Tit	BEATI	12	10	293
Long-eared Owl	LOEOW	7	6	743	Long-tailed Tit	LOTTI	104	158	5921
Short-eared Owl	SHEOW	2	4	393	Marsh Tit	MARTI	28	22	1495
Nightjar	NIJAR	43	36	1678	Willow Tit	WILTI	6	7	482
Swift	SWIFT	39	42	1858	Crested Tit	CRETI	2	1	438
Kingfisher	KINGF	6	14	664	Coal Tit	COATI	106	94	5492
Hoopoe	HOOP0			1	Blue Tit	BLUTI	2649	3465	98023
Wryneck	WRYNE			23	Great Tit	GRETI	2111	2796	63629
Green Woodpecker	GREWO	16	16	423	Nuthatch	NUTHA	106	122	3721
Gt. Spotted Woodpecker	GRSWO	41	57	1427	Treecreeper	TREEC	28	31	2547
Les. Spotted Woodpecker	LESWO	3	6	207	Short-toed Treecreeper	SHTTR			1
Woodlark	WOODL	46	66	1503	Golden Oriole	GOLOR			41
Skylark	SKYLA	33	43	8117	Red-backed Shrike	REBSH			256
Sand Martin	SANMA	274	17	2343	Jay	JAY..	13	16	1574
Swallow	SWALL	1251	1645	57866	Magpie	MAGPI	116	96	7963
House Martin	HOUMA	171	168	9696	Chough	CHOUG	18	43	786
Tree Pipit	TREPI	62	39	1845	Jackdaw	JACKD	134	208	7598
Meadow Pipit	MEAPI	49	63	9572	Rook	ROOK.	423	335	14619
Rock Pipit	ROCPI	7	24	825	Carrion Crow	CROW.	80	131	7685
Yellow Wagtail	YELWA	29	5	1031	Hooded Crow	HOOCR	2	9	1140
Grey Wagtail	GREWA	43	127	5975	Raven	RAVEN	45	186	3940
Pied Wagtail	PIEWA	108	153	9912	Starling	STARL	235	270	16314
Dipper	DIPPE	40	164	9975	House Sparrow	HOUSP	172	239	13328
Wren	WREN.	256	245	15854	Tree Sparrow	TRESP	691	1177	19626
Dunnoek	DUNNO	275	245	30524	Scarlet Rosefinch	SCARO			1
Robin	ROBIN	396	333	21212	Chaffinch	CHAFF	293	367	22983
Nightingale	NIGAL	2	5	472	Brambling	BRAMB			2
Bluethroat	BLUTH			1	Serin	SERIN			1
Black Redstart	BLARE	3	4	173	Greenfinch	GREFI	180	233	14410
Redstart	REDST	40	99	6594	Goldfinch	GOLDF	46	80	3305
Whinchat	WHINC	40	36	2421	Siskin	SISKI	1		86
Stonechat	STOCH	67	158	3538	Linnet	LINNE	150	250	28053
Wheatear	WHEAT	28	45	3879	Twite	TWITE	2	9	872
Ring Ouzel	RINOOU	2	6	1764	Redpoll	REDPO	17	4	1345
Blackbird	BLABI	1142	1224	131332	Parrot Crossbill	PARCR			4
Fieldfare	FIELD			7	Common/Scottish Crossbill	CROSS			154
Song Thrush	SONTH	548	660	74504	Bullfinch	BULLF	80	94	5837
Redwing	REDWI		1	120	Hawfinch	HAWFI	1	4	198
Mistle Thrush	MISTH	68	76	8054	Snow Bunting	SNOBU			202
Cetti's Warbler	CETWA		2	30	Yellowhammer	YELHA	66	84	7663
Grasshopper Warbler	GRAWA	8	4	388	Cirl Bunting	CIRBU			255
Savi's Warbler	SAVWA			4	Reed Bunting	REEBU	50	70	7993
Sedge Warbler	SEDWA	49	53	4859	Corn Bunting	CORBU	17	2	965
Marsh Warbler	MARWA			168					
Reed Warbler	REEWA	421	576	15515					
					NUMBER OF CARDS		22,402	27,636	1,258,116

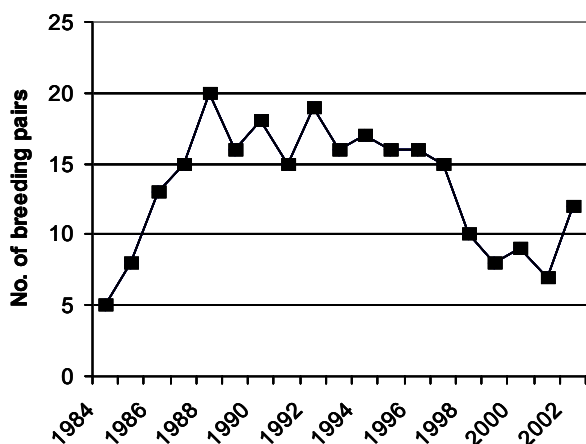
Species in bold are used within the BTO's Integrated Population Monitoring Programme. We would be particularly pleased to receive more cards for those species marked with • (currently less than 150 records received each year).

