THE NORTH WEST NORFOLK RINGING GROUP

ANNUAL REPORT 1999

MILLENIUM 2000 ISSUE

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Destination Cooking Pot

Photo: Karl-Heinz Loske

Villagers at Boje-Ebok, Nigeria have been catching Swallows to supplement their diet for generations. To catch the Swallows they use a long pole with palm twigs, which are coated with a sticky preparation made from Palm oil, resin and water. Clear moonlight nights are favoured and successful hunters can catch up to 800 Swallows in a single night.

- A full account of these events was first described in the North West Norfolk Ringing Group Annual Report 1995.

- Please refer to page 43 of this Report for further details.

INTRODUCTION

John Middleton , Editor

THIS REPORT for 1999 is the eighth that has been produced by the North West Norfolk Ringing Group now in its tenth year. It coincides with:

- The New Millennium
- The Hundredth Anniversary of scientific bird ringing – begun in Denmark in August 1899 by Hans Christian Mortensen.
- The First Decade of ringing by the Group.

To celebrate these events this report will be our **Millennium Issue.** There are some important changes in the style and content to this report. For the first time recovery maps have been produced for those species where there is a sufficient number of interesting recoveries to warrant their inclusion. Advances in Map making software and availability have made this possible. The section dealing with Species, Recoveries and Controls will be much greater in size. Therefore in order that the report does not reach epic proportions, the section that deals with Site and Species reports will only contain details of sites where more than 1000 birds were ringed in 1999. The usual Summary of Site Totals is retained.

Since the Group was inaugurated in 1990 there has been continual development of our aims, objectives and scientific strategy. Which, with our in depth studies of Ringed Plover, Snow Bunting and Wheatear, have enabled us to contribute not only to the knowledge and understanding of the avifauna of Norfolk, but also to these species at a national level. The new edition of *The Birds of* Norfolk, published in 1999 contains two species accounts written by Group members, quotes five papers written by Group members and uses our ringing recovery and other data in no less than twenty three species accounts.

In 1990 the first year of our formation, the Group ringed 1,238 birds, just 5.0% of Norfolk ringer's totals and in our second year 12.2%. Since those formative years the Groups positive approach has played a major role in the contribution that we have made to bird ringing in the county. In 1998 and 1999 respectively we contributed 15.7% and 14.8% of all the birds that were ringed in Norfolk based on figures presented at the annual Norfolk ringers meeting. This tenth anniversary is one in which the Group can be justifiably proud of our achievements and dare I say it our coming of age!

None of this would have been possible without the support and encouragement of many people too numerous to mention individually here. But particularly those ringers who braved winter weather to assist the Group, especially at Snow Bunting catches and as it happens, sometimes not catching! Many of our readers will also have had that experience and probably wondered, like us, why do we do it!

Computers are being used increasingly by the Group and we are fortunate to have our own expert to advise us. Kelvin Baldwin BSc, who is not a ringer, joins the group as an honorary member. Kelvin initially set up our Access Recoveries and Re-trap History Database which is being refined and developed on an ongoing basis. His role will be to advise on Information Technology, Software Development and Programming. A more detailed description of the work he is undertaking can be found in a new section of this report devoted to Computer Development. The Group currently holds on computer, over 37,000 records of new ringed birds of 124 species, using the Bring software package. The Group is currently testing IPMR, which will probably have been released by the time this report is published. Plans also include the development of a North West Norfolk RG web-site.

We hope that you will enjoy reading this report and welcome suggestions as to how it might be improved.

ACKNOWLEDGEMENTS

The group would like to thank all those landowners, tenants, wardens and organisations on whose land our ringing activities have been carried out for their assistance and support and without whom none of our activities would be possible.

- Mr Barrett and Mr Pratley, The Borough Council of Kings Lynn and West Norfolk
  and Mr Vawser Coastal Park Warden
  also
  Mr H.Buscall and Mr J.Austin, The Ken Hill Estate for permission to operate within Snettisham Coastal Park.

- The RSPB for permission to operate the Ringed Plover colour ringing study at Snettisham Reserve.

- Heacham South Beach Residents Association for permission to capture Wheatears on the lawns and in the gardens.

- Holkham Estate, Viscount Coke and Mr Martin Joyce for permission to use the Willow Carr site at the River Burn, Burnham Market.

- Mr Hornigold of the Internal Drainage Board.

- Mr J Reed, The National Trust for permission to capture Snow Buntings at Salthouse.

- Mr R Harold for permission to capture Snow Buntings at Holkham National Nature Reserve.

- The Snow Bunting colour ringing project was supported financially by Dr Paul Dolman, University of East Anglia, School of Environmental Sciences through a grant from NERC and Pete Edwards MBE of Zeneca kindly supplied colour rings, we are extremely grateful for their support.

- The many farmers who have allowed the Group access to their land including:

Mr J.A.Stilgoe	Crabbe Hall Farm, Burnham Market
Mr J.Everritt	Shammer House, North Creake
Mr J.Sexton	Bluestone Farm, South Creake
Mr C.Coe	Great Bircham
Mr E.Cross	Flitcham

- The Group would especially like to thank ACR Heat Transfer, King's Lynn for providing photocopying facilities

- Finally if any one has been omitted please accept our apologies.

REVIEW OF THE YEAR

Trevor Girling

The year began with the Annual BTO Ringing Conference at Swanwick, this year the group was represented by John Middleton, Mike Reed and Sabine Schmitt.

During January the majority of group attention was focussed on the trapping of Snow Buntings. The first catch at Heacham on the 7th produced 22 new birds. A further catch at Holkham on the 9th yielded 39 new birds and also included 7 Shorelark. The largest catch of the year involved 151 birds on the 16th at Salthouse this also included another Shorelark and 2 Turnstone. Some garden whoosh netting resulted in 49 Starlings being trapped. During the only spell of calm weather one mist netting session at Abbey Farm failed to produce any of the hoped for finches and Tree Sparrows. The month as a whole was very windy and wet at times. Some sunny and dry days led to the warmest January day on record at 16 deg C.

February was a very quiet month; the windy conditions from January remained and so gave us very little opportunity for mist netting, apart from our garden sites. A catch of 21 Snow Buntings at Salthouse on the 20th, also produced a nice surprise for John Middleton, who got to ring the young male Lapland Bunting caught at the same time. This bird had been seen feeding with the flock previously, but had not been noticed until we came to extract the birds from the net.

When combining the months of November through to February, this winter was the sunniest since records began.

March at last allowed us to carry out some mist netting at Abbey Farm, with small numbers of Yellowhammer, Tree Sparrows and other finches trapped during several periods of calm weather. The numbers caught however were disappointing considering the numbers present. A small roost of Linnets was discovered in a Privet hedgerow and although birds must have been dispersing to breed a catch of 19 was made on the 27th. The calm conditions generated by this high pressure also led to the first Wheatear of the season being trapped on the 14th. We continued to concentrate on spring netting Wheatears for the rest of the month.

April was a very breezy month the main group activity was focussed on Wheatears which trickled through on passage, larger numbers of birds were noted on the 9th and 17th when 7 and 4 were trapped respectively. It wasn't until the 3rd week that the wind turned to a southerly direction that appreciable numbers of birds started arriving, we finished the month with a total of 86 birds. As usual the odd Stonechat and Whinchat were also caught at this time. Although the windy conditions dominated, one mist netting session at Snettisham Coastal Park(SCP) resulted in our first Willow Warbler and Whitethroat of the year, but as the day went on, the wind increased and we cut short the session.

