

# Number 10 April 1994

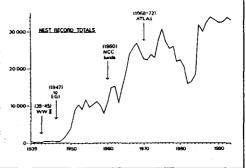


# **Nest Record News**

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 National Heritage and the Countryside Council for Wales, and under a contract from the Department of the Environment for Northern Ireland.

#### HIGHEST TOTAL EVER!

By the end of March this year, the BTO had received 33,343 nest record cards for the 1993 breeding season covering 183 species. This is the highest total ever recorded before at this time of year. A big thank you to all Nest Recorders for working so hard in 1993, particularly when weather conditions were not always favourable.



#### 1993 BREEDING SEASON

#### Introduction

Nature never repeats herself exactly as recent years have shown for Britain's breeding birds. Each season has some fresh aspect to interest birdwatchers, especially when working in a constantly changing countryside. 1991 was a grim year for many breeding birds as unusually cool and often damp weather dominated from April through to July. 1992 provided a welcome contrast as glorious weather during the key months of May and June prompted a very early and generally highly productive season for most of Britain's nesting birds. It was with high hopes that BTO Nest Recorders sallied forth in spring 1993 after another mild winter in Britain and following reports of improved rainfall in the drought-affected wintering grounds in West Africa that are so important to many of our summer visitors. In 1993, another warm spring helped many species towards an early

nesting season and a generally productive one for many thrushes, titmice, corvids and more, but torrential rains dampened the performance of many others including waders, gamebirds, and a range of ground nesting passerines. Most Nest Recorders painted a generally encouraging picture for 1993, with comments countrywide ranging from 'record high nestbox occupancy but success rates somewhat reduced' (Devon); 'mid season rains hit raptors and ground nesting small birds' (New Forest, Hants); 'a second good year but waders washed out' (Powys); 'early season successes but lots predated' (Notts) and 'season improved after late spring snowfall' (Grampian).

# Mild New Year saw early nesting

As hurricane force winds and blizzard conditions battered the west coast of Scotland and oil gushed from the stricken tanker *Braer* that floundered on Shetland, thoughts in northern Britain were on survival and far away from breeding. In southern Britain conditions were far more favourable in the New Year and

mild weather saw Great Crested Grebe hatching young on a London lake in mid January, then later in the month clutches were started by Song Thrush (Devon), Robin (Bucks), Collared Dove (Lancs), and Tawny Owl in several counties. February saw further egg-laying by typically 'early' species including Raven (Anglesey) and Dipper (West Lothian) later in the month. Severe gales with a cold arctic airstream then swept across Britain bringing a halt to nesting operations by all but the hardiest of species and those breeding in the warmer urban microclimate.

In March sunny, often dry, generally anticyclonic weather with above-average temperatures brought a progressive increase in nesting operations, particularly from the 15th as temperatures topped 20°C. Spring-like conditions saw widespread nesting by a broad spectrum of birds from Mute Swan, Mallard and Moorhen to the thrushes, Robin, Stonechat, Long-tailed Tit and Woodlark. Buzzard (Devon), Canada Goose (Staffs), and Siskin (Sussex) were an unlikely trio to start egg-laying in late March.



Moorhens by T K Sykes

Moorhen was among those species encouraged to nest by the warm March weather.

# Residents expanded some ranges

The continuing scarcity of lying snow over much of southern Britain and scarcity of longlasting spells of penetrating frosts, ensured that the 1992-93 winter was another in the recent string of mild winters - four from the last five with 1990-91 the exception. Nest Recorders who systematically search local 'patches' and 'study areas' regularly reported higher numbers of nesting Blackbird, Robin, Wren, titmice, Goldcrest and Grey Wagtail, with many such species rearing good early broods from first or replacement clutches. Several scarce species prone to severe weather losses were also noted to have extended their ranges. Nest Recorders also reported fresh sites, marginal or atypical habitats occupied by Kingfisher, Barn Owl, Bearded Tit, Firecrest, Stonechat and others.

# Nestbox users generally escaped impact of rains

Rainfall was a key factor affecting the relative success of many nesting birds in 1993. Periodic heavy downpours, often torrential, thundery and localised in nature, affected all regions at times from late March through to late July. The important month of May to so many species including most nestbox users was the wettest for eight years. Most box scheme operators provided evidence for another productive season - though there were some striking exceptions. Generally, box occupancy rates were high, especially for Great Tit, with early egg-laying and large brood sizes, though invariably smaller than in 1992 and with localized heavy losses to predators including mice, woodpeckers and mustelids.

Pied Flycatchers generally arrived early on station and many fledged broods of seven young recorded on cards were testimony to the way that most populations went unhindered or escaped the rains. Again, surplus male Pied Flycatchers were reported widely and further encouraging indications of breeding expansion noted.



Great Tit with nesting material by Leslie Baker

Great Tit nestbox occupancy rates were high in 1993.

# Waders and Gamebirds in deep water

The substantial rainfall in late spring and summer was especially damaging in May when, at the same time, snowfalls on the northern hills caused heavy local losses among moorland nesting birds, adding to those in many riparian, farmland and some coastal habitats. Nest Recorders charted local large scale failures among common ground-nesting passerines including Skylark, pipits, chats, buntings and others. These birds were perhaps better equipped to lay repeat clutches and rear late broods than two groups of birds causing continuing concern - waders and gamebirds. Both families suffered another below-par year with nests flooded, clutches deserted, broods moribund and high predation Amongst those species most often affected were Lapwing, Redshank, Little Ringed Plover, Common Sandpiper, Red Grouse and the partridges. Sadly, also, the exotic pair of Black-winged Stilts that finally settled to breed on reclaimed spoil with lagoons in Cheshire, and were incubating a clutch of four eggs by 19 May, eventually deserted after torrential downpours at the end of the month.