Specific studies 2002

A brief selection of your comments on last year's breeding season extracted from correspondence with the Nest Records Unit.

The access restrictions imposed in 2001 to limit the spread of Foot & Mouth Disease also restricted the amount of nest recording that was possible. Many recorders began the 2002 season eager to make up for lost time. But was it going to be a productive season? As usual, the answer seemed to depend on what species you were covering and where you were in the country.

Several ringers and nest recorders have reported recent declines in breeding populations of Pied Flycatcher (*Ringer's Bulletin*, Autumn 1999; *RAS News*, March 2001). Tony Jenkins, based in Carmarthenshire, reported that a recent trends towards reduced nestbox occupancy rates in his population showed signs of reversal in 2002 (see graph below). Gordon Vaughan noted that 2002 was also a good year for his Pied Flycatcher population in Devon, continuing an increase in occupancy rates that began in 1997 - in fact, 2002 witnessed the highest annual total of fledglings his birds had produced since 1993. Additional evidence for increased productivity was provided by the English Nature Devon team, who recorded their highest number of fledglings since 1997.



Golden Grove Country Park, Llandeilo. Pied Flycatcher nestbox occupancy, 1984-2002. Graph: Tony Jenkins

Bryan Nelson's Blue Tit population in Cambridgeshire fared well in 2002, producing the second highest number of fledglings since monitoring began in 1990. However, although the number of Great Tit breeding was fairly high, fledging success was the worst since he started recording their productivity in 1992. Conversely, Gordon Vaughan and the English Nature Devon team reported that Great Tit had a particularly productive season, with Blue Tit and Nuthatch also faring well. Box occupancy of a single House Sparrow terrace monitored by Tony Jenkins in Carmarthenshire was impressive too, with 20 of the 24 boxes used for a total of 33 nesting attempts.

While cavity nesters appeared to be doing well overall, the opposite was true for some open-nesting species and hirundines. Max Meadows in Essex reported declines in the number of nests he was able to locate for a variety of migrant insectivores including Swallow, House Martin, Sedge Warbler, Whitethroat, Chiffchaff, Willow Warbler and Spotted Flycatcher, although Jay, Woodpigeons, thrushes and woodpeckers appeared to be increasing in number.

The 2002 breeding season seems to have been a successful one for both migrant and resident open-nesters breeding at John Little's site in Surrey. Numbers of Tree Pipit, Whitethroat, Willow Warbler, Goldcrest, Stonechat, Redstart, Yellowhammer, Reed Bunting, Linnets and Chaffinch were all high. However, the number of Skylarks had fallen from the previous year.

The Grampian Ringing Group Tawny Owl report produced by John Massie and Robbie Walker showed that breeding was late, with the majority of individuals laying in the first week of April. In addition, the numbers of breeding pairs were down on previous years. Colin Hull in Hertfordshire noted that 2002 was also a poor year for Moorhens due to a high incidence of failure for early nests. Robin Harvey and Mark Brown reported that breeding success on the Farne Islands had been reasonable for Fulmar, Cormorant, Eider, Ringed Plover, Black-headed Gull, Kittiwake, Sandwich Tern, Arctic Tern, and Razorbill, but mixed for Shag, Oystercatcher and Puffin and poor for Common Tern. Julian Greenwood's Study of Black Guillemot in Bangor showed that, although breeding numbers were relatively high, the number of young fledged in 2002 was substantially lower than in previous years.

Nest failure can occur for a variety of reasons. Douglas Trigg in Oban noted that an increase in Pine Marten abundance has resulted in widespread destruction of nestboxes. These mustelids tear them apart in search of food. Gordon Vaughan reported that Dormice were stealing eggs at his site in Devon. Bumblebees also seemed to be particularly prevalent there in 2002. Possibly the most bizarre report was from Malcolm Calvert in Cheshire, who found a Chaffinch nest built in a reed bed in true *Acrocephalus* style. The remains of one chick was found in the middle of the reed bed. Doubts were expressed that the other nestlings would have made it to dry ground on their first flight.

