#### Number 12



April 1996



**British Trust for Ornithology** 

# Nest Record News

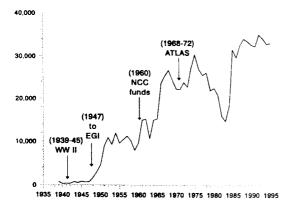
A newsletter for supporters of the NEST RECORD SCHEME, forming part of the BTO's Integrated Population Monitoring programme carried out under contract to the Joint Nature Conservation Committee on behalf of English Nature, Scottish Natural Heritage, the Countryside Council for Wales, and the Department of the Environment for Northern Ireland.

### The millionth massive milestone amassed in 1995!

We were thrilled to receive the Scheme's one millionth Nest Record Card in the 1995 card intake. This was a Pied Wagtail card sent in by Mr Pat French, Highland. Pat says 'The bird called as I got out of the car on my way to check my nestboxes in a nearby wood, and a quick look located the nest'. The nest of five eggs was on a ledge over the doorway of an old croft house shed and five young duly hatched and fledged.

From humble origins in 1939, the Nest Record Scheme was spurred on by famous ornithologists the late Sir Julian Huxley and James Fisher. Quantitative details of the nesting of even common species were surprisingly scanty at that time, the figures on clutch size, incubation and fledging periods in standard bird books often being based on very small or biased series of observations, while the major question of assessing nesting success had been largely ignored.

By the 1950s the Scheme had grown to an average of nearly 10,000 cards completed annually. In 1960, Henry Mayer-Gross was employed as the Scheme's first national organiser and by the late 1960s over 20,000 cards were received per year. This then expanded to over 30,000 from the mid 1980s to the present day. The BTO Nest Record Scheme is now the largest, longest running and most highly computerised scheme of its type in the world. The increasing value of the Scheme as it allows us to understand our breeding birds ever better is due to the fantastic efforts of recorders such as Pat French who send in their highly valued records each year.



By the middle of March, the BTO had been sent 33,035 cards for the 1995 breeding season covering 179 species. A big thank you to all Nest Recorders for all your hard work in 1995!

# **1995 Breeding Season**

#### A year of record-breaking warmth

It is sometimes impossible to determine where Lone nesting season closes and a fresh one begins, 1994 to 1995 providing one of the finest examples in recent times. Temperature plays a key role in influencing the body condition and winter survival of many birds and, working in conjunction with food supplies and day length, determines the time of egg-laying and often breeding success of various species. Unequalled Indian summer weather in November 1994 and October 1995 helped to produce the warmest 12 month period in over three centuries of observations. Overall temperatures exceeded the previous record by half a degree centigrade (almost 1°F), with high values in all four seasons, as talk of global warming intensified. A mild 1994/95 winter, exceptional flooding in January and February, early spring warmth, damaging late May/June frosts, then searing heat and progressive drought throughout late summer and autumn combined to mould a fascinatingly varied and interesting breeding season for Britain's birds. Woodlarks, waders and certain warblers were among the 'winners', certain titmice, hirundines and buntings performing less well, during a year that will linger long in the memories of nest recorders and weather enthusiasts alike.

#### A productive nesting season for many

The relative nesting fortunes of our birds inevitably vary by species and by region. Following the generally ascribed 'below par' 1994 season it was encouraging to receive many more positive views on the recent year, as also reflected by findings from the cards received. BTO nest recorders countrywide variously described aspects of the 1995 nesting season as: 'Easter warmth led to more early thrush, Robin and Dunnock broods fledging than usual' (Hants); 'second ever earliest egg-laying season for my nestbox tits and generally successful despite a damp cool May' (Northants); 'Pied Flycatcher numbers up on 1994 and many second brood Redstarts a bonus' (Stirling); 'huge Grey Squirrel population took their toll of my nestbox owls, Jackdaws and Stock Doves' (Kent); 'prolific year for Woodlarks - now easier to find than Skylarks!' (Sussex); 'a short but fairly good year for my hill waders and passerines' (Peak District); 'an encouraging early season for my buntings and Linnets faded away with small late broods at best' (Devon); 'the falling water levels exposed grebe, Moorhen and some duck nests with many losses to foxes' (Avon); 'moderate year for Peregrine, Osprey and Goshawk hit by collectors and climbers' (Highland); 'forest buzzing with young tits, crests and Willow Warblers a delight' (Dumfriess-shire).

#### Late and early nesting season bonuses

In September and early October 1994 unseasonably cold and wet conditions looked to be drawing the year's nesting events to a suitably disappointing conclusion for most late multibrooded species (see Nest Record News No.11). The year made one last effort to make amends with a glorious, welcome spell of late Indian summer weather in November. As daily temperatures exceeded normal, 3°C by day and 4°C by night during a remarkably frost-free month, biological clocks became confused. Nest recorders noted Feral Pigeon, Collared Dove and House Sparrow laying late clutches and Mallard, Woodpigeon and House Martin with late broods. notably in suburbia. More unusual were those cases of Barn Owl, Stock Dove, Blackbird, Greenfinch and Tree Sparrow raising small late broods in rural situations. Nesting operations eventually came effectively to a temporary conclusion either side of New Year as Britain was battered by a blend of severe gales, blizzards, freezing fog and torrential rains.

The lull in nesting activity was short lived. Mild and exceptionally wet weather in late January and February held sway. By the last week of January, young Blackbirds had hatched in town settings in Southampton (Hants) and Woking (Surrey). Early in February clutches were completed by Collared Doves in Crediton (Devon) and Yeovil (Somerset) and by Tawny Owl near Glossop (Derby), swiftly followed by Mistle Thrush at Bryngwran (Gwynedd) and Great Crested Grebe at Blenheim (Oxon). Grey Heron and Rook displayed much early season activity, with clutches laid in various localities by late February and mid March respectively. These, like other colonial treetop nesting species, tended to escape the heavy early season losses that had been a prominent feature of previous springs.

# Mild wet winter boosts prospects of residents

The very damp start to 1995, together with regular spells of above average temperatures, combined to improve both the over-wintering survival prospects and quality of nesting habitat of many resident birds in Britain. January was the wettest for some 50 years in parts and by February fast rising water tables brought extensive flooding. Severely affected were the south coasts of England and Wales, Cumbria and SE Scotland; though damage was not as extensive as nearby continental NE Europe, notably Holland. Memories of the recent four-year term drought that had downgraded nesting habitat along many water systems in southern Britain faded fast. Spring 1995 brought extensive tracts of high quality riparian habitat. Improved nesting grounds and foraging areas were exploited by a wide range of wetland birds. Black-throated Diver, grebes, Mute Swan, dabbling ducks, plovers, Woodcock, Water Rail, as well as passerines such as Grasshopper Warbler, Grey Wagtail and Reed Bunting benefitted in different parts of the country.



Drawing by R A Richardson.

Woodcock, like certain other waders, found damp wetland habitat in spring 1995 ideal for foraging and nesting. The mild theme that had dominated over so much of winter 1994/95 helped common, scarce and rare species alike. New nesting locations and range extensions were noted for a number of residents and partial migrants vulnerable to severe winter weather, including Barn Owl, Little Grebe, Kingfisher, Black Redstart, Stonechat, Firecrest, Cetti's and Dartford Warblers. Among common species with buoyant populations, Robin, Blackbird and Treecreeper were recorded nesting in 'sub optimal' habitats such as open heath, rank herbage and suburban gardens respectively.

# Warm Easter eggs produce bumper broods

March came in like a lion with short sharp spells of severe frost, even snow blizzards in parts. By mid-month though, glorious spring-like weather returned, heralding overall a warmer, wetter and sunnier spring than normal. As warm, dry, often windless, anticyclonic weather dominated from the spring Equinox through to Easter, and temperatures hovered favourably around the 20°C mark, many healthy resident bird populations displayed the rewards of a fourth successive generally mild winter. The blend of early spring warmth and damp soils gave plentiful supplies of aerial insects and soil invertebrates in most areas. These foods helped to fuel many large clutches. and eventually free-flying broods for an array of species. Lapwing, Robin, Blackbird, Stonechat, Woodlark, Grey Wagtail, Treecreeper, amongst others, were quick to capitalize.