### Mixed season for migrants

The majority of spring migrants arrived back at study sites 'on schedule' or a few days earlier than normal - though there were some striking exceptions. Early first-egg dates were reported for a number of migrants including Blackcap. Willow Warbler, Nightingale and Cuckoo. A second year of improved rainfall in the drought-stricken parts of Sahelian West Africa will have improved the vegetation and survival prospects of certain British migrants which winter there. It was encouraging therefore for some Nest Recorders in 1993 to report higher numbers of Whitethroat and Sedge Warbler. Acrocephalus and Sylvia warblers generally enjoyed a productive nesting season. Concern now switches to the hirundines with both Swallow and House Martin absent from a wide scattering of haunts, especially in southern Britain. Clutches were invariably laid later than normal with only single broods reared by Swallows in a number of parts.

## Further raptor success stories

Birds of prey also enjoyed mixed fortunes in 1993, nesting success varying by species and often from region to region. Most raptors defied the often damp conditions but groundnesting Merlin, Hen Harrier and Buzzard were the species most frequently affected by the damp late spring weather resulting in chilled clutches and partial brood losses. Red Kite continued to flourish as over 100 pairs bred in Wales for the first time this century, plus an extra dozen pairs of introduced origin that nested with varying success in England and Record-breaking numbers of Scotland. Ospreys returned to prospect in summer 1993 after 102 young had fledged from Scotland in the previous year. As with Red Kite, however, a combination of inclement weather, more inexperienced birds involved, and human disturbance, resulted in marginally fewer young fledging than in 1992. The exciting story of range expansion by the Hobby continued as fresh haunts were occupied and, like the Kestrel, this falcon invariably reared free-flying young in a good season.

# 1993 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. Such 'specialists' provide very useful detailed information that can be used to calibrate the widespread national coverage achieved by other recorders. Both types of recorder are equally vital in maintaining the accuracy of the Scheme's monitoring and fact-finding roles.

This year the BTO received cards from 427 individuals and 89 groups. We were especially pleased to see such a big increase in the number of groups sending in cards (up by 35%). Those birdwatchers operating through the 19 local bird clubs and schools, 32 ringing groups and bird observatories, or the 38 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 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-laying, 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) 143/143 inc. 4 Grev Partridge, 11 Dunnock; Argyll Bird Club (per S Petty, Strath) 212/214 inc. 93 Blue Tit, 97 Great Tit; D S C Arthur (Tayside) 119/124 inc. 45 Swallow, 17 Ring Ouzel; W Attridge & D M Gyngell (Surrey) 115/117 inc. 29 Jackdaw, 11 Linnet; J Baldwin & P Maynard (Hants) 171/173 inc. 27 Woodlark, 29 Stonechat; Barnsley Ringing Group (S Yorks) 109/134 inc. Sparrowhawk, 20 Tawny Owl; R E Batty (Norfolk) 100/149 inc. 5 Swift, 50 Great Tit; O Biddulph, S Mann, G Briggs & D Williams (S Yorks) 103/105 inc. 17 Swallow, 12 Linnet; Dr K B Briggs (Hants) 273/276 inc. 115 Oystercatcher, 40 Lapwing; Bristol Naturalists' Society (per H R Hammacott, Avon) 102/249 inc. 10 Whitethroat, 45 Yellowhammer; J E A Brook, R C Cooke & K C Chegdzov (Warks) 941/1.153 inc. 47 Song Thrush, 22 Long-tailed Tit, 8 Garden Warbler; D Buckingham (Devon) 184/190 inc. 8 Goldfinch, 35 Linnet; J M Cheverton (IoW) 99/109 inc. 8 Herring Gull, 30 House Martin; J E S Cooper & R F Sanderson (Sussex) 67/128 inc. 11 Nuthatch, 4 Treecreeper; R E Danson (Lancs) 509/513 inc. 8 Shelduck, 104 Tree Sparrow; S J Denny (Suffolk) 116/116 inc. 17 Avocet, 56 Sandwich Tern; J Driver (Gwynedd) 304/304 inc. 80 Carrion Crow, 7 Raven; G R Ekins (Essex) 82/106 inc. 106 Cormorant; E Flatters & S N Hales (Dorset) 180/181 inc. 60 Blue Tit. 62 Great Tit; Forest Enterprise North Scotland Region (per M Canham) 190/196 inc. 16 Kestrel, 12 Tawny Owl; Forest Enterprise South Scotland Region (per G Shaw) 223/273 inc. 48 Barn Owl, 33 Pied Wagtail; P French (Highland) 370/370 inc. 71 Ovstercatcher, 214 Lapwing; D J Garner (Cambs) 121/132 inc. 6 Longeared Owl, 15 Starling; Gibraltar Point NNR (Lincs) 123/126 inc. 71 Ringed Plover, 46 Little Tern; Grampian Ringing Group & North East Scotland Bird Club 138/150 inc. 44 Tawny Owl, 44 Starling; S R Hacker (Tayside) 154/154 inc. 32 Swallow, 27 Tree Sparrow; D Hazard (S Yorks) 174/176 inc. 11 Dunnock, 16 Linnet; J A High & P J Burston (Devon) 222/226 inc. 40 Pied Flycatcher, 12 Nuthatch; I, P & D Hildred (Lincs) 145/145 inc. 11 Wren, 19 House Sparrow; P & D Hill (Gtr Manchester) 76/108 inc. 5 Little Grebe, 10 Great Crested Grebe; D Holman & M Goodman (Northants) 132/142 inc. 42 Sparrowhawk, 16 Swift: P Holness (Suffolk) 271/365 inc. 160 Swallow. 11 Wheatear; J C & C A Holt (Sussex) 333/333 inc. 74 Blackbird, 16 Greenfinch; Hughenden Ringing Group (per D Cox, B Hawes & D Stevens, Bucks) 620/625 inc. 117 Sandwich Tern, 43 Pied Wagtail, 9 Willow Warbler; M Humphreys (Glam) 133/136 inc. 90 Pied Flycatcher, 19 Great Tit; M S Jones & J Hawkins (Shrops) 98/150 inc. 2 Storm Petrel, 18 Reed Warbler; R Lambert (Lancs) 102/109 inc. 49 Lesser Blackbacked Gull, 7 Barn Owl; Lancaster & District Birdwatching Society (per D Sharpe) 1,170 inc. 123 Coot, 92 Swallow, 32 Song Thrush; N Lawton (Norfolk) 79/138 inc. 35 Oystercatcher, 100 Ringed Plover; J Lewis & S Roberts (Gwent) 213/240 inc. 13 Grey Wagtail, 37 Dipper; R Lidstone-Scott (Shetland) 108/108 inc. 20 Arctic Skua, 55 Great Skua; J V Lloyd