Top Nest Recorders in 2002

National Trust Farne Islands NTF (2,281 records) - J E A Brook & R C Cooke B&C (1,931) - Merseyside Ringing Group MRG (930) - David Warden DWA (790) - Bob Danson RD (782) - Birklands RG BRG (668) - John H Wood JOHW (402) - Ron Louch & David Thompson L/T (378) - Bob Swann RLS (369) - Bill Grainger *et al.* JR (357) - Ivan Proctor IPR (351) - Geoff Myers GWM (338) - Max Meadows MOM (333) - Peter Roe PER (306) - Bob Stevens RS (260) - Matt Prior MGPR (255) - John B Kemp (WWT) WWTW (253) - John & Chas Holt J&CH (250) - Bristol Naturalists' Society BNS (244) - East Dales RG EDRG (240) - Dave Francis DMF (232) - Rye Meads RG RMRG (229) - John Roberts JALR (228) - Robin Ward (Imber Conservation Group) ROW (225) - Lancs. & District Birdwatching Society LDBW (220) - Gordon Vaughan GAV (219) - Paul Holness PRH (219) - David Oliver DWO (211) - John Lloyd JVL (207) - Nigel Lewis NJL (202) - Sorby Breck RG SOBG (201) - Clyde RG CRG (200) - Dave Hazard DAVH (200) - Alan Old ABO (190) - Calf of Man Bird Obs. COM (185) - Douglas Trigg DOTR (177) - Peter Johnson PEJJ (177) - Isabel, Philip & David Hildred IPDH (172) - Souder RG SDRG (171) - Mick Cook & Mike Netherwood MCMN (170) - Northumbria RG NRG (170) - D A Myers DAM (161) - Peter Robinson PJR (161) - E D Cameron EDC (160) - Mel Preston MAXP (156) - Jerry Lewis & Steve Roberts JMSL/L&R (212) - Mike Carrier MICA (154) - Julian Driver JDR (149) - P Page *et al.* (English Nature Devon Team) P/R (142) - Jim Hodson JMH (141) - Rod Smith ROS (138) - Manx RG MANX (137) - Michael D Russell MDR (137) - Harold Dean HD (130) - Garth Lowe GAL (126) - Neil Winter NEW (125) - Nigel Westwood NJW (125) - John Callion JCA (124) - Richard Jenkins RAJ (124) - Ronald Turkington RHT (120) - Ian Spence IMS (119) - Peter Goodlad PG (111) - Anne Goodall AEG (110) - Rob Husbands ROXH (109) - Neil Brown NGB (106) - Nicholas Watts PNW (106) - North West Norfolk RG NWNR (105) - Derek Holman DHOL (104) - Gordano Valley RG GVRG (104) - Mike Rogers MHR (103) - Treswell Wood IPM Group TWIG (101) - Robert Smith (North Solway RG) SMI (100).

How to improve the value of your nest records

A quick guide to some of the more common card errors and how to solve them. These notes are meant to assist and not restrict you, but if you require clarification about any of these points, please refer to the NRS Handbook or contact the Nest Records Officer.

The diagram shows a nest record card with the following fields and callouts:

- Species Code₁**: Points to the 'Species (Code)' field.
- County Code₇**: Points to the 'County/Region Code' field.
- NRS Observer Code₂**: Points to the 'Observer Code' field.
- Grid Reference₈**: Points to the 'Grid Reference' field.
- Visit Dates₃**: Points to the 'Day', 'Mth', and 'Hour' columns.
- Ring Numbers₉**: Points to the 'Ring No.' and 'Young Ring Numbers' fields.
- Egg & Young Counts₄**: Points to the 'Number of' columns (Live Eggs, Dead Eggs, Live Young, Dead Young).
- Status Codes₅**: Points to the 'Status Codes' column.
- Comments₆**: Points to the 'COMMENTS' field.
- Returning Cards₁₀**: Points to the bottom of the card with the text 'PLEASE RECORD FURTHER VISITS ON AN EXTRA CARD STAPLED TO THIS ONE!'.

1 Species Code

Use one of the five-letter species codes given in the *NRS Handbook* or the full species name.

2 NRS Observer Code

Only one NRS Observer Code should be entered on each card. Please contact the Nest Records Officer if you have not been allocated a personal code or one for your group. As a last resort you can submit your cards without a code, but be sure to include your name and address details.