In the clement early spring conditions, mammalian ground and aerial corvid predators were widely considered not to have been such destructive agents in 1995, particularly when compared with the cool, damp previous spring. There were inevitably exceptions as local schemes suffered variously from the activities of Magpie, Weasel, Pine Martin and Grey Squirrel. The prompt start to nesting operations in 1995 provided a healthy springboard for many multibrooded species to slot in quick successive sets of young. Moorhen, Stock Dove, Blackbird, Song Thrush, Robin, Pied Wagtail, and Stonechat were locally highly prolific. Similarly a higher than usual proportion of certain other species consistently raised twin sets of young including Starling, Coal Tit, Chaffinch and Goldfinch. A notable feature of 1995, away from parts of NE Britain where spring was slower to be realised, was the high numbers of young fledging promptly.

# Nestbox-users hit by May frosts and chilly June

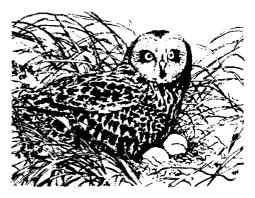
May brought a mixed bag of weather. A dry spell early on in the month of hot air drawn from the Continent enhanced an early return of many migrants. Certain scrub warblers (notably Whitethroat and Blackcap), *Acrocephalus* warblers (initially Sedge Warbler), Sand Martin, Nightingale and Cuckoo were quick to translate favourable nesting potential into results.

Mid-month, from 9th-21st May, winds switched to flow consistently from the northern sector, bringing some damaging frosts on several nights. Key invertebrate food supplies, including defoliating caterpillars, were severely reduced as foliage in many regions was badly scorched. Subsequently, nestbox scheme operator's comments vary widely on the season overall, from 'wonderful', 'moderate' to 'disastrous year'. Certainly, regional location and aspects of local topography, including altitude and aspect played a greater role in governing relative success for titmice, flycatchers and others, than in most years. After a prompt start to nest-building and often egglaying by Blue and Great Tit, operations tended to stutter along, with addled eggs, partial and complete brood losses all frequent features. The situation was compounded by low temperatures during a cold, sunless first half to June. Nestbox schemes in western sites, including the West Country, Wales, Cumbria and southern Scotland generally enjoyed better success. Pied Flycatchers and Redstarts eventually reared moderate to large broods after protracted fledging periods that coincided with warmer conditions.

#### Raptors and owls enjoy mixed fortunes

Dry, warm, settled anticyclonic conditions in midsummer boosted further the fortunes of many recovering raptor populations. Buzzard successfully re-occupied further pre-pesticide sites in eastern Scotland and England. Marsh Harrier colonized new localities in western Britain in dramatic style, the latter now summering in Ireland. Montagu's Harrier returned to nest successfully on former heathland habitat (in addition to 'new-found' farmland niches). Sparrowhawk and Hobby generally enjoyed a prolific if prolonged season. For the slowly expanding Scottish population of Ospreys, 143 fledged young from 97 pairs represented a mediocre return. Sadly, Osprey along with Peregrine, Hen Harrier, Merlin and Goshawk, variously lost clutches or young to collectors, falconers or through disturbance from climbers. The encouraging Red Kite reintroduction programme gathered momentum with second generation young breeding. The Sea Eagle expansion story is a slower affair. To add raptorial spice, a male Pallid Harrier paired with a female Hen Harrier on mainland Orkney but sadly the resulting clutch was deserted.

Owl fortunes were generally less than satisfactory. After much early promise, vole populations dipped in key study sites in northern Britain. Many Tawny Owls 'took a year out' or raised small broods, often singletons. Mobile, nomadic mid-summer Short-eared Owls reflected a similar story in parts. Southern sites tended to be more productive. Barn Owl continued to fly the flag with new sites taken, and moderate broods raised widely, including late second broods in places.



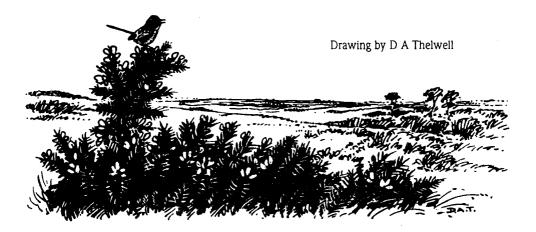
Drawing by Ian Willis.

Short-eared Owls failed to nest, or raised small broods, as vole numbers crashed in parts of northern Britain.

# Searing heat and drought hits habitats and nests alike

Summer proper arrived over the third week of June as temperatures climbed steadily to reach 25°C across the country. This was the prelude to a remarkably dry and consistently warm, often hot and humid spell of spectacular weather that transformed the nature of the breeding season. Initially the heat helped a wide range of species from farmland waders, gamebirds, hirundines, certain finches and buntings, also woodland doves, thrushes, certain warblers, plus heath-dwelling pipits, chats, Nightjar and Woodlark to raise successive broods. All was not rosy. As temperatures countrywide often topped 30°C during July and August, nest recorders noted some species (including Blackbird, Linnet, Dipper) drawing operations to an early conclusion, and others raising small late broods (including Swallow, Yellowhammer, Tree Sparrow). Falling water levels along streams and lake margins led to increasingly exposed and vulnerable nests of diving duck, Moorhen, Coot, Dipper, wagtails and Acrocephalus warblers, with some extensive local predation a result. In the arid hot conditions, premature leaf fall, sub-standard nest construction and declining soil and certain aerial insect food supplies led to further instances of broods lost to mammalian predators, and cases of moribund dehydrated and over-heating small young.

By the middle of August the British countryside was tinder dry. Serious fires affected fragments of wood, heath and moor from east Devon, the Malvern Hills, New Forest, and Sherwood Forest north to Inverness-shire. Nesting grounds were lost for flagship species such as Dartford Warbler, Nightjar, Black Grouse and Merlin, together with associated bird communities. Relieving rains arrived early in September but the 1995 season had one more throw of the dice. October brought further unseasonably warm conditions and a late flourish of Woodpigeon, Stock Dove and Feral Pigeon nests, alongside unexpected Greenfinch, Bullfinch and Barn Owl attempts, concluding a remarkable twelve month period.



In the searing August heat, tinder dry heaths caught fire and patches of nesting habitat for species such as the Dartford Warbler were destroyed.

# 1995 Card Intake - Sample Highlights

A great strength of the Nest Record Scheme comes from the wide national coverage that is achieved each year. In almost all parts of the country there are birdwatchers who fill in just a handful of detailed cards for nests found on their local 'patch'. Then there are others who are able to spend more time, sometimes concentrating on a particular species or travelling widely to find nests.

This year we received cards from 450 individuals and 79 groups. Those birdwatchers operating through the 23 local bird clubs and schools, 30 ringing groups and bird observatories, or the 26 National, County, or RSPB Nature Reserves and Forestry Commission woodlands all had the advantages of being able to exchange ideas, help with co-operative projects, and also help reduce the BTO's time with administration, thereby increasing time available for data analysis.

The list that follows shows the total Nest Record Cards each recorder or group sent to the BTO (where it exceeded 100), preceded by the number that were for nests visited more than once (eg 82/109 means that 82 of the 109 cards sent were multi-visit nest histories). Single-visit cards have limited usefulness, primarily helping to illustrate habitats and nest sites: relatively few reveal other information about breeding biology, except when a nest is found at egg-laving, hatching or fledging. Multi-visit cards are much more valuable, because even just two visits allow the calculation of the survival rate of a nest. They also show whether egg-laying has finished and allow a more accurate calculation to be made of the first egg-laying date - all important facts.