(Dvfed) 144/158 inc. 44 Pied Flycatcher, 10 House Sparrow; R J Louch & D Tompson (Oxon) 256/271 inc. 30 Dunnock, 19 Blackcap, 14 Bullfinch; D Luckhurst (Co Durham) 155/163 inc. 75 Lapwing, 8 Spotted Flycatcher: F J Mawby (Cumbria) 106/126 inc. 36 Lapwing, 17 Blue Tit; M O Meadows (Essex) 555/577 inc. 37 Woodpigeon, 78 Magpie, 59 Carrion Crow: Mersevside Ringing Group (per D Norman, Cheshire, Merseyside & Clwyd) 764/1,059 inc. 141 Grey Heron, 53 Woodpigeon, 171 Pied Flycatcher; S F Moores (Norfolk) 99/100 inc. 8 Moorhen, 21 Swallow; J Moulton (Clwyd) 136/212 inc. 7 Dipper, 100 Pied Flycatcher; D Murfitt (N Yorks) 47/103 inc. 6 Little Owl, 16 Blackbird; D A Myers (Gtr Manchester) 167/167 inc. 29 Oystercatcher, 20 Woodpigeon; National Trust Farne Islands (per J Walton, Northum) 1,224/1,224 inc. 207 Shag, 498 Kittiwake, 200 Arctic Tern; National Trust Long Nanny (per M A Freeman, Northum) 285/285 inc. 228 Arctic Tern, 49 Little Tern; North Ronaldsay Bird Observatory (Orkney) 83/105 inc. 50 Fulmar, 11 Rock Dove; Northumbria Ringing Group (per M Holmes) 376/381 inc. 13 Tawny Owl, 22 Dipper; A B Old & D Ross (Cumbria) 168/168 inc. 90 Pied Flycatcher, 55 Blue Tit; Orkney Ringing Group/RSPB (per E R Meek) 84/103 inc. 26 Red-throated Diver, 33 Hen Harrier; C Osthoff (Co Wicklow) 87/103 inc. 5 Spotted Flycatcher, 25 Blue Tit; A G Page (Hants) 114/121 inc. 17 Woodlark, 6 Dartford Warbler, 11 Wood Warbler; P Page (Devon) 197/199 inc. 81 Pied Flycatcher, 11 Nuthatch; G Pearce (Devon) 157/158 inc. 18 Barn Owl, 12 Nuthatch; J Pritchard (Kent) 64/102 inc. 35 Grey Heron, 14 Swallow; R Proctor (Grampian) 88/111 inc. 15 Slavonian Grebe, 18 Goldeneye; W Proctor (Warks) 1,805/2,496 inc. 621 Kittiwake, 198 House Martin, 610 Rook; J Raby (Worcs) 112/112 inc. 11 Coot, 17 Rook; J Richardson (Co Durham) 236/869 inc. 34 Common Tern, 103 Song Thrush, 12 Jay; P H Ridout (Hants) 172/172 inc. 5 Chiffchaff, 9 Corn Bunting; H Robb (Central) 174/185 inc. 42 Redstart, 16 Wood Warbler; J A L Roberts (Clwyd) 193/199 inc. 7 Peregrine, 43 Pied Flycatcher; P J Robinson (Isles of Scilly) 227/765 inc. 141 Shag. 197 Herring Gull, 71 Common Tern; P & V Roe & T Kuechel (West Yorks) 182/193 inc. 14 Swallow, 7 Spotted Flycatcher; M D Russell (Beds) 107/111 inc. 10 Mallard, 33 Moorhen; RSPB Nagshead Reserve (per I Proctor, Glos) 337/337 inc. 6 Wood Warbler, 89 Pied Flycatcher; RSPB Ynys-hir Reserve (Powys) 201/212 inc. 22 Buzzard, 94 Pied Flycatcher; Rve Meads Ringing Group (per A D Wilson, Herts) 104/108 inc. 39 Common Tern, 12 Reed Warbler; N Skinner (Suffolk) 77/103 inc. 9 Kittiwake, 13 Little Tern; Sorby Breck Ringing Group (per G Mawson, S Yorks) 248/275 inc. 111 Swallow, 69 Great Tit: South Lakeland RSPB Group (per G Bottomley, Cumbria) 128/128 inc. 54 Pied Flycatcher, 51 Blue Tit; I M Spence & I W Lloyd (Clwyd) 342 inc. 14 Tawny Owl, 125 Pied Flycatcher; B Standley (Cheshire) 73/129 inc. 4 Yellow Wagtail, 6 Wren; J Stanners (Lancs) 89/104 inc. 9 Mallard, 6 Mistle Thrush; R

Stevens (Notts) 742/824 inc. 20 Little Grebe, 208 Coot. 140 House Martin; A Stratford (Gwynedd) 158/158 inc. 71 Pied Flycatcher, 13 Raven; Tain Royal Academy Bird Club (per R & R L Swann, Highland) 252/277 inc. 56 Eider, 33 Buzzard; M Thomas (Glam) 239/239 inc. 44 Wren, 33 Magpie; D M Tuck (Surrey) 128/129 inc. 23 Blackbird, 16 Song Thrush; S Tyler, S J Ormerod & F Burge (Gwent) 127/147 inc. 37 Grev Wagtail, 81 Dipper; G A Vaughan (Devon) 154/154 inc. 60 Pied Flycatcher, 10 Nuthatch; R Walton (for Northumbria Ringing Group) 116/116 inc. 17 Song Thrush, 20 Spotted Flycatcher; D Warden (Avon) 314/329 inc. 40 Woodpigeon, 104 Reed Warbler; E H Webb (Suffolk) 128/134 inc. 20 House Martin, 42 Great Tit; N J Westwood (Cambs) 69/116 inc. 7 Great Crested Grebe, 32 Reed Warbler.