3 Visit dates

Please record a date for each line where you have recorded a Status Code. We recommend that observers try to visit active nests at least twice, as this makes the record much more useful than a single visit card.

4 Eggs & young counts

If you are uncertain how many eggs or young are in the nest use '?'. Use '2+' to indicate 'at least two' and '(2)' for 'about two'.

5 Status Codes

Please record **both** letters of the 'official' Status Codes in the same column. Please try to record the most important codes first. We are only interested in 'active nests' so please do not submit cards for nests that failed before any eggs were laid.

6 Comments

These comments are useful for specific analyses but try to ensure that you have selected the appropriate 'Status Code'.

7 County Code

This consists of four letters starting with GB or ER. Please continue to use the county code given in the handbook, even if the name of your county has changed.

8 Grid reference

Record two letters followed by six numbers (eg SD123456). Use dashes if recording four figure (SD12-45-) or two figure (SD1-4-) grid references. (For Eire and N Ireland use the single letter and a hyphen, eg S-123456)

9 Ring numbers

If you have used the Status Code 'YR' please record the ring numbers of the chicks here.

10 Returning cards

If at all possible, please return your cards to us preferably before Christmas or by 1 February at the latest. Please put 'Nest Records Unit' on the envelope. We can process your returns much quicker if you also include a NRS Summary Form (available on request).

Second/third/fourth broods should be recorded on a fresh card and stapled or paper-clipped to the first.

A substantial clutch of papers

As the Nest Record Scheme enters its 65th year of data collection, Dave Leech, the new Head of Nest Records, looks back at some of the contributions that nest recorders have made to bird conservation in the UK.

The fact that the Nest Record Scheme is mentioned in over 270 separate articles, bird reports and books produced since the BTO began collating productivity data in 1939, is an impressive testament to the hard work and dedication of nest recorders past and present. The range of topics covered by these publications is as impressive as their number, and it continues to expand as novel threats to the survival of bird populations continue to arise.

The first published study to use NRS data was a now classic investigation of seasonal, geographical and annual variation in clutch size, the timing of breeding and hatching success in the Robin, undertaken by the famous David Lack in 1946. Such descriptive studies of breeding parameters have subsequently been produced for more than 60 species, both passerine and non-passerine, in over 80 published articles. Comparing current levels of productivity with the values presented in these publications allows potentially detrimental trends in breeding success over time to be identified and investigated.

Three processes control the size of a population: survival, movements and productivity. By contrasting variation in survival and immigration/emigration rates, as measured by the Ringing Scheme, with variation in breeding success, as measured by the NRS, it is possible to determine which of these processes is responsible for driving observed population trends.

Intensive agriculture – extensive declines

Many granivorous farmland bird species have been decreasing in number since the mid-1960s. An investigation by Gavin Siriwardena *et al.* in 2000 focused on 12 of these species, and concluded that only in the case of the Linnet could a reduction in productivity, specifically a decrease in nest survival rates during incubation, have caused the observed population decline. In fact, many of the species studied actually demonstrated increased breeding success as numbers fell, a relationship that was also noted by O'Connor studying Great Tit, Wren and Yellowhammer in the 1970s and 1980s, by Chamberlain and Crick studying Skylark in 1999 and by Peach studying Reed Bunting in 1999. This apparently counter-intuitive phenomenon is probably caused by a reduction in competition for resources between individuals as the size of the population decreases, leading to increased success for those individuals remaining. Alternatively, the remaining individuals may be concentrated in the best habitats once the population has declined. The decrease in Linnet productivity, and indeed the decline in survival rates of the other species investigated, may have been caused by food shortages as fields that once contained stubbles are increasingly used to grow winter cereals. Modern farming techniques also ensure that less grain is spilt during harvesting and the increased use of herbicides reduces the availability of weed seeds in arable areas.

Thin on the ground

With agricultural intensification came development of new agrochemicals. The late 1940s witnessed the introduction of organochlorine pesticides (DDT, BHC), with the even more toxic

cyclodienes (aldrin, dieldrin and heptachlor) arriving on the market in the mid-1950s. The increasing use of both types of compound coincided with a sharp rise in the incidence of egg breakage and embryo deaths as evidenced by nest record studies of Merlin by Newton and Crick, Sparrowhawk by Newton and Stock Dove by O'Connor and Mead. Further research demonstrated that high concentrations of these pesticides in the diet led to eggshell thinning, with eggs becoming easily damaged in the nest. Fortunately, the withdrawal of these chemicals during the 1970s and 1980s saw a significant recovery in the breeding success of these species.