W D Allen (Shrops) 161/161 inc. 2 Quail, 10 House Martin; T M Allinson (Co Durham) 136/142 inc. 38 Lapwing, 18 Snipe; D S C Arthur (Tayside) 103/121 inc. 37 Swaliow, 22 Ring Ouzel; Barrow Gurney Ringing Group (per T W G Lewis, Avon) 112/114 inc. 54 Blue Tit, 30 Great Tit; Beddington Farm Bird Club (per M Cook & M Netherwood, London) 99/101 inc. 91 Tree Sparrow; Birklands Ringing Group (per M A Dobb, Notts) 116/116 inc. 16 Dunnock, 19 Chaffinch; J Bishop (Isle of Man) 160/355 inc. 199 Herring Guil, 10 Razorbill; DJ Bowker (Lancs) 111/116 inc. 89 Swallow, 16 Dipper; Dr K B Briggs (Hants) 354/366 inc. 10 Goosander, 70 Coot; Bristo1 Naturalists' Society (per P J Chadwick, Avon) 248/328 inc. 36 Willow Warbler, 41 Yellowhammer; J E A Brook, R C Cooke & K C Chedgzoy (Warks) 1363/1523 inc. 17 Pheasant, 27 Wren, 43 Chaffinch; J Callion (Cumbria) 158/176 inc. 137 Stonechat, 10 Sedge Warbler; J E S Cooper & R F Sanderson (Sussex) 102/152 inc. 39 Canada Geese, 12 Redstart; R E Danson (Lancs) 715/718 inc. 14 Little Owl, 90 Swallow, 85 Tree Sparrow; H Dean (Cumbria) 98/111 inc. 9 Tawny Owl, 44 Pied Flycatcher; SJ Denny (Suffolk) 114/125 inc. 28 Sandwich Tern, 60 Common Tem: R A Denver (Surrey) 75/103 inc. 4 Mandarin, 19 Stock Dove; A Dixon (Tyne & Wear) 126/135 inc. 77 Lapwing, 33 Raven; J Driver (Gwynedd) 55/104 inc. 43 Carrion Crow, 10 Raven; C & R du Feu (Notts) 150/151 inc. 17 Wren, 4 Marsh Tit: R Duncan & A Pout (Grampian) 127/130 inc. 17 Skylark. 71 Linnet; Dursley Bird Watching & Preservation Society (per B M Wherrett, Glos) 107/107 inc. 3 Mandarin, 34 Great Tit; Forest Enterprise North Scotland Region (per M Canham) 434/442 inc. 16 Kestrel, 36 Tawny Owl; Forest Enterprise South Scotland Region (per G Shaw) 193/237 inc. 46 Barn Owl, 17 Pied Wagtail; P French (Highland) 420/ 420 inc. 206 Lapwing, 51 Common Gull; D J Garner (Cambs) 97/111 inc. 14 Reed Warbler, 21 Starling: Grampian Ringing Group (per A Duncan) 104/105 inc. 56 Oystercatcher, 12 Swallow; D Hazard (S Yorks) 159/159 inc. 24 Swallow, 26 Linnet; I, P & D Hildred (Lincs) 142/143 inc. 11 Wren, 14 House Sparrow; P & D Hill (Gtr Manchester) 85/111 inc. 12 Grey Heron, 14 Canada Geese; J & M Hodson (W Yorks) 140/ 147 inc. 3 Common Sandpiper, 9 Greenfinch; D Holman (Northants) 110/120 inc. 20 Sparrowhawk, 7 Hobby; P R Holness (Suffolk) 310/376 inc. 11 Egyptian Geese, 146 Swallow; J C & C A Holt (Sussex) 168/168 inc. 36 Blackbird, 27 Song Thrush; Hughenden Ringing Group (per B Hawes, D Cox & M McOuaid, Bucks) 184/185 inc. 26 Pied Wagtail, 33 Blackbird; M Humphreys (Glam) 163/163 inc. 100 Pied Flycatcher, 6 Nuthatch; P V Irving, J C Warwick & S P Worwood (N Yorks) 97/137 inc. 6 Golden Plover, 18 House Martin; R A Jenkins (Dyfed) 129/129 inc. 23 Pied Flycatcher, 62 Blue Tit; M S Jones (Shrops) 96/149 inc. 9 Reed Warbler, 5 Reed Bunting; J B Kemp (Cambs) 179/179 inc. 24 Snipe, 58 Redshank; R J Lanaway (Sussex) 106/107 inc. 27 Swallow, 12 Pied Wagtail; Llangorse Ringing Group (per J M S Lewis & S J Roberts, Gwent) 2!8/ 241 inc. 37 Dipper, 33 Pied Flycatcher; R J Louch & D Tompson (Oxon) 312/327 inc. 51 Whitethroat, 25 Blackcap; R G Loxton (Kent) 470/470 inc. 118 Blackbird, 60 Song Thrush; F Mawby (Cumbria) 89/105 inc. 13 Pied Flycatcher, 19 Great Tit; R McBeath (Lothian) 196/196 inc. 39 Cormorant, 106 Kittiwake; M O Meadows (Essex) 483/486 inc. 47 Moorhen, 60 Woodpigeon, 36 Magpie; Merseyside Ringing Group (per D Norman, Cheshire, Clwyd & Merseyside: 1549/1839 inc. 163 Black-headed Gull, 24 Swift, 135 Swallow; Montrose Basin Local Nature Reserve (per R Goater, Tayside) 103/103 all Eider; J P Moulton (Anglesey) 65/197 inc. 36 Swallow, 91 Pied Flycatcher; D A Myers (Gtr Man) 208/214 inc. 33 Oystercatcher. 54 Woodpigeon; G W Myers (Cleveland) 268/278 inc. 38 Stock Dove, 8 Willow Warbler: National Trust Farne Islands (per J Walton, Northum) 1753/1753 inc. 305 Shag, 917 Kittiwake, 10 Rock Pipit: National Trust Long Nanny (per M A Freeman, Northum) 467/467 inc. 407 Arctic Tern, 60 Little Tern: Northumbria Ringing Group (per M Holmes) 432/435 inc. 13 Merlin, 43 Dipper; North West Norfolk Ringing Group (per J L Middleton) 109/168 inc. 81 Ringed Plover, 49 Swallow; A B Old (Cumbria) 138/138 inc. 57 Pied Flycatcher, 64 Blue Tit; Orkney Ringing Group (per E R Meek) 143/168 inc. 88