May arrived and with it better weather, increased numbers of Wheatears attracted most of our efforts and by the end of the month our total had reached 204, a record figure. Nest finding and pullus ringing started in earnest as well, with the first Ringed Plover at Snettisham on the 19th, and Lapwing at the usual farms especially Abbey Farm at Flitcham. This latter site also had breeding Tawny Owl for the second year running, the two chicks being ringed on the 18th. Mist netting sessions were also taking place at both SCP on the 29th and 30th,and the Willow Carr (WCB) on the 4th, 7th and 12th. All eight of the most commonly caught warblers were trapped, the highlight being a Grasshopper Warbler at WCB. It is interesting to compare that a similar number of new birds were trapped at SCP in May in both 1998 and 1999 however the number of warblers trapped that had been ringed in previous years was very different, 20 in 1998 but only 5 in 1999. Whether this was a factor of the weather conditions holding back the breeding population, or mortality in the winter quarters is hard to ascertain. Mist netting at SCP resulted in only the groups second Cuckoo, on the 29th.

June mirrored May in that pullus ringing occupied most of the groups time, it being a particularly busy month with Ringed Plover, Avocet, Barn Owl, Skylark and Swallow all being monitored by various group members. Mist netting gained momentum with sessions at WCB and SCP, a Kingfisher on the 19th was only the second caught at this site in ten years. The 27

Avocet ringed this month were all ringed as pullus as part of a colour-ringing project, at a confidential site on the wash. Although the month as a whole had higher than average rainfall and temperatures slightly below, it enabled a very good start to the breeding season.

July arrived and with it, high-pressure that dominated for the majority of the month providing more opportunities to mist net at both SCP and WCB. With good numbers of warblers and finches being caught at both sites it was obvious that some juvenile dispersal was taking place already. WCB came up trumps with two Kingfishers on 16th. Pullus ringing continued in the form of Ringed Plover, Barn Owl and more Swallows.

August proved a very frustrating month at SCP due to the strong winds that plague this site, it limited our mist netting to just two days, hence we missed out on many passage birds. At WCB however things were rather different, fortunately due to the sheltered nature of this site ringing was possible on thirteen days this month, this enabled large numbers of warblers to be caught especially Reed Warbler (96) and Blackcap (122). This certainly proved the excellent nature of this site, as birds are funnelled into it from three sides. An interesting bird came in the form of a Barred Warbler trapped on the 24th. Our annual count of Fulmar Chicks at Hunstanton revealed that 45 were present, but again none were ringed due to nest positioning on the cliffs.

September started as August ended with high pressure dominating for the first few days. Following this a strong westerly predominated, this limited all mist netting at SCP to the days that were not too blustery. Some spring netting resulted in 4 Whinchat, 1 Stonechat and 3 Wheatear being caught, this compensated somewhat. Fortunately John Middleton was having a much better time at the sheltered Willow Carr. He was able to carry out an almost daily ringing routine that resulted in large numbers of warblers being caught, primarily Blackcap. A total of 628 were caught by the end of the month. Other highlights included Water Rail (2), Cetti's Warbler (2) and Barred Warbler (2).
Due mainly to John's efforts the group had its second highest monthly total ever with 1121 birds being ringed.

Mist netting at WCB continued in early October with more Blackcaps being caught. Trevor travelled to Spurn Point to take part in the excellent ringing course whilst John and Sabine attended the "100 years of Bird Ringing" conference on Helgoland in Germany. As soon as we were back from our travels the wind finally had gone round to the East, and the Thrushes started to arrive. Renewed effort at both SCP and WCB enabled us to exploit the Blackbirds and Redwings that were arriving en-masse. Two more Water Rails were trapped at WCB before the month's end, plus re-trapping one bird several times. Thrush migration helped by clear skies meant that October was the sunniest since 1959, a complete contrast to last year.

November continued much as October had done, we continued to catch the Thrushes until much of the available food sources had been eaten, and the birds moved on inland. The first Snow Buntings arrived and we started baiting at our usual sites. Some garden ringing began, as most other group activities tailed off.

December gave us the chance to whoosh net Starlings in the gardens with 60 in all by the end of the year. Our first catch of Snow Buntings at Heacham on the 13th produced 71 new birds. A further catch of 34 at Salthouse on the 18th was also made, during this time six Turnstone were also caught, again taking advantage of the millet seed put out for the Snow Buntings.

1999 was a superb year especially at the Willow Carr; the hard work setting up the site really paid dividends, its sheltered position enabled ringing to take place when our coastal sites were too exposed. The breeding season was the best for a number of years, due in part to it being the warmest year on record with an average daily temperature of 10.6 deg C. The thrushes arrived at a time when we able to exploit it fully.
In all an excellent year, being fortunate with the weather and making the most of all of our opportunities to make catches when we could.

A SUMMARY OF THE 1999 RINGED PLOVER BREEDING SEASON

Jos Barlow

Funding by English Nature enabled this project to continue for the 1999 breeding season, though data collection by myself and John Martin was limited to two days a week. This amount of time was sufficient to find nests, and through successful liaison with John Middleton to ensure almost all the chicks were ringed with both metal and colour rings. 141 Chicks were ringed in total, making this the most successful year in terms of the total number of chicks ringed. Only two broods of chicks were known to have escaped ringing!

The other priority in terms of data collection was for the colour combinations of the adults with nests to be read. This was also successfully achieved, though there were gaps in the data, particularly so on the RSPB reserve where nests were often lost before the adult colours could be read, and on the spit by the sailing club where birds tend to nest very close together and in tall vegetation. In previous years nest trapping has supplied most of the data for this area, a time consuming operation which was not attempted this year. Time was not available for adequate data on fledging success (though where this was known, it was very good, with many broods all fledging). The higher number of broods found without known nests (eight in comparison with a norm of around two a year in the previous 3 years of this study) show that to maintain complete consistency between years a higher level of coverage than two days a week would be required.

Between the end of April and mid August, a total of 100 Ringed Plover nests were found, and a further 8 broods were located for which no nests were found. Figure 1 and 2 show the outcomes of these 108 nesting attempts. In general the 1999 season was a successful one; 47% of all nests found were known to have hatched, in comparison with only 35% in 1998. A comparison with the data from other years also show levels of predation and trampling to have been normal.

The point of particular interest that I noticed whilst working this summer was the lack of success of pairs nesting on the reserve: only 19% of the nesting attempts there were known to hatch, whilst on the rest of the beach 55% of all attempts hatched. Predation was by far the most frequent cause of loss (15 out of the 20 losses on the reserve were due to predation), and south of the small spit which lies halfway between the chalets and the old jetty (near the groynes), no nesting attempts were successful. This is in contrast with other years where this has been a successful area of beach for several pairs. However, the survival of chicks on the reserve appeared to be very good, and in keeping with the rest of the beach this season. An analysis of returning chicks in the next few years will shed more light on which areas of the beach are most important for maintaining the population.