Walking on eggshells

Changing agricultural practices have also had a negative impact on some species breeding in pastoral habitats. Increased sheep stocking densities on grassland in Northwest England and Wales is thought to be a major factor in the decline of Golden Plover nesting success identified by Crick in 1992. A study by Shrubbs in 1990 found that, as stocking densities increased, so too did the incidence of nest trampling and desertion of Lapwing nests, with 10% of nests deserted in 1985 compared with 5% in 1962.



Increased stocking rates have led to a higher incidence of nest desertion and nest trampling in Lapwing and Golden Plover. Photo: George Higginbotham.

Home or away

The explanations for population declines may not always be found on the breeding grounds. In a paper published in 1992, Baillie and Peach investigated the processes responsible for variation in the abundance of a range of migrant species that winter in Africa, including Blackcap, Whitethroat, Sedge Warbler and Swallow. Their analyses demonstrated that, while the relationship between population size and breeding success was poor, survival rates appeared to increase as abundance increased and decrease as numbers fell. A previous analysis by Peach *et al.* in 1991 indicated that Sedge Warbler annual survival rates were correlated with rainfall on the wintering grounds, probably due to the decreased availability of insect food in dry years. This is likely to be the case for the other migrant warbler species studied by Baillie and Peach as they are all insectivorous.



Fluctuations in Willow Warbler abundance are not due to variation in breeding success but to survival rates over the winter period. Photo: Tommy Holden.

Timing is everything

NRS data can also be used to investigate changes in the timing of reproduction. Humphrey Crick *et al.* studied clutch initiation dates over the period 1971-95 for a suite of 65 species and found that 20 species had advanced their laying date significantly. On average these species were laying 8.8 days earlier, matching the advancement of deciduous vegetation coming into leaf in the Northern Hemisphere over the same period. This trend towards earlier laying was identified across a broad range of species including waders, resident and migrant insectivores, corvids and seed-eaters. Further work by Crick and Sparks in 1999

demonstrated that the laying dates of 31 of the 36 species studied were significantly related to either mean monthly temperatures or rainfall. These results suggest that birds are responding to global warming, producing clutches progressively earlier as temperatures rise. In fact, the earliest Robin and Chaffinch laying dates are currently used by the UK Government as one of the 34 indicators of climate change in the UK.

At first glance, early laying seems to be potentially beneficial, extending the breeding season so that a larger number of repeat broods can be raised and allowing offspring more time to build up fat reserves in preparation for their first winter. However, this is not necessarily the case. Birds time their reproductive attempts such that the nestling period coincides with peak prey availability. However, research on the Great Tit by Visser in the Netherlands and Buse in Oxford has shown that, while the birds are able to advance their laying dates as temperatures rise, their caterpillar prey are able to advance their hatching date still further while also developing at a much faster rate. This reduces the synchrony between nestling demand and food availability, and may have potentially catastrophic effects on breeding success. The situation may be even worse for migrant species as they are constrained from laying earlier by the timing of their arrival on the breeding grounds.

It is vital that we continue to collect high quality data on the breeding success of British birds as without it we are unable to identify the processes responsible for driving population declines in these species. Without this understanding, it would not be possible to identify and combat the cause of such declines. Your records really DO count.

Featured Species: Tree Pipit

Many people will be familiar with the parachuting display flights of the Tree Pipit *Anthus trivialis* in spring. Tree Pipit is a summer visitor to Britain, arriving from late March/early April. The species breeds throughout the country, although there has been a range contraction in southern England and, surprisingly, few occur in Ireland. There were an estimated 120,000 territories in Britain at the time of the 1988-91 Atlas. Niall Burton has been developing an interest in this species over the last few years and here he provides a few tips on how to find the nest.

The species is usually associated with heaths, the upland birch and oak woods of northern and western Britain and the *ffridd* of Wales. However, high densities may also be found in young conifer plantations.

Breeding may occur from the last week of April, although in East Anglia most pairs lay their first clutches in the second week of May (see graph). Many pairs only lay one clutch, although those that have lost their first clutch or brood, or which have had a successful and early first attempt, may lay a second. Clutches typically vary from between three to six eggs, with clutch size declining over the breeding season.