Red-throated Diver, 24 Hen Harrier; A G Page (Hants) 98/108 inc. 12 Sparrowhawk, 30 Woodlark; P Page (Devon) 155 inc. 73 Pied Flycatcher, 64 Blue Tit; Peak District Raptor Monitoring Group (W Yorks) 124/133 inc. 78 Sparrowhawk, 10 Tawny Owl; R H Peart (Dorset) 144/148 inc. 8 Grey Wagtail, 23 Spotted Flycatcher; I Proctor (Glos) 285/286 inc. 93 Pied Flycatcher, 141 Blue Tit; A Ramage (Fife) 104/104 inc. 13 Little Grebe, 18 Sand Martin; J Richardson, R W Grainger, M Lonsdale, N & P Fenwick (Co Durham) 183/714 inc. 46 Moorhen, 13 Meadow Pipit, 28 Chaffinch; P H Ridout (Hants) 148/148 inc. 14 Jackdaw, 19 Corn Bunting; H Robb (Central) 170/176 inc. 41 Redstart, 8 Wood Warbler; J A L Roberts (Clwyd) 188/190 inc. 10 Buzzard, 8 Raven; P Robinson (Isles of Scilly) 224/529 inc. 87 Kittiwake, 50 Song Thrush: T Robinson (Cumbria) 93/112 inc. 35 Pied Flycatcher, 40 Blue Tit; M D Russell (Beds) 120/129 inc. 24 Moorhen, 20 Rook; Salisbury Plain Conservation Group (per R Havden, Wilts) 96/118 inc. 15 Kestrel, 31 Tawny Owl; Sandwich Bay Bird Observatory (per T Bagworth, Kent) 71/106 inc. 31 Cormorant, 6 Tree Sparrow; N J Skinner (Suffolk) 88/107 inc. 22 Kittiwake, 12 Little Tern; Sorby Breck Ringing Group (per G P Mawson, O Biddulph & G Briggs, S Yorks) 390/428 inc. 151 Swallow, 78 Great Tit; Souder Ringing Group (per M J Williams, Derbys) 96/115 inc. 9 Common Tern, 37 Great Tit; R Squires & R J Jones (Powys) 234/236 inc. 42 Lapwing, 70 Pied Flycatcher; North Ronaldsay Bird Observatory (per S Stansfield, Orkney) 99/105 inc. 65 Fulmar, 9 Rock Dove: R I Stevens (Notts) 1053/1346 inc. 27 Little Grebe, 249 Coot, 213 Black-headed Gull; Tain Royal Academy Bird Club (per R L & R Swann, Highland) 368/385 inc. 79 Eider, 35 Buzzard; R Taylor (Cheshire) 510/548 inc. 206 Blackbird, 162 Song Thrush: W Taylor (Grampian) 77/106 inc. 26 Common Gull, 11 Crested Tit; M Thomas (Glam) 285/285 inc. 41 Wren, 32 Song Thrush; J F Thompson (Co Durham) 100/102 inc. 54 Black-headed Gull, 6 Carrion Crow; S J Tyler & F Burge (Gwent) 137/158 inc. 57 Grey Wagtail, 56 Dipper; G A Vaughan (Devon) 156/ 156 inc. 51 Pied Flycatcher, 64 Blue Tit; D Warden (Avon) 481/ 510 inc. 76 Canada Geese, 161 Reed Warbler; E H Webb (Suffolk) 144/145 inc. 24 House Martin, 44 Great Tit; N J Westwood (Cambs) 257/258 inc. 4 Cuckoo, 197 Reed Warbler; S M Wilmer (Lancs) 300/310 inc. 62 Swallow, 14 Willow Warbler.

#### Milestones Passed In 1995

Receiving the 1,000,000 card was, of course, the most exciting milestone attained in 1995 (see front page). However, from the raptor point of view we received the 50th Montagu's Harrier card from A G Page of Forest Enterprises, where it was good to see a return to heather nesting in the New Forest, Hampshire; the 500th Hobby card from D Holman, Northamptonshire, who is specialising in this raptor; and the 2,000th Peregrine card from long-standing contributor W Kennedy, Londonderry. Of the waders, the 100th Red-necked Phalarope card was sent in by M O'Brien of the RSPB (and former co-organiser of the BTO's Wet Meadow Survey), where 1995 saw fine success on Fetlar, Shetland following favourable habitat improvement; and the 2,000th Lapwing card came from S White, Merseyside, the young leaving the nest on the 5 May. The 5,000th Arctic Tern card was from N Littlewood, Northumberland for a pair in a colony of over 1,000 nests where the National Trust have done stalwart work in monitoring the seabirds and adding to BTO's historical nest record files over several decades. Four passerines attaining notable milestones were: Grey Wagtail with the 5,000th card coming from S J Tyler, Gwent; Reed Warbler with the 10,000th card sent in by P Roper, Essex; Pied Flycatcher with the 30,000th card sent in by J A L Roberts, Clwyd; and Linnet with the 25,000th card coming from J Gates, Surrey.

### Have A Go Yourself

Currently there are 59 studies that are using Nest Record Cards, 23 of which are by amateur birdwatchers. Analysing Nest Record Cards is interesting, challenging and rewarding but cannot be undertaken lightly. It takes a good deal of time to pore through the cards, and for species with a reasonable number of records you

really require a computer. The rewards are that you really get to know a particular species very well and you can reveal facts that are new to science. If you would like to analyse the cards for a particular species, contact Humphrey Crick and he will be pleased to give advice on planning, analysis and writing up your studies.

# Totals For Nest Record Scheme From Pre-1994 To 1995

lotais roi	Nest Record our		1005	TOTAL
SPECIES	Pre-94	1994	1995 95	2,102
Red-throated Diver	1,902	105	4	190
Black throated Diver	181	5	102	1,985
Little Grebe	1,801	82	102	1
Pied-billed Grebe	-	1	103	2,983
Great Crested Grebe	2,753	127	-	1
Red-necked Grebe	1	2	2	181
Slavonian Grebe	177	2	2	15
Black-necked Grebe	13	392	109	4,503
Fulmar	4,002	47	· ·	145
Manx Shearwater	98 40			40
Storm Petrel	40	4		7
Leach's Petrel	28		3	31
Gannet	1,435	26	91	1,552
Cormorant	5,440	379	622	6,441
Shag	19	1	-	20
Bittern	1	-	-	4,631
Little Bittern	3,965	351	315	4,051
Grey Heron	5,705	3		4,805
Night Heron	4,456	190	159	4,005
Mute Swan	6	1		, 1
Whooper Swan		•	1	562
Bar-headed Goose	528	20	14	2,712
Greylag Goose	2,192	286	234	2,712
Canada Goose Barnacle Goose	1	1	4	38
Egyptian Goose	17	9	12 11	272
Shelduck	247	14	10	263
Mandarin	235	18	4	161
Wigeon	149	8	12	97
Gadwall	76	9	3	215
Teal	209	3	177	7,580
Mallard	7,187	216		23
Pintail	21	2		9
Garganey	9	5	8	143
Shoveler	130	7	4	122
Pochard	111	29	14	1,076
Tufted Duck	1,033			1
Scaup	1 2,436	92	354	2,882
Eider	2,430		•	40
Common Scoter	118	8	32	158
Goldeneye	234	10	1	245
Red breasted Merganser	215	3	5	223 85
Goosander	72	4	9	23
Ruddy Duck	18	1	4	23
Honey Buzzard	18	1	3	41
Red Kite	23	11	7	1,343
Marsh Harrier	1,243	60	40	1,343
Hen Harrier		•	1	50
Pallid Harrier Montagu's Harrier	47	1	2	417
Goshawk	319	22	76	4,677
Sparrowhawk	4,317	154	206 165	4,355
-	4,015	175	105	439
<b>Buzzard</b> Golden Eagle	427	7	3	44
Osprey	34	7	223	6,082
Kestrel	5,622	237	143	2,475
Merlin	2,066	266	32	526
Hobby	473	21	9 <i>4</i>	

SDECIES	D 04	1004		
SPECIES Peregrine	Pre-94	1994	1995	TOTAL
Red Grouse	1,902	89	76	2,067
_	620	23	22	665
Ptarmigan Black Grouse	134	2	2	138
Capercaillie	57 74	1	2	60
Red-legged Partridge		4	-	78
Chukar	434	7	4	445
Grey Partridge	705	r	1	1
Quail	785 11	5	6 2	796
Pheasant	1,915	30	47	14 1,992
Golden Pheasant	1,913		47	
Lady Amherst's Pheasant	1	3		6
Water Rail	97	•	- 1	1
Corncrake	28	-	1	98
Moorhen	18,389	1	1	30
Coot		504	556	19,449
Oystercatcher	11,961	719	667	13,347
Black-winged Stilt	11,354	660	501	12,515
Avocet	2 505	- 12		2
Stone-curlew	4 <b>3</b> 0	12	•	517
Little Ringed Plover		75		430
Ringed Plover	1,569		42	1,686
Kentish Plover	7,047	368	220	7,635
Dotterel	19 249		•	19
Golden Plover		1		250
Lapwing	767	15	15	797
Temminck's Stint	18,615	836	1,015	20,466
Purple Sandpiper	1	-	•	1
Dunlin	3 499	-	·	3
Ruff	499	4	3	506
Snipe	1,378			4
Woodcock	565	<b>41</b>	59	1,478
Black-tailed Godwit	13	Ŷ	13	587
Whimbrel	60	•	•	13 60
Curlew	2,486	58	59	
Redshank	1,983	50 69	<b>9</b> 6	<b>2,603</b> 2,148
Greenshank	1,903	2	90	2,148
Wood Sandpiper	2	2	1	2
Common Sandpiper	1,272	23	41	1,336
Red-necked Phalarope	71	25	12	1,330
Arctic Skua	291	20	5	318
Great Skua	362	9	6	310
Little Gull	3			3
Black-headed Gull	7,064	946	464	8,474
Mediterranean Gull	3		404	4
Common Gull	3.220	281	229	3,730
Lesser Black-backed Gull	1,072	117	23	1,212
Herring Gull	4,719	354	330	5,403
Great Black-backed Gull	1,683	166	225	2,074
Kittiwake	6,047	897	1,197	8,141
Lesser Crested Tern	3	1	1,177	4
Sandwich Tern	1,679	8	15	1,702
Roseate Tern	606	50	38	694
Common Tern	4,381	172	160	4,713
Arctic Tern	4,118	563	672	5,353
Little Tern	4,170	297	113	4,580
Guillemot	1,092		2	1,094
Razorbill	715	20	33	768
Black Guillemot	1,071	20 90	62	1,223
Puffin	208	53	02	261
	200	10		201