#### MILESTONES PASSED IN 1993

Each year sees some exciting additions to the collection for rare breeding species, 1993 including just the second nest history for Blackwinged Stilt and the sixth Whooper Swan card. A number of interesting milestones were also broken in 1993. Of the ducks and geese, the 250th Shelduck card was sent in by R Danson. Lancs; the 500th Greylag Goose card came from R S Broke, Norfolk; the 1,000th Tufted Duck card from J Clark, Anglesey; and the 2.000th Canada Goose card C L Butterworth, Herts. Merlin also reached the 2,000 mark with a card from T Prescott of the Orkney Ringing Group. Collared Dove and Common Gull both attained the 3,000 target with cards sent in respectively by G W Myers, Cleveland for a nest in a holly tree; and C B Proctor, Grampian for a nest on a grassed city Details of a Long-tailed Tit nest reservoir. containing a clutch of eight eggs, comprised the 4,000th card for this species and was completed by P L Haynes, Surrey. Four species reached 5,000 cards: Kittiwake with a nest predated by a Great Black backed Gull sent in by P J Robinson, Isles of Scilly; Redstart with A G Page's card for a nest in an ancient Hampshire oak woodland; Bullfinch with a card from P Guest, Essex for a nest fledging five young; and Jackdaw with J Pritchard's card for a pair nesting in an ash tree in Kent. Finally, O Biddulph and S Mann sent in the 40,000th Swallow card for a nest 3m up on a barn joist.

# TOTALS FOR NEST RECORD SCHEME FROM PRE-1992 TO 1993

		4000	1002	TOTAL
SPECIES	Pre-92	1992	1993	TOTAL
Red-throated Diver	1,752	62	<b>93</b> 3	1,907
Black-throated Diver	166	8 53	3 77	177 1.751
Little Grebe	1,621	226	168	
Great Crested Grebe	2,318	220	108	2,712 1
Red-necked Grebe	1 156	1	17	174
Slavonian Grebe	12	1	17	13
Black-necked Grebe	3,081	459	201	3,741
Fulmar	98	439	201	98
Manx Shearwater Storm Petrel	37	2	1	40
Leach's Petrel	2	<u>-</u>	i	3
	22	6		28
Gannei Cormorant	1.222	47	18	1.287
	3,425	536	387	4,348
Shag Bittern	18	550	507	18
Little Bittern	18	_	<u>.</u>	1
Grev Heron	3.306	333	384	4,023
Mute Swan	3,778	304	349	4,431
Whooper Swan	3,778	1	1	6
Grevlag Goose	490	29	16	535
Canada Goose	1,828	179	164	2,171
Egyptian Goose	1,828	2	2	17
Shelduck	229	12	10	251
Mandarin	206	13	13	232
Wigeon	141	6	2	149
Gadwall	62	7	6	75
Teal	200	5	4	209
Mallard	6,832	258	217	7,307
Pintail	18	2	1	21
Garganey	9	-		9
Shoveler	124	3	3	130
Pochard	108	2	-	110
Tufted Duck	919	59	53	1,031
Scaup	1	-		1
Eider	2,145	162	158	2,465
Common Scoter	39	-	1	40
Goldeneye	37	39	40	116
Red-breasted Merganser	227	3	3	233
Goosander	192	7	9	208
Ruddy Duck	57	10	5	72
Honey Buzzard	13	3	2	18
Red Kite	15	-	3	18
Marsh Harrier	15	5	2	22
* Hen Harrier	1,100	83	57	1,240
Montagu's Harrier	46	1	~	47
Goshawk	225	37	56	318
Sparrowhawk	3,877	254	245	4,376
* Buzzard	3,363	134	177	3,674
Golden Eagle	393	17	12	422
Osprey	34	1	•	35
Kestrel	5,211	243	228	5,682
* Merlin	1,802	174	135	2,111
Hobby	421	34	23	478
* Peregrine	1,704	97	91	1,892
Red Grouse	630	8	14	652
Ptarmigan	124	3	5	132
Black Grouse	52	4	3	59

SPECI	T.C	D 02	1000	1002	mom. r
		Pre-92	1992	1993	TOTAL
Caperca		66	2	3	71
	ged Partridge	411	6	3	420
-	artridge	768	13	12	793
Quail		10	2	-	12
Pheasa		1,843	26	46	1,915
	Pheasant	1	-	-	1
	mherst's Pheasant	1	=	•	1
Water I		75	1	2	78
Corner		27	-	•	27
Moorh	en	17,640	449	470	18,559
Coot		10,630	618	591	11,839
Oyster	catcher	10,025	565	657	11,247
Black-v	winged Stilt	1	-	1	2
Avocet		456	7	22	485
Stone-c	urlew	433	-	-	433
Little F	Ringed Plover	1,365	65	88	1,518
	l Piover	6,466	264	360	7,090
	Plover	19	_	-	19
Dottere		244	1	3	248
	Plover	779	12	13	804
Lapwin		17,160	621	861	18,642
	nck's Stint	1,,100	021	-	10,042
	Sandpiper	3	_		3
Dunlin		494	-	6	500
Ruff		1	-	-	1
Snipe		1,344	14	19	1,377
Woodc		551	5	9	565
	ailed Godwit	13	•	-	13
Whimb		55	2	-	57
* Curley		2,394	24	56	2,474
Redsha		1,928	15	34	1,977
Greens		146	4	4	154
	Sandpiper	2	-	•	2
Commo	on Sandpiper	1,181	29	37	1,247
Red-ne	cked Phalarope	36	18	19	73
Arctic	Skua	268	3	23	294
Great S	Skua	275	5	61	341
Little (	Gull	3	_	-	3
Black-l	neaded Gull	6,429	324	319	7,072
Medite	rranean Gull	3	-		3
Commo	on Gull	2,665	347	204	3,216
Lesser	Black-backed Gull	983	36	53	1,072
Herring		4,043	387	315	4,745
	Black-backed Gull	1,306	216	149	1,671
Kittiwa	ke	3,539	1,232	1,276	6,047
	Crested Tern	2	1,252	1,270	3
	ch Tern	991	11	183	1,185
Roseate		622	4	34	660
	on Tern	3,744	195	317	4,256
Arctic '		3,744	323	445	
Little T					4,123
Guillen		3,948	271	302	4,521
Razorbi		1,092	3	4	1,099
		657	53	7	717
	Guillemot	988	57	26	1,071
Puffin		198	6	4	208
Rock D		261	4	3	268
Feral P	-	1,221	142	142	1,505
Stock I		5,083	238	224	5,545
Woodpi	•	19,290	835	744	20,869
Collare	d Dove	2,777	231	208	3,216