Fig 1: Typical Ringed Plover clutch

Fig 2: Newly hatched chicks

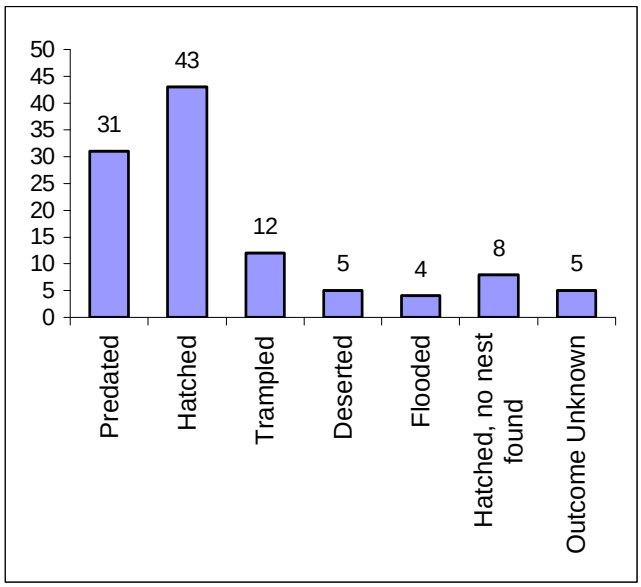


Fig 3: The outcomes of the 108 nesting attempts discovered in 1999

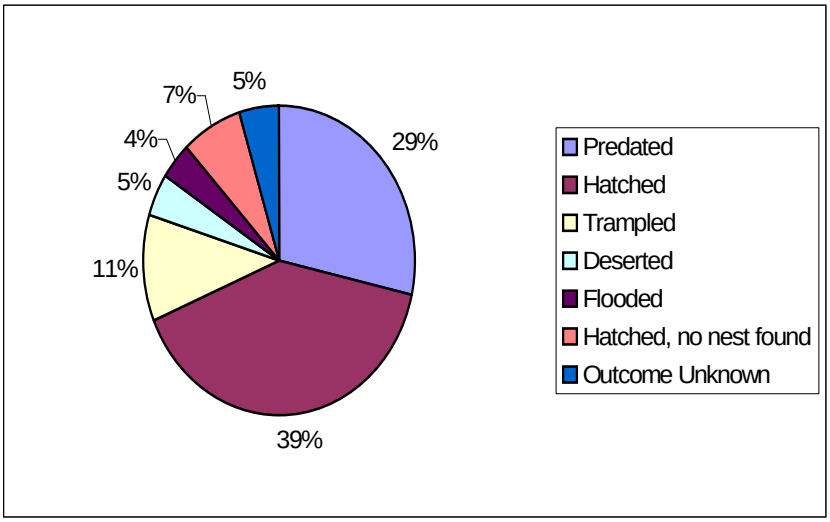


Fig 4: Breeding attempt outcomes as percentage of all known breeding attempts

ACKNOWLEDGEMENTS

Thanks to John Martin for help throughout the season, John Middleton for the amount of time put into ringing, and Durwyn Liley and Pete Burston for their help when the season was at its most hectic. And of course to all the RSPB staff at Snettisham, especially Jim Scott. Thanks also to Bill Sutherland and English Nature for making this years data collection possible.

SNOW BUNTING STUDY WINTER 98/99

Paul Dolman

Study Population:

Catching effort was concentrated at the focal site used for foraging experiments (Salthouse), with 382 captures on 3 dates, involving 316 individuals. As in previous winters, no more than 1 or 2 adult males were present on any occasion; the wintering population was dominated by first-winter females with smaller numbers of adult females and first-winter males, see Table 1. Trapping was also carried out at an additional coastal site (Holkham, west of Salthouse), with 91 captures involving 81 individuals made between 31 Dec and 9 Jan.

All birds captured were aged and sexed according to Svennson (1992). Ringed and individually colour marked (with a site and year code on the same leg as the metal BTO ring, and an additional unique code using three colour rings on the opposite leg), and wing length, fat score and pectoral muscle condition recorded.

In addition to catching, intensive observations to identify colour-ringed birds were made at Salthouse, on 9 dates between 17 Feb and 5 March 1999.

Population turnover at focal site and local movements

Fig 1. shows the composition of the flock at Salthouse, as determined by catches and observation of colour rings, in relation to the date of first capture.

Of the initial 121 individuals captured on 28 Nov (in a 83% sample of those present), 35 (29%) were recaptured amongst 206 birds trapped 7 weeks later (on 16 Jan in a 93% sample of the flock present), at which time 161 (78%) of those caught were 'new' (either unringed or adults re-captured for the first occasion during winter 1998/9), indicating substantial turn over between early and mid winter. There was no differences between age/sex categories in the proportions of birds caught on 28 Nov that subsequently remained or departed (X^2, see Fig. 1). Of the females captured on 28 Nov, those that moved on shortly afterwards tended to be the birds in better body condition, with significantly higher pectoral scores than those recorded at later dates (see Table 2). Although numbers subsequently declined (from peak count of 221 on 16 Jan to 151 on 20 Feb.), a further influx of unringed birds occurred during this period; of 55 caught on 20 Feb (in a 48% sample of those present), 21 (38%) were unringed.

Local movement was recorded between sites. Of 121 colour ringed at Salthouse on 28 Nov, 5 were recaptured amongst 81 individuals caught 4/5 weeks later at Holkham (on 31 Dec and 9 Jan). Of 81 individuals caught at Holkham in late Dec / early Jan, 18 (22%) were subsequently re-captured or observed at Salthouse during mid Jan - late Feb.

Despite turn over of individuals and a gradual decline in the size of the flock, the age/sex composition of the flock remained similar from 16 Jan to early March (see Table 1).

Change in body condition between winter periods

Mean weight and fat scores changed little from Nov to early Jan, and then increased prior to migration (see **Table 2**). That these trends were due to individuals gaining weight rather than an artefact of population turnover was confirmed by examining biometric changes of individuals captured on more than one date (see **Table 2**). Neither biometric measures nor individual changes between catching dates were significantly related to the date at which individuals were last recorded.

Table 1. Age and sex composition of individuals captured[1] and or observed[2] at Salthouse during winter 1998/9. Of the 316 individuals captured at Salthouse, 288 were initially un-ringed, 10 had been ringed earlier at Holkham, 16 were adults ringed in Norfolk in previous years and 2 were controls.

	28 Nov	16 Jan	17-20 Feb	23-24 Feb	25-28 Feb	1-2 March
flock size	146	221	115			
sample size	121[1]	206[1]	82[1+2]	87[2]	45[2]	36[2]
% imm. males	15	14	9	10	16	11
% adult females	8	14	12	11	18	17
% imm. females	75	72	79	78	67	72

Table 2. Weight and fat scores at different catching dates at Salthouse (SAL) and Holkham (HLK). Means ± s.e.m. are shown for each age and sex category.

	Sample	Immature Females		Adult females		Immature Males	
	size	weight	fat	weight	fat	weight	fat
SAL. 28 Nov	121	31.3 ± 0.2	1.1 ± 0.1	29.5 ± 0.3	0.7 ± 0.2	34.4 ± 0.4	1.0 ± 0.2
HLK. 31 Dec	39	31.8 ± 0.5	1.5 ± 0.1	30.9 ± 0.6	1.2 ± 0.4	36.1 ± 0.6	1.6 ± 0.4
HLK. 9 Jan	52	31.1 ± 0.3	1.6 ± 0.1	29.6 ± 1.0	1.0 ± 1.0	34.2 ± 0.7	1.6 ± 0.2
SAL. 16 Jan	206	33.0 ± 0.1	2.1 ± 0.1	32.8 ± 0.3	2.1 ± 0.2	36.0 ± 0.4	2.0 ± 0.1
SAL. 20 Feb	55	35.0 ± 0.4	3.1 ± 0.2	34.4 ± 1.1	3.2 ± 0.5	38.9 ± 1.1	3.3 ± 0.5