SPECIES	D 04	1004		
Rock Dove	<b>Pre-94</b> 280	1994	1995	TOTAL
Feral Pigeon		33	15	328
Stock Dove	1,515	40	51	1,606
Woodpigeon	<b>5,569</b>	302	323	6,194
Collared Dove	20,664	758	823	22,245
Turtle Dove	3,292	202	180	3,674
Ring-necked Parakeet	1,834	8	20	1,862
Cuckoo	6	1	1	8
Barn Owl	1,926 <b>2,682</b>	22	26	1,974
Snowy Owl	2,082	343	163	3,188
Little Owl	1,476	41		2
Tawny Ow!	6,585		53	1,570
Long-eared Owl	603	333	331	7,249
Short-eared Owl	326	20	20	643
Nightjar	1,204	5	6	337
Swift	998	66	61	1,331
Kingfisher	547	130	166	1,294
Ноорое	1	19	12	578
Wryneck	23		•	1
Green Woodpecker	293			23
Great Spotted Woodpecker	957	8	12	313
Lesser Spotted Woodpecker	156	52	49	1,058
Woodlark	719	2	4	162
Skylark	6,401	81	80	880
Sand Martin		93	102	6,596
Swallow	1,000	37	75	1,112
House Martin	41,528	1,998	1,547	45,073
Tree Pipit	6,792	333	527	7,652
Meadow Pipit	1,493	24	19	1,536
Rock Pipit	8,260	164	190	8,614
Yellow Wagtail	654 917	20	27	701
Grey Wagtail	4,759	11	11	939
Pied Wagtail	7,858	157 298	226	5,142
Dipper	,		278	8,434
Wren	8,019 12,887	269	277	8,565
Dunnock	27,656	369	374	13,630
Robin	17,493	319 434	358	28,333
Nightingale	426	<b>434</b> 2	386	18,313
Bluethroat	420	2	3	431
Black Redstart	130	8	2	1 140
Redstart	5,151	184	191	
Whinchat	1,816	20	24	5,526
Stonechat	2,352	93	180	1,860 2,625
Wheatear	3,033	98 98	100	3,231
Ring Ouzel	1,358	37	45	1,440
Blackbird	117,683	1,595	1,424	120,702
Fieldfare	6	1,575	1,424	7
Song Thrush	68,390	771	708	69,869
Redwing	110	1	700	111
Mistle Thrush	6,906	126	146	7,178
Cetti's Warbler	23	120	140	23
Grasshopper Warbler	332	20	7	359
Savi's Warbler	2	20	/	2
Sedge Warbler	4,083	80	137	4,300
Marsh Warbler	166		157	<b>4,300</b> 166
Reed Warbler	9.635	320	488	10.443
Dartford Warbler	385	30	<b>400</b> 16	431
Lesser Whitethroat	773	8	10	799
Whitethroat	5,186	117	171	5,474
Garden Warbler	1,574	62	57	1,693
	.,			1,073

CDECIEC	Dr. 04	1004	1995	TOTAL
SPECIES	Pre-94	1994		-
Blackcap	2,735	88	94 92	2,917
Wood Warbler	2,067	71		2,230
Chiffchaff	2,167	80	93	2,340
Willow Warbler	11,176	73	221	<b>11,470</b> 747
Goldcrest	719	11	17	/4/ 9
Firecrest	9		201	
Spotted Flycatcher	9,459	245	201	9,905
Pied Flycatcher	27,680	1,769	1,603	31,052
Bearded Tit	55	4	209	59 <b>4,643</b>
Long-tailed Tit	4,170	264		,
Marsh Tit Willow Tit	1,157	45	<b>35</b> 11	<b>1,237</b> 417
	400	6		301
Crested Tit	256	32	13 101	
Coal Tit	4,433	133		4,667
Blue Tit	62,159	3,918	3,681	69,758
Great Tit	38,783	2,592	2,253 <b>88</b>	43,628
Nuthatch	2,546	127	55	2,761
Treecreeper	2,055	50		2,160
Short-toed Treecreeper	1	•	-	1 41
Golden Oriole	41	-	•	260
Red-backed Shrike	260		32	1,400
Jay	1,344	24	216	,
Magpie	6,126	301	14	<b>6,643</b> 598
Chough	565	19	226	
Jackdaw	5,214	305		5,745
Rook	9,049	163	188 197	9,400
Carrion Crow	5,773	315	197	<b>6,285</b>
Hooded Crow	1,034	15		1,059
Raven	2,606	112 433	146 322	2,864
Starling	12,881			13,636
House Sparrow	10,945	143	124	11,212
Tree Sparrow Chaffinch	14,207	374 402	320 474	14,901
	18,742	402	4/4	19,618 2
Brambling Serin	2	•	•	2
	-	170	210	-
Greenfinch Goldfinch	12,674	170 62	210 51	13,054 2,908
Siskin	2,795	02 7	1	· · ·
Linnet	63 <b>24,386</b>	411	410	71 <b>25,207</b>
Twite	<b>24,380</b> 840	411	410	848
Redpoll	1,279	9	2	1,290
Common Crossbill	1,279	4	2	149
Parrot Crossbill	143	4	2	4
Scarlet Rosefinch	4	•	•	4
Bullfinch	5,013	52	57	5,122
Hawfinch	155	<b>52</b> 4	6	165
Snow Bunting	59	4	0	59
Yellowhammer		115	144	6,455
Cirl Bunting	6,196	115	144	251
U U	251 <b>7,294</b>	101	90	7,485
Reed Bunting Corn Bunting		75	60	7,465
Com building	,613	/5	00	/40
GRAND TOTAL	937,625	34,739	33,035	1,005,399

NB A few records for some wildfowl species may relate to feral birds (eg Whooper Swan, Greylag Goose and Mallard).

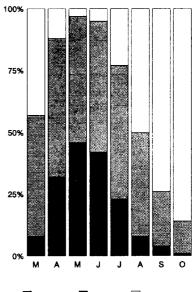
Species highlighted in bold are those used within the BTO's Population Monitoring Programme.

The totals for pre-1994 and 1994 have changed since those printed in *Nest Record News* No. 11 due to the addition of cards received at the BTO after March 1995.

## **Painting The Full Picture**

Test Recorders once again turned up trumps N in 1995 and, shrugging off uncomfortable field conditions at times, stuck to the important task of 'seeing the full season through'. All was not fun. Clambering up wet ladders in cold May days to count moribund broods of nestboxusing Blue Tits and searching beneath corrugated hot tin roofs of farm buildings for Swallow families in the searing heat of August, illustrated the extreme elements encountered in 1995. It is vital that the BTO's Nest Record Scheme collects a representative sample of multi-visit nest cards spanning the full nesting season for those species that are to be monitored with confidence. The Trust extends its grateful thanks to all contributors in 1995 for maintaining the improvement in recording coverage that has been charted in recent years and issues of Nest Record News.