As with other pipits, Tree Pipits nest on the ground, under grass and often with dead bracken or other vegetation also overhanging the nest cup. Nests are often located near to one of the male's favoured song posts. Pairs may be particularly secretive and variable in their behaviour during incubation and finding nests at this stage always presents a challenge. In their book, *A Field Guide to Birds' Nests* (1972), Campbell and Ferguson-Lees detail the most reliable method for finding nests during incubation (summarising the methods previously described by Clive Simson). Just before and during the laying period, pairs feed together close to the nest. When flushed, they fly up to a nearby perch and then drop to the ground again. Nests may be found once incubation has started by tapping out these spots.

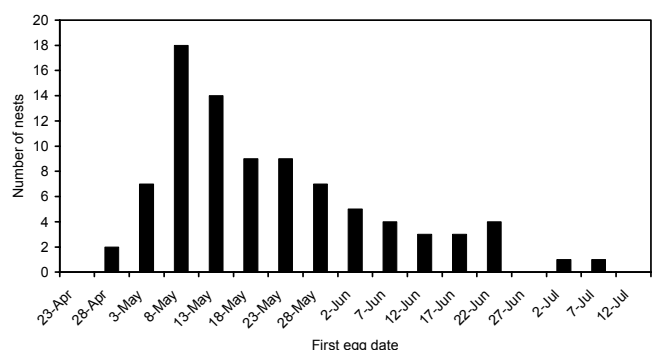
At all times it is important to be able to recognise the species' different calls. Females returning to eggs may 'peep' nervously

and once located can then be watched back. They also often use their 'zeep-zeep' flight call when flying to and from the nest. A male singing with food in its beak is likely to be carrying food to an incubating female. Nests may be more readily found with young, when adults can be followed carrying food, although often they may be more wary at this stage.



Donald Watson

Niall Burton
BTO Habitats Department



The laying season (as indicated by first egg dates) of Tree Pipits in Breckland (East Anglia).

News Roundup

Want to get more from your nest recording?

Have you ever wondered what happens to the chicks from your nests once they've fledged and gone? Do they survive, do they come back? By ringing the chicks, you may be able to start answering these questions. You will find out if they are recaptured by ringers or brought in by the neighbour's cat!

Training to ring only nestlings is a simple process, and you could be ringing on your own within a short space of time. All you need is some time and enthusiasm! If you want to know more, then get in touch with the BTO Ringing Unit and they'll find a ringing trainer in your area.

Contact: Mark Grantham (mark.grantham@bto.org)

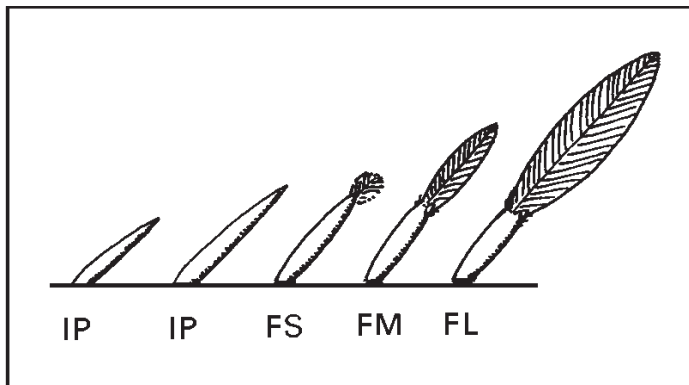


Are your birds doing the same?

Recently a Linnet ringed as a nestling in Sussex was reported in Belgium, a distance of 250 km. Another nestling, a Clwyd-bred Chaffinch, was caught and released by a ringer in the Netherlands, having travelled over 520 km! Linnet photo: BTO Collection

Handbook illustrations

We have discovered that some nest recorders have been sent temporary copies of the *Nest Record Scheme Handbook* that were missing their illustrations. The most important one shows the primary feather growth stages IP, FS, FM and FL (illustration below). If you have a faulty copy and would like a replacement, please contact the Nest Records Officer.



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.

LB or NN?

The Status Code 'LB' should only be used for nidifugous species such as Lapwing and Skylark that leave the nest before being able to fly. 'NN' (a 'Success code') should be used when these birds take their first flight (ie they have 'fledged').



R A Richardson

The oldest nestbox still in use?

Nest recorder David Warden writes: "In 1947, while still at school, I made a nestbox. A pair of Blue Tits used it that year and in 1949 a pair of Great Tits. I moved the box from Hall Green, Birmingham, then to Worthing, Sussex and finally to its present location at Chew Valley Lake, Somerset. It occurs to me that this may be the oldest nestbox still in use."

Can anybody beat this record?!