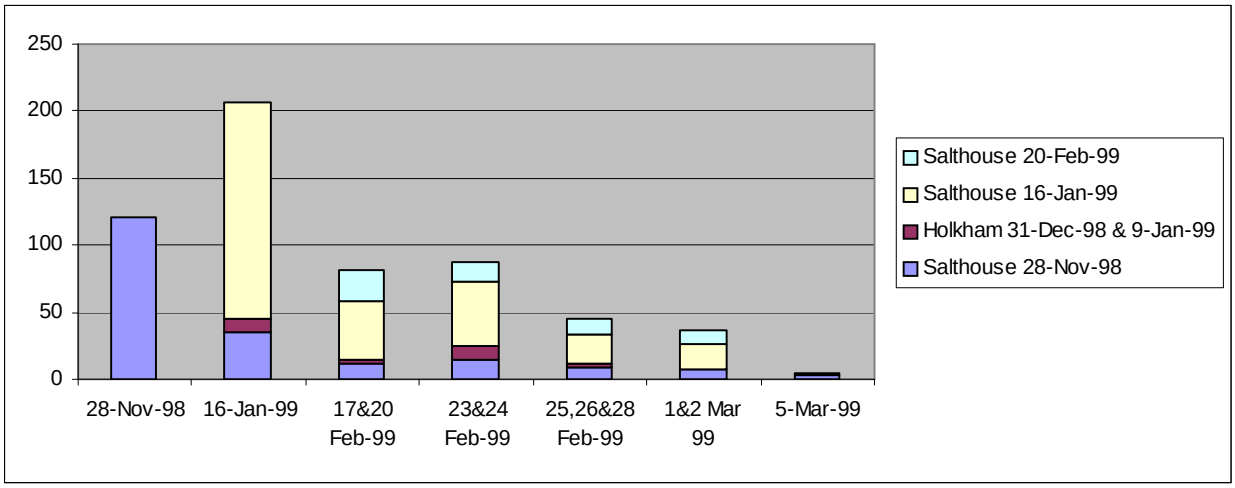
Of the 119 females and immature males captured at SAL on 28 Nov, 42 were subsequently re-captured or observed in Norfolk during winter 1998/9, while 77 were not recorded again (presumed to have departed). No significant differences were found between those that stayed and those that departed for; fat score, wing length, weight, P9 score or weight corrected for body size (weight/wing length) (2 factor analyses of variance, controlling for significant effects of age/sex on biometric measures). However, the group that departed had higher mean pectoral muscle score than those that remained (for females only, excluding males due to heteroscedasticity, 2 factor anova controlling for age; remain/depart $F_{1,97}=5.178$, $p=0.0251$; mean muscle scores: im females remaining = 1.68± 0.09 departing = 1.92± 0.04; adult females remaining = = 1.50± 0.29 departing 1.83 ± 0.17).

Individuals captured at SAL on both 28 Nov and 16 Jan had gained weight (n=35, mean change = +1.5g, se 0.2, paired $t=6.487$, $p<0.001$), showed little change or an increase in fat deposit (mean change in fat score =+0.7 s.e.=0.2, paired $t=4.914$, $p<0.001$) and no significant change in pectoral muscle (paired $t=1.406$, $p=0.169$). Individuals that were lighter at 28 Nov gained more weight to mid Jan (Spearman rank correlation between initial weight and weight change: all n=35; $r_s=-0.42$, $p=0.013$, imm. females only n=25; $r_s=-0.50$, $p=0.012$). Individuals captured at Salthouse on both 16 Jan and 20 Feb significantly increased in weight (n=27, mean =+1.6g, ± 0.4, paired $t=3.820$, $p=0.001$) and fat score (n=28, mean =+0.9±0.2, paired $t=4.432$, $p<0.001$). There was no significant correlation between individuals' weight at 16 Jan and weight gain to 20 Feb (all; n=27; $r_s=-0.15$, $p=0.447$, imm. females only; n=21; $r_s=-0.10$, $p=0.658$), in contrast to the inverse relation from early to mid winter.

Of 205 females and immature males captured on 16 Jan; 114 migrated soon after and were not seen again while 91 were recorded on subsequent dates. No consistent differences were found between the biometric measures of the two groups at Jan 16 (2 factor analyses of variance controlling for age/sex). For birds captured on both 16 Jan and 20 Feb; no significant correlation was found between the date that individuals were last recorded (i.e prior to disappearance, presumed migration) and biometric changes between catching dates.

Figure 1: Composition of snow bunting flock at Salthouse, in relation to the date of first capture in Norfolk during winter 1998/9.

For birds captured on 28 Nov, the proportions not seen again (presumed moved on) or recorded subsequently, did not differ between age/sex categories (im. females, adult females or im. males, excluding adult males) (X^2=0.259, 2 d.f., p=0.879); similarly there were no differences between age/sex categories for the proportions of birds captured on 16 Jan that were subsequently recorded versus not seen again (X^2=1.554, 2 d.f., p=0.460).



SITE AND SPECIES TOTALS REPORTS 1999

INTRODUCTION

In order to limit the amount of space devoted to this section a change has been made from the format and style usually adopted. Only sites, where over 1000 birds were captured in 1999 are included together with a totals summary for all sites.

- A summary of all sites is presented below with a species highlight for each site.

Site Name	Site Code	No Ringed	Species Highlight
Willow Carr, River Burn	WCB	2307	Blackcap 896
Snettisham Coastal Park	SCP	1179	Wheatear 175
Salthouse	SAL	213	Snow Bunting 206
Friars Lane, Burnham Market	FLB	212	Blackbird 44
Gaywood	TKL	167	Starling 81
Abbey Farm, Flitcham	AFF	159	Lapwing 21
Snettisham	SNE	142	Ringed Plover 141
Heacham	HNB	140	Snow Bunting 93
Burnham Market	JMB	82	Starling 56
Gaywood River	GRR	70	Blackbird 31
COMBINED (LESS THAN 20 BIRDS)	OTHERS	69	Barn Owl 30
Stanhoe	THS	56	Blue Tit 17
Gateley	GAT	47	Blue Tit 19
Holkham	HLK	47	Shorelark 7
Beacon Hill (Crabbe Hall)	BHB	33	Skylark 19
Confidential Site	CONFIDENTIAL	27	Avocet 27
Shammer House	SHA	25	Swallow 19
Camping Hill Stiffkey	CHS	21	Swallow 21
All Sites		4996	

Summary of totals all sites and site species highlight.

- A detailed report is presented for Snettisham Coastal Park with a total for 1999 shown in **Table 1.**
- Snettisham Coastal Park Annual totals 1990-1999 are given in **Table 2.**

- A report is presented for the Willow Carr, Burnham Market, which includes a monthly capture calendar (**Table 3**).

SNETTISHAM COASTAL PARK 1999

Species	F Grown	Pullus	Total
Sparrowhawk	1		1
Lapwing		4	4
Turtle Dove	1		1
Cuckoo	1		1
Kingfisher	1		1
Green Woodpecker	2		2
Skylark	2	14	16
Swallow	2	5	7
Meadow Pipit	2	5	7
Wren	55		55
Dunnock	77		77
Robin	39		39
Redstart	1		1
Whinchat	11		11
Stonechat	3		3
Wheatear	175		175
Blackbird	115		115
Song Thrush	18		18
Redwing	1		1
Mistle Thrush	1		1
Sedge Warbler	27	20	47
Reed Warbler	58	17	75
Lesser Whitethroat	20		20
Whitethroat	52		52
Blackcap	97		97
Chiffchaff	19		19
Willow Warbler	51	5	56
Goldcrest	7		7
Spotted Flycatcher	1		1
Long-tailed Tit	23		23
Blue Tit	57		57
Great Tit	31		31
Starling	7		7
House Sparrow	5		5
Chaffinch	36		36
Greenfinch	24		24
Goldfinch	31		31
Linnet	39		39
Bullfinch	11		11
Yellowhammer	1		1
Reed Bunting	3	1	4
Total	**1108**	**71**	**1179**

Table 1: Snettisham Coastal Park Total 1999.

Site Code SCP Habitat Code C7 B1
Reedmarsh and scrub

The park comprises 143 acres of land. With a variety of habitats ranging from open water, reed marsh, rough grass, thorn scrub and rabbit grazed turf with gravel areas, bounded by the eastern shingle beach of the Wash on the seaward side, and the raised earth bank of sea defences to the west.

The diverse habitat supports good numbers of breeding warblers particularly Reed, Sedge, Whitethroat, Lesser Whitethroat, Willow Warbler and Grasshopper Warbler, also Linnets, Meadow Pipits and Skylarks.