It is coverage of late nesting attempts by three groups of birds that are most likely to 'escape the net': single-brooded species that undertake undetected repeats (eg Little Owl, Blue Tit, Willow Warbler), those that are double-brooded in favourable years (eg Barn Owl, Starling, Chaffinch) and, most importantly, those consistently multibrooded in most seasons (eg grebes, rails, doves, chats, thrushes, wagtails, buntings). All three groups deserve especial attention. The Trust gains coverage of the full season in two ways: (a) via random finds by nest recorders searching across the full season, (b) through the dedicated efforts of 'specialists' who concentrate much of their attention on one or more species. If you cover all successive nesting attempts by a single pair or a discrete population during the course of your 1996 fieldwork do please list the relevant species in the appropriate section on your Summary Sheet. Fresh 'specialists' are always welcome and, if a particular bird catches your eye, please take up the challenge in helping to improve our knowledge. A dozen species currently deserving of 'specialist' attention are Water Rail, Feral Pigeon, Rock Pipit, Yellow Wagtail, Whinchat, Wheatear, Mistle Thrush, Goldcrest, Marsh Tit, Long-tailed Tit, Treecreeper and Redpoll. If you are undecided as to which species to tackle do please choose from the Scheme's list of 'Target Species' in the first instance.



**Observer Effort Graph** 

Most days Few days 🗌 No days

The diagram above illustrates the monthly 'recording effort' expended by 529 observers and groups in 1995. It shows how, during the early spring warmth of late March, following on from another generally mild winter, most observers spent 'some days' checking the early nesting fortunes by grebes. Grey Heron, doves, thrushes, among others. Inevitably, the maximum recording was undertaken during the marvellous trio of mid spring to summer months April, May and June, that are so eagerly awaited but which just seem to flash by. Commendably, some one-half of observers continued to nest find on a few days or more each week during the oppressive heat of July and August. This effort, alongside later fieldwork in September and later Indian summer conditions in October, charted the overall story for multibrooded doves, hirundines, finches, thrushes, buntings, and others, and those unexpected late 'finds' (see season's review) that will enable the BTO to sample the full season accurately.

## **1994 Annual Breeding Report**

We were very pleased to report that several species could be taken off the Nest Record Scheme's "alert list" in 1994's annual monitoring report (*BTO News* 201: 9-11). Particularly good news was that Raven could be down-graded from the high level "Conservation Alert" to the lower level of 'Conservation Vigilance'. At the same time, Mute Swan, Nightjar and Dipper each had such promising trends of breeding performance, often together with increasing populations, that they were removed completely from the alert list.

However, Greenfinch developed a significant trend of increasing nest losses at the incubation stage, leading to increasing overall losses from egglaying to fledging. The Constant Effort Sites Scheme (CES) for ringers also found severe declines in productivity for Greenfinches in 1993 (*BTO News* 191: 6-7) and the BTO's Garden Bird Feeding Survey (GBFS) has recorded smaller feeding flock sizes in recent winters (*BTO News* 200: 5). The Nest Record Scheme, CES and GBFS may be providing an early warning of impending population decline so this species has been placed on the list requiring "Conservation Vigilance".

The 1994 nesting season started early in most regions of the UK. Nesting birds then suffered from poor spring and early summer weather but many benefitted from a late summer heatwave. This mixture of weather conditions was favourable for some species and not for others, thus equal numbers of species had early or late seasons (in terms of the distributions of their laying dates), produced small or large clutch and brood sizes on average, and experienced poor or good nest success. A number of species appeared to be particularly adversely affected by the poor spring weather, including: Hen Harrier, Moorhen, Collared Dove, Tawny Owl, Dunnock, Blackcap, Willow Warbler, Nuthatch and Rook. In contrast, 1994 was a relatively good year for Grey Heron, Peregrine, Merlin, Barn Owl, Mute Swan, Grey Wagtail, Dipper, Mistle Thrush, Robin, Sedge Warbler and Reed Warbler.

The Nest Record Scheme has added three new species to its monitoring list: Stonechat, Jackdaw and Tree Sparrow. Stonechat is poorly monitored by the CBC but the *New Breeding Atlas* 1988-91 showed a substantial decline in breeding range. The analysis of Nest Record Cards from 1962-94 showed that average clutch size has significantly increased in England by about half an egg, but that nest failure rates during the nestling stage decreased in the UK from the 1960s to the 1970s and have then increased again. We will be keeping a close eye on this species over the coming years.

In contrast, the Jackdaw is a species that is widespread and has shown some substantial population increases on farmland CBC plots. In general, like most of the other corvids, the breeding performance of Jackdaws has improved and it is likely that these improvements have benefitted the population.

Tree Sparrow is probably one of the species causing greatest concern at the moment, with steeply declining populations. Our provisional analysis of its Nest Record Cards suggests that there has been little sign of a decline in breeding performance in the species and that the factors affecting Tree Sparrows are likely, therefore, to operate outside of the breeding season.

#### More Records Please

The number of Nest Record Cards for a number of monitoring species have fallen to critically low levels and may severely hinder the BTO's mission to monitor the "health" of their populations. Please can Nest Recorders make extra efforts to record the nests of the following species:

Curlew Nightjar Skylark Wheatear Sedge Warbler Whitethroat Blackcap Wood Warbler Chiffchaff Raven Bullfinch Yellowhammer Reed Bunting Corn Bunting

# **Declining Willow Warblers**

About three million Willow Warblers establish territories in Britain and Ireland each summer, making it the most abundant summer visitor to these islands. The population size of this species has been one of the most stable of all species in recent times, but suddenly, between 1990 and 1992, the Common Birds Census (CBC) measured an unprecedented decline, particularly in southern Britain (down by 47%).

To answer why, the BTO combined results from CBC, Nest Record Scheme and Constant Effort Sites ringing scheme (CES). The analyses showed that while the breeding population in southern Britain had nearly halved, it remained almost unchanged in the north. Analysis of nearly 6000 Nest Record Cards showed that clutch sizes, brood sizes and nest failure rates have remained unchanged over the period of the decline.

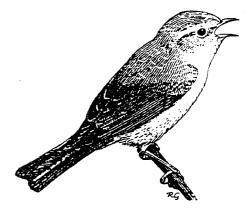
## **Nest Recording Rare Birds**

ompleting Nest Record Cards for scarce and rare birds is an important task but, of necessity, a strictly controlled one. In the recent past, information extracted from historical files of cards at BTO HQ has been used to help frame conservation strategies for many species, ranging from Peregrine and Merlin to Barn Owl and Cirl Bunting. However, our quest to improve our knowledge of the breeding biology of rare birds in Britain to help their long-term welfare must in no way be countered by excessive and potentially damaging attention in the short term. It is essential that one has a Schedule 1 licence when visiting nests of birds protected under the Wildlife and Countryside Act 1981. Observers not covered by a licence are breaking the law and will be prosecuted and fined accordingly for disturbing such species during the nesting season. For details of the species involved and the procedure to secure clearance from the BTO's Licensing Officer, see the back page of this newsletter. If you submit cards for Schedule 1 species with your 1996 batch of cards please give your Schedule 1 licence number in the relevant box on your Summary Sheet. Very many thanks.

Analysis of the survival rates of adult Willow Warblers showed that in northern Britain, survival had remained relatively constant at 39% per year. However, in southern Britain, survival rates crashed from a healthy 45% in 1988 to just 24% in 1992.

This combined (Integrated Population Monitoring) study was able to pinpoint the problem as one of survival. The next stage is to assess whether survival has declined on migration or on the Willow Warbler's wintering grounds in Africa or is due to changes in these islands. The BTO analysis allows conservation bodies to focus their research on the stage of the life-cycle that is really affected.

(For further details contact Humphrey Crick or see *BTO News* 197: 10-11 or *Journal of Applied Statistics* 22: 905-922).



Drawing by Robert Gillmor.

Willow Warbler populations have decreased most markedly in Southern Britain but their breeding performance has changed little.