	CRECIEC				
	SPECIES Totals David	Pre-92	1992	1993	TOTAL
	Turtle Dove	1,807	18	9	1,834
	Ring-necked Parakeet	2	3	1	6
	Cuckoo Barn Owl	1,641	32	27	1,700
	Snowy Owl	2,183	239	308	2,730
	Little Owl	2 1,372	52	40	1 472
	Tawny Owl	5,377	379	48 <b>38</b> 1	1,472
	Long-eared Owl	541	379	36	6,137 609
	Short-eared Owl	300	15	14	329
*	Nightjar	1,068	79	58	1,205
	Swift	985	58	61	1,104
	Kingfisher	514	14	24	552
	Ноорое	1	• •	-	1
	Wryneck	18	-	-	18
	Green Woodpecker	279	7	7	293
	Great Spotted Woodpecker	892	36	29	957
	Lesser Spotted Woodpecker	151	3	2	156
	Woodlark	503	87	96	686
*	Skylark	6,166	100	72	6,338
	Sand Martin	951	22	21	994
	Swallow	37,949	2,176	1,346	41,471
	House Martin	5,655	673	566	6,894
	Tree Pipit	1,404	45	41	1,490
*	Azendon zipit	7,925	199	141	8,265
	Rock Pipit	616	19	19	654
	Yellow Wagtail	887	11	14	912
*	Grey Wagtail	4,593	158	190	4,941
	Pied Wagtail	7,446	264	298	8,008
	Dipper	7,371	326	306	8,003
	Wren	12,305	272	369	12,946
	Dunnock	27,277	359	346	27,982
	Robin	16,843	375	361	17,579
	Nightingale	419	5	1	425
	Bluethroat	1	•	•	1
	Black Redstart	131	•	1	132
	Redstart	4,772	213	139	5,124
	Whinchat	1,740	20	28	1,788
*	Stonechat	2,092	118	130	2,340
-	vv neaceat	2,960	96	90	3,146
	Ring Ouzel Blackbird	1,280	27	37	1,344
	Fieldfare	114,900 6	1,712	1,647	118,259
	Song Thrush	67,261	701	710	6
	Redwing	102	7	2	68,672
	Mistle Thrush	6,583	191	141	111 <b>6,915</b>
	Cetti's Warbler	18	171	2	20
	Grasshopper Warbler	321	8	6	335
	Savi's Warbler	2	-	-	2
*	Sedge Warbler	3,955	61	81	4,097
	Marsh Warbler	115	1	6	122
	Reed Warbler	9,280	219	253	9,752
	Dartford Warbler	400	8	19	427
	Lesser Whitethroat	740	11	21	772
*	Whitethroat	5,035	78	60	5,173
	Garden Warbler	1,470	49	55	1,574
*	Blackcap	2,605	72	62	2,739
	Wood Warbler	1,833	48	71	1,952
*	Chiffchaff	2,052	55	52	2,159
	Willow Warbler	10,847	138	132	11,117
	Goldcrest	697	13	15	725

	SPECIES	Pre-92	1992	1993	TOTAL
	Firecrest	10	•	-	10
	Spotted Flycatcher	9,034	248	203	9,485
	Pied Flycatcher	23,957	1,926	1,874	27,757
	Bearded Tit	54	-	-	54
	Long-tailed Tit	3,845	142	189	4,176
	Marsh Tit	1,096	28	31	1,155
	Willow Tit	391	6	5	402
	Crested Tit	261	20	11	292
	Coal Tit	4,175	135	131	4,441
	Blue Tit	55,244	3,512	3,337	62,093
	Great Tit	33,929	2,183	2,526	38,638
	Nuthatch	2,041	171	182	2,394
	Treecreeper	1,955	58	54	2,067
	Short-toed Treecreeper	ì	-	-	1
	Golden Oriole	28	5	8	41
	Red-backed Shrike	251	1	-	252
	Jay	1,291	26	33	1,350
	Magpie	5,455	380	319	6,154
	Chough	450	27	20	497
	Jackdaw	4,734	256	219	5,209
	Rook	7,397	833	862	9,092
	Carrion Crow	5,198	329	303	5,830
	Hooded Crow	1,004	20	9	1,033
*	Raven	2,474	41	87	2,602
	Starling	12,186	331	461	12,978
	House Sparrow	10,668	176	294	11,138
	Tree Sparrow	13,670	228	205	14,103
	Chaffinch	18,181	420	339	18,940
	Brambling	2			20,5 10
	Serin	2	-		2
	Greenfinch	12,377	201	143	12,721
	Goldfinch	2,652	69	73	2,794
	Siskin	59	3	1	63
	Linnet	23,662	370	340	24,372
	Twite	823	4	3	830
	Redpoll	1,266	6	11	1,283
	Common Crossbill	119	2	7	128
	Parrot Crossbill	4	-		4
	Scarlet Rosefinch	i	•	-	1
*	Bullfinch	4,913	46	57	5,016
	Hawfinch	140	11	5	156
	Snow Bunting	59	-	3	59
*	Yellowhammer	6.013	95	110	6,218
	Cirl Bunting	156	42	110	,
	Reed Bunting	7,119	102	48	198
*	Corn Bunting	7,119 566			7,269
	Com Duming	200	16	15	597
		Pre-92	1992	1993	GRAND TOTAL
		869,788	33,994	33,343	937,125

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

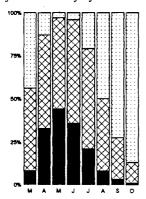
Species highlighted in bold are those used within the BTO's Integrated Population Monitoring programme.