In late 1998 early 1999 at the instigation of King's Lynn and West Norfolk Borough Council, a meeting was convened to set up a management committee. The object was to involve all the bodies that used the park for recreational activities:

The Island Camping Club
The Heacham Wildfowlers
North West Norfolk RG
And other interested parties including
RSPB
Ken Hill Estate

Objectives are:

- To manage the habitat for conservation.
- To discuss ways of managing the impact of increasing numbers of visitors to the Park.
- To produce a management plan.

The management committee, whilst still in its infancy has made some progress. A draft plan has been produced and further discussions are planned.

This initiative is welcomed and supported by the North West Norfolk RG

SNETTISHAM COASTAL PARK TOTALS 1990 – 1999

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Mute Swan			4								4
Mallard		1									1
Sparrowhawk		1					3	1	1	1	7
Kestrel				2			1				3
Water Rail							1				1
Oystercatcher				3							3
Lapwing										4	4
Redshank				1		2					3
Common Sandpiper									1		1
Turtle Dove			1				4	1		1	7
Cuckoo										1	1
Little Owl								1			1
Short Eared Owl	1										1
Kingfisher			1	1						1	3
Wryneck							1				1
Green Woodpecker				1		4	3	2		2	12
Gr Spotted Woodpecker								1			1
Skylark	8	1	2		6		4	5	11	16	53
Swallow	15	2	57	7	2	6	12	2		7	110
House Martin				444		29	38	6			517
Tree Pipit						1	1				2
Meadow Pipit	12		16			5	13	18	20	7	91
Yellow Wagtail							1				1
Grey Wagtail				1							1
Pied Wagtail							3				3
Wren	1	13	7	21		49	22	24	13	55	205
Dunnock	4	24	34	41		71	44	37	62	77	394
Robin		16	10	42		34	26	41	70	39	278
Nightingale						1	1				2
Black Redstart							4	1			5
Redstart			1	4		11		1	1	1	19
Whinchat		2	2		5		16	9	16	11	61
Stonechat			1				5		4	3	13
Wheatear	11	7	27		53	6	190	164	174	175	807
Ring Ouzel									1		1
Blackbird	6	72	12	46		42	41	136	53	115	523
Fieldfare								4			4
Song Thrush	1	13	8	19		5	12	21	38	18	135
Redwing		6		11			8	30	7	1	63
Mistle Thrush		1					1		5	1	8
Grasshopper Warbler		4	5	1		3	4				17
Sedge Warbler	5	25	21	38		190	64	37	22	47	449
Reed Warbler	30	36	33	33		134	83	98	57	75	579
Barred Warbler						2	1				3
Lesser Whitethroat	3	17	15	14		69	33	29	9	20	209
Whitethroat	6	10	12	33		168	64	45	21	52	411

Table 2: Annual Totals Snettisham Coastal Park 1990 – 1999.

Table 2: continued.

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Garden Warbler		2	1	5		19	9	3	5		44
Blackcap		9	20	20		74	29	62	55	97	366
Chiffchaff		1	2	6		15	13	11	16	19	83
Willow Warbler	3	11	10	27		119	59	74	23	56	382
Goldcrest		1		7		3	2	16	4	7	40
Pied Flycatcher								2			2
Spotted Flycatcher										1	1
Long-tailed Tit		13	3	21		44	24	48	26	23	202
Marsh Tit							1				1
Coal Tit				2				1			3
Blue Tit		39	23	63		70	72	53	36	57	413
Great Tit		10	8	35		27	24	17	20	31	172
Nuthatch								1			1
Treecreeper						2					2
Magpie		5							2		7
Starling		14	31	8		6	6	5	29	7	106
House Sparrow						18	2	1	1	5	27
Chaffinch		5	3	13		14	15	34	45	36	165
Brambling									1		1
Greenfinch		8	11	18		22	29	40	29	24	181
Goldfinch			10	19		23	19	22	42	31	166
Linnet	21	16	20	27		38	60	40	19	39	280
Redpoll		5	4	4							13
Bullfinch		2	7	7		8	11	9	4	11	59
Snow Bunting		31									31
Yellowhammer		4	5			1				1	11
Reed Bunting		14	14	12		12	5	18	4	4	83
Corn Bunting			1								1
Total	**127**	**441**	**442**	**1057**	**66**	**1347**	**1084**	**1171**	**947**	**1179**	**7861**
No. Species	**15**	**36**	**37**	**37**	**4**	**39**	**48**	**43**	**38**	**41**	**71**

Table 2: Annual Totals Snettisham Coastal Park 1990 – 1999.

WILLOW CARR, RIVER BURN, BURNHAM MARKET

Site Code WCB Habitat Code C7 F3 Reed swamp and willow carr

This is the second year that we were able to operate at this site. Situated in the same kilometre square a few hundred metres from the Osier Carr which the Group previously used as a ringing site. The habitat is reed swamp with developing willow carr. It is surrounded on two sides by mature trees, the third by grazing meadows and on the fourth by the River Burn. It's sheltered location enables ringing to take place whatever the wind except when it is from the east.

Only one alteration to the net pattern was made in 1999 from that of 1998, an additional net ride was cut to accommodate an extra 18m net. This turned out to be a good decision as 2 out of 3 Barred Warblers, 2 Cetti's and 2 Kingfishers were all caught in it.

The intention for 1999 was to build on the experience gained in operating the site in autumn 1998 and cover the spring migration period in addition to autumn. Ultimately this was not feasible due to our commitment to the Ringed Plover project and only one session was possible in both May and June.

Intensive ringing on a virtual daily basis commenced in July and ended in October. The results were remarkable and but for an absence of two weeks beginning 29th September would have exceeded 1000 Blackcaps at this site alone! Instead we had to settle for 896.

Photo John Middleton

Barred Warbler

WILLOW CARR, RIVER BURN, BURNHAM MARKET

- **MONTHLY CAPTURE CALENDAR**

Species	April	May	June	July	Aug	Sept	Oct	Total
Sparrowhawk						1	1	2
Water Rail						2	2	4
Kingfisher				2				2
Great Spotted Woodpecker							1	1
Swallow						1		1
Wren		2	9	54	34	23	20	142
Dunnock			7	13	10	12	8	50
Robin			7	11	23	20	15	76
Wheatear						1		1
Blackbird			4	12	12	13	79	120
Song Thrush				7	17	19	7	50
Redwing							97	97
Cetti's Warbler						2		2
Grasshopper Warbler		1			1			2
Sedge Warbler		10	9	36	59	14		128
Reed Warbler		3	1	49	96	75		224
Barred Warbler					1	2		3
Lesser Whitethroat		1	0	1	1	1		4
Whitethroat			0	5	13	3		21
Garden Warbler			0	1	4	17	1	23
Blackcap		22	9	51	122	628	64	896
Chiffchaff		1	2	58	46	19	1	127
Willow Warbler	1	4	3	15	21	1		45
Goldcrest			1	3	2	6	15	27
Spotted Flycatcher					4			4
Long-tailed Tit			2	12	3	18	47	82
Marsh Tit			1					1
Blue Tit			3	24	8	10	5	50
Great Tit		2	7	11	8	6	4	38
Treecreeper			1	4				5
Starling							1	1
Chaffinch				12	8	21	8	49
Brambling							1	1
Siskin						1	3	4
Bullfinch		3		13	1	2	4	23
Reed Bunting		1						1
Total	**1**	**50**	**66**	**394**	**494**	**918**	**384**	**2307**

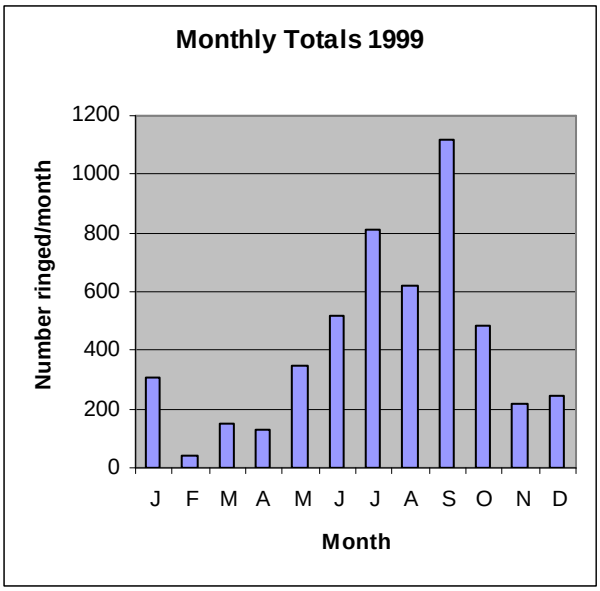
Table 3: Willow Carr monthly capture calendar.