# Help Eliminate Common Card Errors

The BTO has been delighted by the way in which the now 'not-so-new' white Nest Record Card format has been mastered. Use of the tick box system, activity and outcome codes, and involvement of an optical mark reader, now enables a very rapid feedback of findings, to the benefit of nest recorders, government agencies and birds. Inevitably, a few queries continue to arise. Some of the more frequent problems confronting recorders are listed below. Any help in eliminating these from your 1996 batch of cards would be much appreciated.

#### I. Observer Code

Please use your observer code on all cards. Your code can be found marked in red on all fresh summary sheets. If unknown, please ask the Nest Records Unit at the BTO, or leave blank at the last resort.

#### 2. County/Region Code

Make sure that the relevant four-letter county or region code is marked in the respective box on all cards, eg Shropshire (GBSA), Tayside Region (GBTR), Limerick (ERLK). These codes are common to some other BTO schemes, including the National Ringing Scheme, and are listed in *The Nest Record Scheme Handbook* pages 16-17. Please note that until the Government review of county boundaries has been completed, we would like you to use the same codes as in previous years (eg continue to use GBCV for Cleveland).

#### 3. Grid References

The best method for recording location is to use grid references. When four-figure grid references are used to help safeguard the confidentiality of a nest site (rather than the conventional six-figure format), make sure that the relevant 10km square is marked using **dashes** (see *Handbook* page 17).

#### 4. Counting the Nest Contents

When a simple count of the nest contents is not possible at an active nest please **do not** leave the egg and/or young boxes blank. Use one of the following examples of **approximate** counts, with a comment written alongside to clarify if needed: ? - if the contents cannot be counted with certainty, or if the adult is sitting and you cannot see the contents.

6+ - if there are six or more eggs or young.

(6) - if there are about six eggs or young.

#### 5. Activity Codes

Additional handwritten detail on aspects of behaviour noted per visit can greatly enhance the value of cards. Please, though, make sure that these are also covered by an activity code **if** one applies. All activity and outcome codes comprise **two** characters (see *Handbook* pages 23-25, and the handy blue Coding Card).

#### 6. Nest Site Details

Specific detail on the nature of the nest site discovered is welcome in the Comments Box on the reverse side of the Nest Record Card (see *Handbook* page 21). Artistically minded observers are encouraged to sketch the nature of unusual nesting situations if spare space exists on the front of cards.

#### 7. Recording with Clarity

In an age when speed seems to dominate so many aspects of life, neat and boldly marked cards provide a welcome bonus. This is especially the case, bearing in mind that certain sections of the card are interpreted by an optical mark reader and personnel with limited ornithological knowledge. Please mark all boxes boldly, in **strong black** biro, felt tip or ink pen, (we have found blue is sometimes not dark enough) and use capital letters for all activity and outcome codes and other sections of the card where space allows. Very many thanks.

# **New Projects**

The following projects using Nest Record Card data have been initiated since Nest Record News No. 11.

- a. Keith Bowey Sedge Warbler
- b. Douglas Bowker Dipper in Lancashire
- c. Andrew Brown Nightingale
- d. Alessandro Gimona Rooks in Scotland

- e. Ian Hartley · Cuckoo
- f. Anna Lindholm Cuckoo & Reed Warbler
- g. Peter Marks Nuthatch
- h. Diane Mitchell Little Owl
- i. J. Pithon Ring-necked Parakeet
- j. Rob Purveur Goldcrest
- k. Derek Ratcliffe Raven

# A Prompt and Safe Return of Cards

Your hardwon findings deserve careful handling. Please send all completed Nest Record Cards in a single batch as soon as possible after your fieldwork draws to a close - and by 1st February 1997 at the very latest, so that your results can be included in the yearly totals for Nest Record News and the Annual Report on the 1996 nesting season. Alternatively, cards can be handed directly to staff if you are in the vicinity of The Nunnery, or if you attend BTO conferences, notably those at Swanwick in Derbyshire: the Members' Conference in December 1996 and Ringers' Conference in January 1997. At these gatherings staff will be available to discuss findings, problems

# **Recording Colonial Nesting Birds**

The newly styled **Colony Nest Record Card** is available upon request from the Nest Records Unit at the BTO. It is specifically designed to be used for recording repeated visits to a large number of nests at a single colony of birds. The colony card is suitable for use with seabirds, Grey Heron, House Martin, Sand Martin, Rook and Jackdaw. It will help save observer time and also reduce time in those situations in colonies where disturbance may be considered a constraint (see Appendix 1 and 2 in the *Handbook*). However, where neither of these restrictions apply, fieldworkers are urged to complete standard format individual Nest Record Cards for nests in colonies as these contain extra detail that will be put to greater use by analysts in the future. and relay replacement recording materials if required.

Do ensure that your cards are bound safe and sound. Small batches of less than 20 cards are suitably carried by a strong envelope. Larger batches deserve to be placed in a padded envelope. All card batches should first be bound using rubber bands or string. When wrapping cards in brown paper please ensure that this is not going to be easily ripped by first placing them in a plastic polythene bag or cardboard box for extra protection. All batches of cards should be accompanied by a completed Summary Sheet and the totals double-checked. Many thanks.



Drawing by Mike Toms Dormouse asleep in its nest.

# Dormice

#### **Nestboxes for Dormice and Birds**

en years ago the native Dormouse **I** (*Muscardinus*) was "rediscovered" in the county of Northamptonshire. This proved to be the catalyst for the formation of the Northamptonshire Dormouse Group, which now have nearly 2,000 nesting boxes in 20 woodlands in Northamptonshire and the surrounding counties Bedfordshire, Cambridgeshire of and Leicestershire. Through the Group's efforts the Dormouse has now been rediscovered and newly discovered at several sites and a long-term project is in place to monitor and study this delightful but scarce mammal. As the Dormouse lives at relatively low population densities, is sedentary with a fragmented distribution and entirely dependant on woodlands, these studies are vital in helping to form conservation strategies to help safeguard its future.

The nestboxes used for the Dormice have proved to be equally suitable for many other species of mammals, birds and insects and the group also record as much information as they can concerning these other occupants. There was scope to make better use of the valuable information concerning occupancy of the boxes by species of birds using BTO Nest Record Cards. This however had to be done in such a way as to minimise any potential disturbance to both the Dormice and two bat species, Brown Long-eared and Natterers which regularly use the boxes and are protected species under the Wildlife and Countryside Act.

The strategy used to monitor the nestboxes for Dormice occupancy gave us the answer to this problem. Monthly checks of all nestboxes are made from April through to November inclusive. Nestboxes occupied by birds are recorded as such on the master recording sheet. I then construct my own list of boxes occupied by the birds. This enables me to revisit these specifically identified nestboxes at regular intervals, and to follow events through to their conclusion, and subsequently complete multiple visit Nest Record Cards without having to re-check all of the nestboxes myself. The monthly check of all nestboxes will bring to light any replacement or repeat nesting attempts as the season progresses. This saves a huge amount of time and also means no additional disturbance to nestboxes occupied by other species.

Competition between Dormice and birds for ownership of the nestboxes was suspected. We experimented by pairing twenty boxes to provide two potential nesting sites within very close proximity. To date, six instances of pairs of boxes being successfully occupied at the same time by Dormice and birds have been recorded.

Another point of interest concerns the design of nestbox used. The entrance hole is at the back of the box, facing, but spaced from the tree trunk, and is positioned close to a branch, enabling any potential mammal occupant easier access to the box. The fact that the entrance hole is in most cases considerably less visible has made no difference to birds and bats in terms of occupancy rates, and we have no evidence to date to show that predation of young birds or eggs by Weasels or Wood Mice is any greater with this design.

As an example of bird and mammal interests working hand in hand this project has proved to be a very worthwhile and fruitful effort. I am sure there must be many other individuals or groups of people undertaking studies of either mammals or birds who could work with both interests in mind to make the most of their nestboxes.