The totals for pre-1992 and 1992 have changed since those printed in Nest Record News No. 9 due to the addition of cards received at the BTO after March 1993.

<sup>\*</sup> Other species for which we would particularly like more cards.

# HELP TO PAINT THE COMPLETE PICTURE

The BTO's annual plea to 'see the full season through' and to attempt to find nests covering the complete breeding season for all species resulted in further encouraging progress in The diagram below shows relative coverage by month and is constructed from information on 'recording effort' kindly given on your summary forms for 1993. It shows how, during the warm spring month of March, following on from another mild winter, most observers spent some days actively seeking those important early nesting attempts by the likes of grebes, Heron, doves, thrushes and corvids. Once again, the maximum recording activity took place over the glorious trio of months April, May and June, those key months so eagerly awaited by nest-finders, but which just seem to fly by.



Most days A Few days No days

It is vital that the Scheme also collects as comprehensive a picture as possible of those nesting attempts for repeat clutches and later broods. This may be accomplished through those random finds of casual nest recorders or the dedicated efforts of 'specialists' who concentrate much or all of their fieldwork on one or more birds. It is through the vital efforts of the latter that the BTO can correct the mass data each year so that we can present a complete and accurate picture of nesting productivity by individual species over the full season. In this respect it was encouraging to see more observers taking on the role of the 'specialist' in 1993. Equally, it was very

pleasing once again to see many observers nest-finding and recording well into the late summer months from July to September, and beyond. Inevitably the Scheme received a good scattering of interesting cases of late nests with young Greenfinch and Stock Dove reported in October, Great Crested Grebe and Barn Owl in November. The clear message remains - 'Eyes open at all times'.



Stock Dove by D A Thelwell

The multi-brooded Stock Dove may still be rearing final broods in October.

#### 1992 ANNUAL BREEDING REPORT

The fifth annual breeding report of the Nest Record Scheme was published in *BTO News* 189, in November 1993. It covered 49 species and used 204,392 records from 1962-1992. 1992 was a good year for UK birds, as clutch sizes tended to be relatively large and nest failure rates low.

The warm spring and summer benefitted resident and migrant passerines alike, with four species having their earliest year out of the last 31: Wren, Blackcap, Greenfinch and Yellowhammer.

Clutch sizes were large for a range of species, but particularly for the migrant insectivores such as Redstart and Blackcap. Reed Bunting clutches were the smallest recorded between 1962-1992, leading to a heightened alert to the JNCC (Reed Bunting nest failure rates have been increasing for some time). Vigilance was suggested for Moorhen because not only has clutch size been decreasing over the last 31 years but the last 4 years have seen especially small average clutch sizes, probably due to degradation of waterside habitats.

Failure rates were relatively low for many species, and it was pleasing to report that the three species with long-term increases in failure rates fared better than expected in 1992: Reed Bunting, Linnet and Raven. Swallow failure rates during incubation were still found to be increasing and the BTO was concerned to note that Swallow had suffered a third successive year of very high nest losses during the nestling stage, despite generally favourable summer weather. The BTO therefore issued a heightened vigilance alert for Swallow.

# **BUNTING STUDIES**

Great concern has been expressed about the fate of some of Britain's buntings recently and the Nest Records Unit has undertaken some research to help elucidate the problems facing them. Common Birds Census and the New Atlas results have shown major declines in the populations of Reed and Corn Buntings and the Cirl Bunting has almost disappeared in Britain over the last twenty years.

A reasonable proportion of nest record cards are followed through to success or failure and the causes of failure are often recorded. Three main types of failure for nesting buntings were identified: nest predation, destruction due to agricultural operations (eg harvesting, cattle trampling, hedge cutting) and natural causes (eg rain, adult predated). Nest-predation was the most frequently recorded cause of failure and included culprits such as fox, dog, cat, grass snake and "vermin"! It accounted for one third of all Reed Bunting, Cirl Bunting and

Yellowhammer nests and was particularly important during the nestling stage.

The population declines of many small farmland bird species occurred soon after 1970, coinciding with changes in predator populations, farming practices and possibly weather patterns. The relative importance of the different causes of loss have remained essentially unchanged over the years for Reed Bunting and Yellowhammer. However for Corn Bunting, the comparative importance of nest losses due to agricultural operations increased from pre- and post-1970 from 7% to 21% of all nests, although the overall failure rate was lower in the post-1970 sample. The Corn Bunting is more likely to nest within cereal fields than the other buntings, making it more vulnerable to agricultural operations. Furthermore, the Corn Bunting is a particularly late-nesting species and the switch from spring to autumn-sowing, with consequentially earlier harvesting dates, is likely to affect it most severely.



Yellowhammer by John Hollyer

Predation of Yellowhammer nests was found to be the most frequently recorded cause of failure on nest record cards.