MONTHLY RINGING TOTALS 1999 ALL SITES COMBINED

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Sparrowhawk									1	1	1		3
Water Rail									2	2			4
Avocet						27							27
Ringed Plover					31	73	37						141
Lapwing					44	3							47
Turnstone	2											6	8
Stock Dove						4	1						5
Woodpigeon		1				1	2		1				5
Collared Dove	4		2										6
Turtle Dove						1							1
Cuckoo					1								1
Barn Owl					1	26	7						34
Tawny Owl					2								2
Kingfisher						1	2						3
Green Woodpecker							2						2
Great Spotted Woodpecker										1		1	2
Skylark	1			2	8	22	3						36
Shorelark	8												8
Swallow						48	28	12	2				90
Meadow Pipit			1	1	5								7
Pied Wagtail				1									1
Wren					5	21	88	40	32	24	8	1	219
Dunnock	10	3	13		4	32	35	18	28	10	15	1	169
Robin	2	2	2	5	3	12	22	35	28	19	10	1	141
Redstart									1				1
Whinchat				3	7				4				14
Stonechat			4	1					1				6
Wheatear			22	86	96	2			4				210
Blackbird	6	4	1	3	7	11	33	21	27	134	72	25	344
Fieldfare											1		1
Song Thrush				1	1	3	15	17	24	13	2		76
Redwing										97	2		99
Mistle Thrush					1								1
Cetti's Warbler									2				2
Grasshopper Warbler					1			1					2
Sedge Warbler					23	32	46	60	15				176
Reed Warbler					4	23	85	104	87				303
Barred Warbler								1	2				3
Lesser Whitethroat					3	1	10	7	3				24
Whitethroat				1	2	9	20	23	19				74
Garden Warbler							1	4	17	1			23
Blackcap	1				25	16	73	146	681	67	1		1010
Chiffchaff					1	6	70	48	27	1	1	1	155
Willow Warbler				1	15	23	40	22	1				102
Goldcrest	1		1			2	4	2	10	18	12	1	51
Spotted Flycatcher							2	4	1				7
Long-tailed Tit			2			12	15	3	20	54	15		121
Marsh Tit						1					1	2	4
Coal Tit											4	3	7
Blue Tit	5	2	2	1	13	24	45	13	14	11	36	19	185

MONTHLY RINGING TOTALS 1999 CONTINUED

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Great Tit	2	1	1	3	25	21	23	11	9	6	14	15	131
Nuthatch											1		1
Treecreeper						1	4						5
Jackdaw					5								5
Starling	49		8	1	3	9			7	1	8	60	146
House Sparrow						19	3		1		2		25
Tree Sparrow			12										12
Chaffinch	3	2	25	7		7	43	8	30	9	2	2	138
Brambling										1			1
Greenfinch		5	12	11		14	9	4	8	1	4	4	72
Goldfinch			2		2	2	8	9	8	2	3		36
Siskin			2						1	3			6
Linnet			21	1	3	9	18	3		3			58
Bullfinch	1				3	3	15	4	2	4	6		38
Lapland Bunting		1											1
Snow Bunting	212	21										105	338
Yellowhammer			11										11
Reed Bunting			3	2	2		1		1				9
Total	307	42	147	132	346	521	810	620	1121	483	221	247	4996



Graph: Monthly Capture Calendar, all sites combined

ANNUAL TOTALS 1990-1999.

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Fulmar		21	28	17	23	21	7	7			124
Manx Shearwater					1						1
Mute Swan	14	62	90	66	9	2					243
Egyptian Goose	1										1
Shelduck	6	3									9
Mallard	2	8		7	7						24
Marsh Harrier	31	16	38	37	14	27		3			166
Sparrowhawk	2	4		3	3		3	4	4	3	26
Kestrel	11		1	2	2	5	2	11	6		40
Red-legged Partridge									1		1
Grey Partridge									1		1
Water Rail							4	1	2	4	11
Moorhen	4	2	1					1			8
Coot		6		3							9
Oystercatcher	2	6	1	12	3		1	1	2		28
Avocet	24	9		24	2			2	13	27	101
Ringed Plover	15	4		53	183	46	128	146	109	141	825
Lapwing	35	36	33	16	14	11	2	11	31	47	236
Sanderling							61		25		86
Dunlin							1				1
Snipe		1									1
Woodcock				1				2	1		4
Redshank	4			6	4	2		1			17
Common Sandpiper									1		1
Turnstone					5	6	22		4	8	45
Black-headed Gull	10	37					26	13	1		87
Common Gull		11		1			9	1			22
Common Tern	7	4									11
Little Tern	10	4		1							15
Puffin							1				1
Stock Dove	13	7	10	2		1	3	11	9	5	61
Woodpigeon	4	7			6	2	5	9	4	5	42
Collared Dove		1						1	13	6	21
Turtle Dove			1		1		4	3	7	1	17
Cuckoo	1									1	2
Barn Owl	2	1	1	3	2	5	10	24	29	34	111
Little Owl	1							4			5
Tawny Owl					2		3		4	2	11
Long-eared Owl	1			1							2
Short-eared Owl	1	1									2
Swift	1	5		2							8
Kingfisher			1	2						3	6
Wryneck							1		1		2
Green Woodpecker				2	3	5	3	4	3	2	22
Gr Spotted Woodpecker	2	3		2	2			7	3	2	21
Skylark	13	1	2	7	24	8	5	70	126	36	292

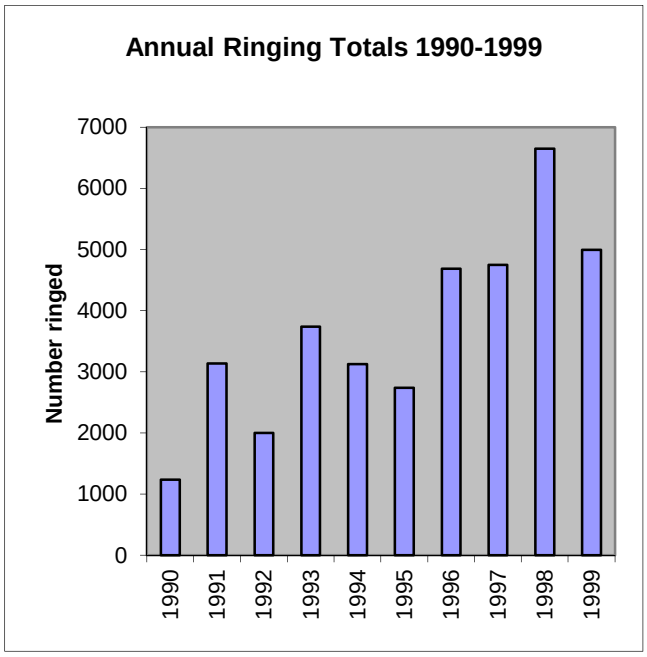
ANNUAL TOTALS 1990-1999.