Keith Walkling, 3 Windsor Close, Wilbarston, Market Harborough, Leics LE16 8QT Contact Keith or Mike Miley at the Northants Wildlife Trust for advice

#### National Dormouse Monitoring Scheme

If you encounter Dormice during the course of your nest finding activities, or when birdwatching in general, do please notify Pat Morris who coordinates the National Dormouse Scheme and will be pleased to relay relevant forms and details of nestbox design. Please remember that a licence is required to disturb Dormice nests. His address: Dr P Morris, Biology Department, Royal Holloway College, University of London, Englefield Green, Egham, Surrey TW20 OEX.

### Nestboxes

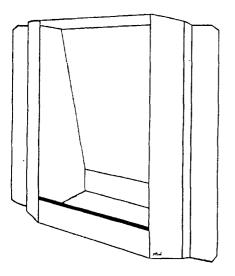
#### The Nestbox Challenge

The BTO and *Bird Watching* magazine have jointly launched a competition to build better nestboxes. New ideas are needed for a future edition of the BTO's *Nestboxes* guide to be written by nest recorder Chris du Feu. Entries can be in the form of new designs, new methods of attachment, new materials or some trick for attracting birds to use them.

First prize will be a pack of three Schwegler woodcrete boxes and for the runner up two wooden boxes from Jamie Wood. The best idea from a BTO member will win a year's subscription to *Bird Watching* and the best idea from a nonmember will be a year's BTO membership. Judging will be by Chris Mead, Chris du Feu and Humphrey Crick.

The original closing date was 31 March 1996, but by popular demand, having received dozens of entries, the closing date is being extended to mid June 1996. So, why not win a prize for your good ideas and send an entry to **Chris Mead** at BTO HQ!

The current version of the BTO Nestboxes



Mike Newman's novel Peregrine nestbox has been designed for mounting on a cooling tower.

Guide No. 23 has evolved from the findings of nestbox enthusiasts over more than 50 years and drawn upon the input of pioneer studies undertaken by celebrities in this field including Bruce Campbell, Edwin Cohen and David Lack, among other BTO members. Today's copy of Nestboxes is widely acclaimed as the definitive guide for making, siting and maintaining 'boxes' of all shapes, sizes and types. The artificially created nesting places covered range from rafts, tunnels, ledges and chimneys, to conventional square 'boxes' for the garden Blue Tit and Robin. It covers alternative nesting places for over 80 species of British birds, from Great Tit and Goldeneve, Spotted Flycatcher and Shelduck, to Redstart and Red-throated Diver. Copies of the highly recommended current format can be obtained from the Sales Department, BTO Headquarters, price £5.95 plus p & p.

If you don't wish to take part in the "Nestbox Challenge" but have some new ideas and findings on nestbox design, please send them to:

Chris du Feu, 66 High Street, Beckingham, Notts DN10 4PF.

#### **Cleaning Out Nestboxes And The Law**

Following Gordon Vaughan's article about cleaning out nestboxes in *Nest Record News* No. 11, Nick Williams, Chief Wildlife Inspector at the Department of the Environment kindly wrote with the following information.

Section 1(1)(c) of the Wildlife and Countryside Act makes it an offence for anyone to take or destroy the egg of any wild bird. The action of cleaning out nestboxes can involve the removal of unhatched or infertile eggs, and thus, could cause a person inadvertently to break the law. However, in recognition of the need to clean out nestboxes annually, the Department issues a General Licence to permit this activity.

In the light of the comments made by Gordon Vaughan, the Department has produced a revised licence (WLF 1000068) which is valid for a longer period than the previous licence. Thus the clearing out of used nestboxes that contain abandoned eggs is now permitted from 1 August (instead of 1 October) to 31 January each year. The eggs must be destroyed promptly and cannot be kept or sold.

# BTO Membership Tops 10,000 Mark

For the sixth consecutive year 1995 marked an increase in BTO membership: it passed through the 10,000 barrier, and is now well on its way to 11,000. Other aspects of BTO membership gave equally encouraging signs in 1995; 93% renewed their membership and 80% are now paying by Direct Debit. We hope that this relatively healthy membership situation reflects both the enjoyment gained from taking part in a wide variety of projects and the tangible benefits gained from membership. BTO surveys increasingly benefit the UK's birds via BTO guided conservation strategies. These are backed by facts gathered by members, that are published in reports, scientific journals and covered by the media.

We thank those nest recorders who took the chance to join the BTO's ranks in 1995. We enclose a fresh membership form with this newsletter. Given a large active force of birdwatchers, and stronger financial footing, the BTO will be able to undertake more research projects along the lines of the self-funded Save our Skylarks launched in 1995. The immediate benefits of BTO membership include the bimonthly magazine BTO News, use of the BTO library, and discount vouchers for books and sound recordings. If you are already a member, please pass the enclosed form to a local birdwatcher who you think might be a potential recruit, whether they may be tempted to join the band of active survey workers or just wish to support financially a worthy bird conservation cause. Thank you,

# The Nest Records Unit

**Humphrey Crick** (Head of Nest Records Unit) is currently analysing the methodology of the Nest Record Scheme, analysing Chiffchaff, Nightjar and finch Nest Record Cards and has responsibility for raptor monitoring within the BTO.

**Caroline Dudley** (Assistant Nest Records Officer) has special responsibility for maintaining the collection of cards and for overseeing their computerisation. She helps with data analysis, answering data requests and edits *Nest Record News*.

**David Glue** (Nest Records Research Officer) is also a keen student of the weather and follows the nesting fortunes of Britain's birds through the seasons, reporting his findings in *BTO News* and elsewhere. He is currently analysing the Nest Record Card historical holdings for Short-eared Owl, Goosander and Red-breasted Merganser. He also maintains the Raptor Research Register, Garden Bird Feeding Survey, and is actively promoting the BTO's fresh format and highly successful Garden BirdWatch project.

**Mike Toms** (Project Barn Owl National Coordinator) is organizing the joint BTO/ Hawk and Owl Trust national survey of Barn Owls that will run until 1997. Part of his work will involve the encouragement of more detailed recording of Barn Owl nests to provide a more systematic monitoring programme for this species.



Woodpigeon, along with certain other species, took advantage of the Indian summer weather in 1995 and were still raising broods in November.

Drawing by D A Thelwell.

# BIRD 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 J K Baker, the Licensing Officer, at the BTO 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, etc, or a letter of support from a study group - relevant to the species application being sought. Please apply to J K Baker at the BTO, Thetford.

#### List of Schedule I species

Avocet Bee-eater Bittern Bittern, Little Bluethroat Brambling Bunting, Cirl Bunting, Lapland Bunting, Snow Buzzard, Honey Chough Corncrake Crake, Spotted Crossbill Curlew, Stone Diver, Black-throated Diver, Great Northern Diver, Red-throated **Dotterel** Duck, Long-tailed Eagle, Golden Eagle, White-tailed Falcon, Gyr Warbler, Marsh Fieldfare Firecrest Garganey Goldeneve

Godwit, Black-tailed Goose, Grevlag Goshawk Grebe, Black-necked Grebe, Slavonian Greenshank Gull, Little Gull, Mediterranean Harrier (all species) Heron, Purple Hobby Hoopoe Kingfisher Kite, Red Merlin Oriole, Golden Osprey Owl. Barn Owl, Snowy Peregrine Petrel. Leach's Phalarope, Red-necked Pintail Plover, Kentish Plover, Little Ringed Quail Redstart, Black Redwing

Rosefinch, Scarlet Ruff Sandpiper, Green Sandpiper, Purple Sandpiper, Wood Scaup Scoter, Common Scoter, Velvet Serin Shorelark Shrike, Red-backed Spoonbill Stilt, Black-winged Stint. Temminck's Swan, Bewick Swan, Whooper Tern. Black Tern, Little Tern, Roseate Tit, Bearded Tit. Crested Treecreeper, Short-toed Warbler. Cetti's Warbler, Dartford Warbler, Savi's Whimbrel Woodlark Wrvneck

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

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