Insects in nestboxes/nests: information wanted

We have been contacted by a student carrying out research into the insects that have been found in nestboxes and nests. If any nest recorders can help with information please contact: Edie Jolley, 16 Mountfields, Halifax HX3 8SS e-mail: ediejolley@hotmail.com

National Nest Reference Collection

Many nest recorders are already contributing used (finished with) nests to the national collection based at the Hunterian Museum of the University of Glasgow. The collection already contains over 550 nests of 54 species and more are sought. Their 'wish list' includes examples of nests from more unusual species like Hawfinch, Corn Bunting, Woodlark and Nightingale. We know that some nest recorders find nests for these species and might consider collecting them at the end of the season. If you can help, you can obtain further details of what is required from:

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

Cleaning out nestboxes and the Law

Section 1(1)(c) of the Wildlife and Countryside Act 1981 makes 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 new Collins Field Guide



Collins revised their field guide *Bird Nests, Eggs and Nestlings* in 2002. As far as we know, this is the only field guide on nests, eggs and nestlings currently in print. It is certain to be of interest to BTO nest recorders who don't already have a copy of the earlier edition. Well illustrated with artwork, drawings and photographs. It even contains a short introduction to the Nest Record Scheme written by David Glue!

ISBN 0-00-713039-2 Price £19.99

Using mirrors to deter nestbox predators

Nest Recorder John Clarke reports on a novel solution to the common and often very serious problem of nestbox damage caused by Great Spotted Woodpeckers.

"Some years ago I came across a colony of thirty House Martin nests under some eaves. Most strikingly, just below each one was a small piece of mirror. The owner of the house explained that he had once reared an orphaned Great Spotted Woodpecker in a budgerigar cage. As the bird grew he had provided a perch, then a ladder and then a bell - all of which the young bird accepted. However, when he hung a mirror in the cage the woodpecker had gone berserk apparently terrified by its own reflection. Then the owner had problems with GSW preying on his House Martin nests, so he stuck pieces of mirror below each one. The effect was instant, and from then on he had no further instances of nest damage.

"I decided to fix small mirrors to 14 of our nest boxes, siting 12 in three plantations where the worst GSW damage (usually 100% of boxes) had occurred. The other two were sited in gardens. After six months one plantation box and one garden box had been damaged. After eighteen months a further two boxes had been damaged in a second plantation. At least 10 of the nest boxes had been occupied by tits.

To summarise, mirror boxes in one plantation were 100% effective, in the second plantation 75% survived for 18 months; and in the third 50% survived for 18 months. Two of the four damaged boxes were accessed via the side and not by enlarging the entrance hole."

John mentions that the tits don't seem to be put off by the mirrors, "although one did spend long periods doing a budgerigar impression, clearly fascinated by its own reflection!"

Nest Record Milestones Passed in 2002

The 2002 season saw a number of 'milestones' being reached for many species. New to the list during the year was our first card for Red-crested Pochard, recorded by Nicholas Watts (PNW).

Other landmarks reached during 2002 were the following:
100th Water Rail - Lancs & District Birdwatching Society (LDBW)
2,000th Cormorant - Mike Carrier - (MICA)
4,000th Lesser Black-backed Gull - Bristol Naturalists' Society (BNS)
6,000th Little Tern - Dee Estuary RSPB Reserve (GRON)
8,000th Mistle Thrush - Birklands RG (BRG)
8,000th Eider - Calf of Man BO (COM)
10,000th Tawny Owl - John Massie & Robbie Walker (JMA)
10,000th Artic Tern - National Trust Farne Islands (NTF)
11,000th Spotted Flycatcher - John Clarke (JCKE)
14,000th Kittiwake - Peter Robinson (PJR)
15,000th Reed Warbler - David Warden (DWA)
27,000th Woodpigeon - Brook & Cooke - B&C)
28,000th Linnet - Dave Hazard (DAVH)
40,000th Pied Flycatcher - John Lawton Roberts (JALR)
57,000th Swallow - Garth Lowe (GAL)
74,000th Song Thrush - David Oliver (DWO)

Sparrowhawk prey items

Richard Howells, one of our youngest nest recorders, has collected the remains of 75 prey items at a Sparrowhawk nest site he is monitoring in Gwent. These have included Starling, Blackbird, Greenfinch and a juvenile Robin. A couple of bird rings have also been found, one from a Blackbird and the other is a colour ring that has still to be traced.

Richard writes "I also found five Woodpigeon legs and one breast bone with both wings still attached. This proves that the female must have been strong enough to carry a whole pigeon back to the nest. This was probably one of the reasons why all of the seven chicks fledged successfully. Another reason may have been that they were the only pair of Sparrowhawks in the wood, giving them an abundance of food sources."