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Shorelark									44	8	52
Sand Martin	2	142	218	55	76		1	4			498
Swallow	64	50	138	113	671	143	208	299	115	90	1891
House Martin	1	40	91	460	2	50	41	6			691
Tree Pipit		1				1	1	1			4
Meadow Pipit	47	9	17		33	5	15	20	20	7	173
Yellow Wagtail							3				3
Grey Wagtail				1							1
Pied Wagtail	3		5	11	44	146	178	104	20	1	512
Waxwing		1					13				14
Dipper		1			1						2
Wren	25	39	36	109	92	73	91	84	118	219	886
Dunnock	41	109	109	196	125	139	170	150	352	169	1560
Robin	74	60	49	162	81	60	122	127	399	141	1275
Bluethroat				1							1
Nightingale						1	2		1		4
Black Redstart	1		1				6	2			10
Redstart		2	4	19	17	11	20	2	14	1	90
Whinchat	1	7	2		7		17	9	16	14	73
Stonechat	2	1	1				7		7	6	24
Wheatear	30	23	27	2	65	6	199	175	180	210	917
Ring Ouzel	2			1					1		4
Blackbird	112	346	88	234	138	60	337	383	416	344	2458
Fieldfare	2	13		9	19	8	156	20	13	1	241
Song Thrush	32	75	24	107	30	14	55	56	86	76	555
Redwing	9	20		49	7	1	34	80	28	99	327
Mistle Thrush	2	15		4	2	3	1	6	6	1	40
Cettis Warbler									1	2	3
Grasshopper Warbler		7	5	1	1	3	4		3	2	26
Sedge Warbler	6	63	34	45	75	194	106	93	88	176	880
Reed Warbler	32	46	44	45	217	134	114	187	235	303	1357
Icterine Warbler					1						1
Barred Warbler		1			4	2	1			3	11
Lesser Whitethroat	8	32	18	46	17	72	51	49	13	24	330
Whitethroat	6	17	15	47	25	179	78	67	58	74	566
Garden Warbler	2	17	8	36	59	20	38	16	32	23	251
Blackcap	16	31	128	134	75	119	137	154	495	1010	2299
Yellow-browed Warbler		1			1						2
Wood Warbler					1		1	1			3
Chiffchaff	4	7	14	26	21	37	65	67	188	155	584
Willow Warbler	8	22	25	84	45	125	148	157	120	102	836
Goldcrest	144	13	6	104	44	11	44	86	245	51	748
Firecrest					1		3	2	1		7
Spotted Flycatcher	2	7	7	2	7	5	7	6	1	7	51
Pied Flycatcher		2	1	5	13		3	7	10		41

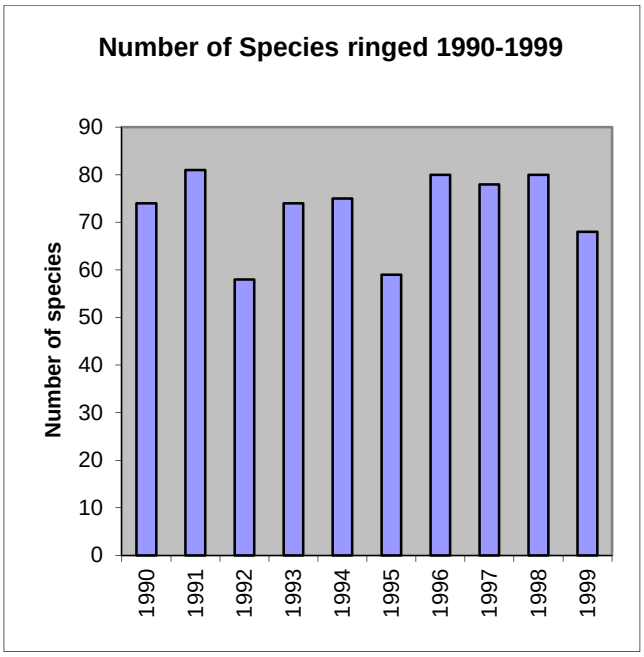
ANNUAL TOTALS 1990-1999.

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Pied Flycatcher		2	1	5	13		3	7	10		41
Bearded Tit		2			2						4
Long-tailed Tit	57	63	25	167	45	81	67	91	147	121	864
Marsh Tit	2	1	2	2	1	1	4	2		4	19
Willow Tit	4	2		1			1				8
Coal Tit	5	15	3	12	8	3	15	12	41	7	121
Blue Tit	54	287	149	233	208	130	193	342	309	185	2090
Great Tit	17	72	36	92	56	62	83	141	158	131	848
Nuthatch		1			1			6		1	9
Treecreeper	1	1	3	4	4	3	3	3	6	5	33
Isabelline Shrike							1				1
Red-backed Shrike		2									2
Jay				1	1			1	1		4
Magpie	2	8	2	1				6	2		21
Jackdaw	3								11	5	19
Starling	93	151	161	35	186	39	760	257	434	146	2262
House Sparrow	1		1		3	20	21	42	35	25	148
Tree Sparrow	3	9				6	36	21	11	12	98
Chaffinch	22	157	60	307	98	140	258	243	273	138	1696
Brambling		32		5	3		22	3	13	1	79
Greenfinch	21	620	104	54	51	93	160	337	349	72	1861
Goldfinch	2	7	14	36	1	25	51	58	118	36	348
Siskin				1	1		4		541	6	553
Linnet	22	26	20	35		49	61	43	38	58	352
Twite				4	45	3					52
Redpoll		5	6	6			1	1	5		24
Crossbill	1							7	17		25
Scarlet Rosefinch								1			1
Bullfinch	15	12	10	31	1	12	18	21	40	38	198
Lapland Bunting										1	1
Snow Bunting		146	57	293	48	253	95	258	305	338	1793
Yellowhammer	14	14	11	13	15	32	33	71	49	11	263
Reed Bunting	4	21	15	25	23	23	19	23	15	9	177
Corn Bunting			1						5		6
Total	1238	3134	2002	3736	3128	2738	4684	4747	6649	4996	37052
No. Species	74	81	58	74	75	59	80	78	80	68	124

GRAPHS: ANNUAL TOTALS AND NUMBER OF SPECIES RINGED 1990-1999.



Graph 1: Annual Totals 1990-1999



Graph 2: Number of Species ringed 1990-1999

NEST RECORDS 1999

Trevor Girling

Nest record data was collected again this year. The total number of cards submitted to the BTO Nest Records Unit was 267 of 24 species. Thanks to the efforts of the following group members: J.Barlow 105, T.Girling 87, T.Hallahan 36 and J.Middleton 39.

Our efforts this year were concentrated on Ringed Plover, Swallow, Skylark, Barn Owl and Reed Warbler. Although a number of other species were observed and recorded.

An account of the Nest Records for Ringed Plover can be found in the article by J.Barlow elsewhere in this report.

In contrast to recent years, birds that were found to be breeding in May and June, fared very well, with rainfall below average and temperatures higher than normal. The lack of prolonged wind and rain that over the last two years had become the norm meant that very few chicks got chilled or staved to death. One or two thunderstorms at the end of May were not serious enough to hinder the breeding cycle.

Our annual count of the Fulmar nests on Hunstanton cliffs revealed 45 pullus, this is the lowest count for five years. None of the pullus could be reached this year.

A full analysis of Swallows, was not made this year; and for the Swallows at Locke Farm at Snettisham, this year was made all the worse by a change in ownership of the farm. This resulted in the Nissen hut and other outbuildings being removed and the whole farm 'tidied', this meant the destruction of seven nesting sites that had been used for many years in the past.