## NEW PROJECTS

The following projects using nest record card data have been initiated since the last Nest Record News:

- a. A V Cross Ravens in Shropshire
- b. Tony Davis Wood Warblers
- c. Pamela Jordan Moorhen
- d. Peter Marks Nuthatch
- e. Mark O'Brien Red-necked Phalarope
- f. Geoff Parker & Henry McGhie, S G Sealy Cuckoo
- g. Bob Proctor Capercaillie
- h. Fred Slater & Henry Robb Redstart
- i. Denis Summers-Smith Tree Sparrow
- j. Rachel Warren Snipe.

### HAVE A GO YOURSELF

Currently there are 45 studies that are using nest record cards, 21 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 find out facts that are new to science. If you would like to try an investigation on a particular species, contact Humphrey Crick and he will be pleased to give advice on planning, analysis and writing up your studies.

# CO-OPERATION! A plea to all Ringers and Nest Recorders

Nest Record News is sent to all Ringers each year because so many are involved in pulli ringing: up to 200,000 pulli are ringed each year! However, not all pulli that are ringed are recorded on nest record cards and not all pulli recorded on nest record cards are ringed. Maybe there is some scope here for Ringers

and Nest Recorders to get together to enhance each other's activities.

Raymond O'Connor, the BTO's past Director, did some calculations in 1986 about raptors to show how the number of Nest Records could be increased if all pulli ringed were recorded on the cards:

	Sparrowhawk	Kestrel	Buzzard
Proportion of ringed broods that were recorded on NRCs	27%	13%	2%
Potential increase in NRCs if all broods ringed were on NRCs	127%	216%	163%

We have looked at the reverse side of the coin to see how pulli ringing could be increased if all broods recorded on nest record cards were ringed:

	Sparrowhawk	Kestrel	Buzzard
Proportion of NRCs not ringed	53%	67%	98%
Potential increase in ringed pulli if all NRCs ringed	30%	27%	59%

At recent rates this would translate into the following approximate increases in NRCs and pulli ringed:

	Sparrowhawk	Kestrel	Buzzard
Extra NRCs	180	235	127
Extra pulli ringed	380	360	120

Imagine how these figures would translate in other species! For instance: Swallow NRCs could increase by 142% and Nuthatch NRCs by 134% and the number of pulli ringed for Treecreepers could increase by 329% and for

Chiffchaff by 198%. Nightjar NRCs would increase by 53% and pulli ringed by 68%.

The scope for improved coverage is fantasticall that is required is for Nest Recorders and Ringers to improve links between themselves: Nest Recorders could alert their local Ringers when broods are ready to be ringed and Ringers could have the enjoyment of visiting nests at least twice to fill in a nest record card or, if they really lack the time, alert their local Nest Recorders about nests that they have found, too early to be ringed, but for which they have not the time to record on a nest record card.

Cooperation is the name of the game for us all!

#### PUNCHING HOLES IN CARDS

Some recorders make holes in the cards with a hole punch so that they can store them in a ring binder file. Although we would prefer you not to do this, it is possible for a card to have holes punched in it and still be read correctly by the optical mark reader (which reads the reverse side of the card), but only if the holes are made away from those parts read by the machine. Please only punch holes in the section of the card shaded in the diagram below and do not punch a hole through a continuous or dashed black or red straight line.

### RECORDING GRID REFERENCES

Please help the data processors to computerise your grid references correctly. Use the National Grid Reference as given on Ordnance For counties in England, Survey maps. Scotland and Wales, please use the two letters denoting your 100km grid square at the beginning of the sequence of numbers, eg SH432621. For counties in Ireland, use the relevant letter followed by a dash, eg D-213123. Four and two-figure grid references should be written with dashes in the boxes where numbers are missing eg SH43-62- for a four-figure grid reference or SH4--6-- for a two-figure grid reference. If you are using a grid reference, each of the eight Grid Ref. boxes should be filled with either a letter, a number or a dash. Do not leave any boxes hlank

#### NEW SCHEME HANDBOOK

An updated version of the Nest Record Scheme instruction booklet will soon be printed and sent out to all Nest Recorders as it contains a little new information. We would be very grateful if you could carefully read through the handbook to familiarise yourselves with the new information as well as refreshing your memories with the original details.

#### NEW COLONY NEST RECORD CARD

The new BTO colony nest record card is now available on request to all Nest Recorders wishing to record details of nesting colonies. The card is specifically designed to enable the progress of nests in colonies to be recorded more quickly and conveniently than can be done on individual nest record cards. Colony cards should only be used for recording the nests of the following species nesting in colonial situations: colonial seabirds (eg auks, gulls and terns), Grey Heron, House Martin, Sand Martin, Rook and Jackdaw. (NB When disturbance is not-considered a problem and

recording time is not limited, please complete individual nest record cards for each nest of the above species, as these carry more detail and can be optically read for speed of use and greater application.)

# NEW NEST RECORD SCHEME LOGO

We hope that you like the new Nest Record Scheme logo as much as we do. We feel it more appropriate to the Scheme than the original Lapwing chick logo, where the chick was not even in a nest! Many thanks go to Steve Carter for designing the logo and to Susan Waghorn for the computer graphics.

# NEST RECORDERS TO HELP SOLVE MYSTERY OF BARN OWL POPULATION

How many Barn Owls are there in Britain today, and is the decline which has been recorded this century continuing? That is what the new joint British Trust for Ornithology/Hawk and Owl Trust survey and monitoring programme aims to find out.

New methods enhancing earlier projects have been developed for the survey. Randomly selected sample squares nationwide will be intensively searched for nests by licensed volunteer fieldworkers drawn from the BTO and Hawk and Owl Trust networks. A pilot year is currently in progress with volunteers helping to fine tune the methods for the full survey, which will be launched in autumn 1994.

The survey will identify changes in Barn Owl abundance and distribution. In addition, information on site occupancy, productivity and survival rates is required as part of a new long-term Barn Owl Annual Monitoring Programme. This will be used to provide an 'early warning system' enabling rapid response by conservationists to any further adverse changes in the population. The BTO's Ringing and Nest Record Schemes will

play a vital part in contributing to the monitoring programme. Barn Owl nest record cards submitted over the survey period will contribute data to the monitoring programme, but Nest Recorders will also be sought to carry out measurements of the owlets' growth and development to allow a more accurate assessment of condition, breeding success and survival.