Female Sparrowhawk with Woodpigeon. Photo: Bill Watkins/BTO Collection. Whilst Sparrowhawks do take Woodpigeons, most prey items are smaller than Blackbird size. Male Sparrowhawks usually do all the hunting until the young are about half-grown, after which the female helps (BWP). Inset: Colour-ringed leg found in Sparrowhawk nest. Photo: Richard Howells.

Dear anonymous nest recorder...

Every year we receive anonymous batches of filled-in nest record cards. They usually arrive loose in envelopes without any indication of where they have come from. We have been able to track down most of them this year. Please remember to include your name and address with any card submissions so that we can send you a receipt and replacement materials. Where possible, please include a Summary Sheet with your cards. If you need one of these, please don't hesitate to ask. Many thanks.

STOP PRESS..STOP PRESS..STOP PRESS

A number of nest recorders have reported that the turn of the year (2002/03) has been exceptional for nesting owls. Second broods of Barn Owls were still in the nest in November and December. Tawny Owls started laying in January.

Species protected under the Wildlife and Countryside Act 1981

The species listed below are protected under the Wildlife and Countryside Act 1981 as amended by the Environmental Protection Act 1990. If you wish to consider visiting the nests of any of these species, write to Jez Blackburn, the Licensing Officer, at the BTO HQ (jez.blackburn@bto.org) for a licence application form. No nest may be visited without prior approval.

The majority of licenses issued during the breeding season are renewals for the same workers who held the appropriate approval during the previous season. Newcomers to the Nest Record Scheme, or recorders who have never 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 Bird Ringer etc, or a letter of support from a study group - relevant to the species application being sought. Please note that applications must be received before the end of February to be given priority; and no renewal can be granted until a report form has been submitted (including nil returns) for the previous season.

List of Schedule 1 species

Avocet	Eagle, White-tailed	Oriole, Golden	Serin
Bee-eater	Falcon, Gyr	Osprey	Shorelark
Bittern	Fieldfare	Owl, Barn	Shrike, Red-backed
Bittern, Little	Firecrest	Owl, Snowy	Spoonbill
Bluethroat	Garganey	Peregrine	Stilt, Black-winged
Brambling	Goldeneye	Petrel, Leach's	Stint, Temminck's
Bunting, Cirl	Godwit, Black-tailed	Phalarope, Red-necked	Swan, Bewick's
Bunting, Lapland	Goose, Greylag	Pintail	Swan, Whooper
Bunting, Snow	Goshawk	Plover, Kentish	Tern, Black
Buzzard, Honey	Grebe, Black-necked	Plover, Little Ringed	Tern, Little
Chough	Grebe, Slavonian	Quail	Tern, Roseate
Corncrake	Greenshank	Redstart, Black	Tit, Bearded
Crake, Spotted	Gull, Little	Redwing	Tit, Crested
Crossbill, (all species)	Gull, Mediterranean	Rosefinch, Scarlet	Treecreeper, Short-toed
Curllew, Stone	Harrier (all species)	Ruff	Warbler, Cetti's
Diver, Black-throated	Heron, Purple	Sandpiper, Green	Warbler, Dartford
Diver, Great Northern	Hobby	Sandpiper, Purple	Warbler, Marsh
Diver, Red-throated	Hoopoe	Sandpiper, Wood	Warbler, Savi's
Dotterel	Kingfisher	Scaup	Whimbrel
Duck, Long-tailed	Kite, Red	Scoter, Common	Woodlark
Eagle, Golden	Merlin	Scoter, Velvet	Wryneck

A rarer breeding species than these may be added to the Schedule 1 list without warning, so if you find one, contact the BTO's Licensing Officer for clearance

Nest Record Scheme contacts

Peter Beaven (Nest Records Officer) - The main point of contact for nest recorders. Peter manages the NRS data archive. He can be contacted at nest.records@bto.org He is also the Coordinator for the Barn Owl Monitoring Programme.

Dr Dave Leech (Head of Nest Record Scheme) - Oversees the NRS and nest record 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 support to the Scheme, typesetting of the *NRS Handbook*, *Nest Record News* and other mailings.



Nest Records Unit, BTO, The Nunnery, Thetford, Norfolk IP24 2PU.

Tel: (01842) 750050, Fax: (01842) 750030,

Email: nest.records@bto.org

Web site: www.bto.org

Registered Charity No. 216652

Researching the wild birds of Britain and Ireland