The methodology for this detailed nest recording was developed during the BTO Owls Project which ran from 1987-90. The information obtained from that study helped identify post-fledging juvenile mortality as the most vulnerable stage in the Barn Owl lifecycle. With information of this kind, conservation strategies can be formulated to help minimise losses of newly-fledged birds.

All Barn Owl nest records will be of great value to the project (but please obtain a Schedule 1 licence first - see page 16) and we hope that as many nest record cards as possible will be sent in over the four years of the survey. If you would like to help with the detailed nest recording, or would like further information about the survey, please contact Trudie Dockerty (Project Officer) at the BTO.

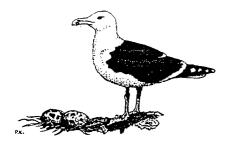


Barn Owl by D A Thelwell

The British Barn Owl population will be monitored in a new BTO/Hawk and Owl Trust survey.

# 1994 SURVEY OF LARGE GULLS NESTING ON BUILDINGS

Information is needed from the 1994 breeding season on the numbers and distribution of large gulls nesting on buildings. The aim is to establish the current extent of phenomenon and the changes that have occurred since the last such survey in 1976. This is a survey endorsed by the BTO. If you are able to help, please contact Susan Raven at: University of Durham, Department of Biological Sciences, Science Laboratories, South Road, Durham DL1 3LE Tel: (091) 374 2000.



Great Black-backed Gull by P J Grant

#### SENDING IN YOUR CARDS

Please send all completed cards in one batch as soon as your fieldwork finishes - by 1st February at the very latest. Cards can be handed directly to staff, if you are passing The Nunnery, or if you plan to attend one of the BTO's conferences

Please ensure that your cards arrive in one piece by binding them with rubber bands or string, before placing them in a polythene bag and paper-wrapping with a boldly-marked address label.

It is always tragic when cards go missing in the post due to flimsy packaging. Ordinary envelopes are not strong enough to take more than 20 cards; padded envelopes are much more suitable. Please don't let your hard-won data be lost like this

### BTO NESTBOXES GUIDE

For anyone interested in making their own nestboxes or other artificial sites for breeding birds, this book is a must. The book covers the construction of many different types of nestboxes, nesting tunnels, rafts and islands as well as how to improve natural sites for birds to nest in. Individual species accounts are given containing information on the siting of boxes and other artificial structures to best suit certain species. Obtain your copy from the Sales Department at BTO headquarters, price £4.95 plus p&p.

### THE NEST RECORDS UNIT

Humphrey Crick (Head of Nest Records Unit) is employed under the JNCC contract to develop the use of Nest Record data as part of the Integrated Population Monitoring programme. This is a programme of work aimed at combining the results of nest recording, ringing and censuses to build up an overall picture of how well each species is faring in Britain. He is currently undertaking an analysis of the bunting and Twite data held by the BTO 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 also helps with data analysis and answering data requests.

David Glue (Nest Records Research Officer) keeps an eye on how each season progresses and summarises the nesting year. He is undertaking a programme of analyses of the basic breeding biology of species of conservation interest. He also maintains the Raptor Research Register and coordinates the BTO's garden bird work.

Trudie Docherty (Project Barn Owl Project Officer) has recently joined the unit to run this new project, described more fully opposite. Part of her work will involve the encouragement of more detailed recording of Barn Owl nests to provide a more systematic monitoring programme for this species.

#### 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 for Special List Schedule 1 species 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 Trust. However, it is necessary to provide two references from 'respected' ornithologists eg County Recorder, BTO Regional Representative, Chairman of Bird Club, 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.

GENERAL LIST OF SCHEDULE 1 SPECIES (NB: These six species are Special List species in Scotland)

Crossbill Owl, Barn Quail
Kingfisher Plover, Little Ringed Redstart, Black

#### SPECIAL LIST OF SCHEDULE 1 SPECIES

Avocet Goose, Greylag Ruff
Bee-eater Goshawk Sandpiper, Green
Bittern Grebe, Black-necked Sandpiper, Purple
Bittern, Little Grebe, Slavonian Sandpiper, Wood

Bittern, Little Grebe, Slavonian Sandpiper, Wood Bluethroat Greenshank Scaup
Brambling Gull, Little Scoter, Common

Bunting, Cirl Gull, Mediterranean Scoter, Velvet
Bunting, Lapland Harrier (all species) Serin
Bunting, Snow Heron, Purple Shorelark

Buzzard, Honey Hobby Shrike, Red-backed Chough Hoopoe Spoonbill

Corncrake Kingfisher (Scotland) Stilt, Black-winged Crake, Spotted Kite, Red Stint, Temminck's Crossbill (Scotland) Merlin Swan, Bewick Curlew, Stone Oriole, Golden Swan, Whooper

 Curlew, Stone
 Oriole, Golden
 Swan, Whooper

 Diver, Black-throated
 Osprey
 Tern, Black

 Diver, Great Northern
 Owl, Barn (Scotland)
 Tern, Little

 Diver, Red-throated
 Owl, Snowy
 Tern, Roseate

Dotterel Duck, Long-tailed Owl, Snowy Tern, Roseate

Duck, Long-tailed Petrel, Leach's Tit, Crested

Eagle, Golden Phalarope, Red-necked Treecreeper, Short-toed Eagle, White-tailed Pintail Warbler, Cetti's

Falcon, Gyr Plover, Kentish Warbler, Dartford Warbler, Marsh Plover, Little Ringed Warbler, Savi's Fieldfare (Scotland) Whimbrel

Firecrest Quail (Scotland) Woodlark
Garganey Redstart, Black (Scotland) Wryneck

Garganey Redstart, Black (Scotland)
Goldeneye Redwing
Godwit, Black-tailed Rosefinch, Scarlet

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

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