12 cards were completed for Reed Warblers this year, additionally five nests were found only after the chicks had fledged, and three nests were found during the building stage, but for some reason they were not finished. A total of 23 pullus were ringed at Snettisham Coastal Park during our programme of nest finding, Six of these were subsequently retrapped.

Ring Number	Ringing Date	Retrap Date	Site
N439938	5-6-1999	10-7-1999	SCP
P083063	29-6-1999	24-7-1999	SCP
P083064	29-6-1999	24-7-1999	SCP
P083066	29-6-1999	31-7-1999	SCP
P083107	14-7-1999	31-7-1999	SCP
P083105	14-7-1999	29-8-1999	WCB

This last bird was retrapped at a site near Burnham Market by John Middleton.

Although none of the previous years pullus Reed Warblers were trapped during 1999 the following birds, originally ringed as pullus were retrapped:-

Species	Ring Number	Ringing Date	Retrap Date
Willow Warbler	8W2980	1-6-1997	29-5-1999
Sedge Warbler	K997255	10-6-1997	31-7-1999
Reed Bunting	N290930	19-5-1998	19-6-1999

A summary of all cards is presented in the following table.

SUMMARY OF NEST RECORD CARDS FOR 1999

- **267 Cards of 24 Species**

Species	No Cards	Success	Failure Egg	Failure Young	Outcome Unknown	No Eggs	Young Hatched	Probably Fledged
Fulmar	45	45				45	45	45
Quail	2	0	1		1	14	0	0
Oystercatcher	1	1				2	2	2
Avocet	9	9				32	29	29
Ringed Plover	105	For full details of this species refer to the article by Jos Barlow.						
Lapwing	19	19				57	54	53
Redshank	1	0	1			3	0	0
Stock Dove	3	3				6	5	5
Woodpigeon	2	2				4	2	2
Turtle Dove	1	0	1			2	0	0
Barn Owl	10	10				44	35	35
Tawny Owl	1	1				2	2	2
Skylark	14	12		1	1	42	40	32
Swallow	26	20	5	1		107	91	86
Meadow Pipit	1	1				5	5	5
Robin	1	1				5	5	5
Blackbird	1	1				4	3	3
Sedge Warbler	3	3				18	18	18
** Reed Warbler	12	6	5	1		38	21	17
Willow Warbler	1	1				5	5	5
Spotted Flycatcher	2	2				7	5	5
Blue Tit	1	1				14	14	13
Great Tit	3	3				22	22	22
Jackdaw	3	2		1		9	9	5

** In addition to the total for Reed Warblers are 3 nests that were abandoned prior to eggs being laid and 5 nests that were found after young had successfully fledged.

Table: Summary of Nest Records 1999.

SPECIES RECOVERIES AND CONTROLS

INTRODUCTION

- Previous reports have usually only featured selected recoveries and controls that were received during the current year of that report.

- The style and content of this report therefore differs from that usually adopted:

  - Recoveries and controls received during 1999 will still be included in this report.

  - There is a review of all recoveries received by the Group 1990 – 1999.

  - In addition some of the recoveries received during the last ten years will be presented in a way that show some results of the first decade of the Groups formation.

  - With the publication of this edition an attempt is also made to show these recoveries in an appropriate context relative to the species concerned and to the site or sites where they were studied.

- Maps of recoveries are included for the first time.

- Just over 700 recoveries of 61 species are in the Group Recoveries database, but not all will be featured in this report.

  - This is when the number of recoveries is small or when they are unlikely to be of interest due to the small distance travelled.

  - Only species recoveries that offer some degree of interpretation or special interest are included.

- The following species are included in Voous order.

Fulmar	Robin	Chaffinch
Marsh Harrier	Wheatear	Brambling
Sparrowhawk	Blackbird	Greenfinch
Kestrel	Fieldfare	Siskin
Oystercatcher	Song Thrush	Linnet
Avocet	Sedge Warbler	Twite
Ringed Plover	Reed Warbler	Redpoll
Lapwing	Whitethroat	Bullfinch
Sanderling	Blackcap	Snow Bunting
Turnstone	Chiffchaff	Yellowhammer
Black-headed Gull	Willow Warbler	
Barn Owl	Goldcrest	
Shorelark	Long-tailed Tit	
Sand Martin	Blue Tit	
Swallow	Magpie	
Dipper	Jackdaw	
Dunnock	Starling	
Robin	Tree Sparrow	

- A summary of the number of annual recoveries is given in Table 1.

  - The order of Table 1 is given alphabetically.
  - The Group received 87 reports of recoveries and controls in 1999.

RECOVERIES AND CONTROLS 1990 – 1999

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Avocet						1	1	2	2	2	**8**
Bar-tailed Godwit							1				**1**
Barn Owl	3				1	2	1	4	2	8	**21**
Black-headed Gull	1	1						2		3	**7**
Blackbird		7	6	3	5	1	4	3	7	5	**41**
Blackcap			2	1		1	1	1	1	6	**13**
Blue Tit			1		1	2		1		1	**6**
Brambling					1						**1**
Bullfinch					1						**1**
Chaffinch				1		1		2	1		**5**
Chiffchaff								2	1	1	**4**
Common Gull					1						**1**
Coot			1	2							**3**
Dipper		1									**1**
Dunnock				1	1	1	2	2	2	2	**11**
Fieldfare			1	1			1				**3**
Fulmar		2	1	3	1	3				1	**11**
Goldcrest					1				1		**2**
Great Tit			1	1			1				**3**
Green Woodpecker						1					**1**
Greenfinch		12	4	1	3	2	2	1	5	1	**31**
Grey Plover				1							**1**
Guillemot					1						**1**
Jackdaw										1	**1**
Jay					1						**1**
Kestrel				1					2	1	**4**
Lapwing									1	1	**2**
Lesser Whitethroat							1		2		**3**
Linnet								2		1	**3**
Long-tailed Tit							3		1	2	**6**
Magpie		1			1						**2**
Marsh Harrier		3	1			2		1			**7**
Mute Swan		19	31	17	19	15	9	2	3		**115**
Oystercatcher	1		1	2				1		1	**6**
Pied Wagtail						1					**1**
Pink-footed Goose			1								**1**
Redpoll							1				**1**
Redshank		1									**1**
Reed Bunting						1					**1**
Reed Warbler			1	3	2	2	2	2		5	**17**
Ringed Plover				1	10	4	15	12	15	7	**64**
Robin		1	1		1	1		2	2	1	**9**
Sand Martin		4	13	5	12						**34**
Sanderling							16	11	5	1	**33**
Sedge Warbler					3	1	1	1		8	**14**
Shore Lark										3	**3**
Siskin									23	9	**32**
Snow Bunting		6	1	8	5		14	7	40	6	**87**
Song Thrush		1					1				**2**

Table 1. Total recoveries and controls of all species.

Table 1. Continued.

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Sparrowhawk			1							1	**2**
Starling		2	5	1	1	3	3	11	7	6	**39**
Swallow		3		1	1	1		2	1	1	**10**
Tree Sparrow										1	**1**
Turnstone						1	4				**5**
Twite						1					**1**
Wheatear	1							1	1		**3**
Whitethroat					1		4				**5**
Willow Warbler					1	1	1				**3**
Woodlark								1			**1**
Wren							1			1	**2**
Yellowhammer			1			1					**2**
Total	**6**	**64**	**74**	**54**	**75**	**50**	**90**	**76**	**125**	**87**	**701**

Maps used in this report.

The format and style of any map used will depend on the type of information it contains but typically will be:

- A map (or maps) where ringing and recovery locations are joined by straight lines.
- A map (or maps) showing recovery locations of birds ringed by the Group (λ) and ringing locations of birds controlled by the Group having been ringed elsewhere (σ).

Political Boundaries

- Many geopolitical changes have occurred which have not yet been incorporated into ringing scheme codes. This report follows these conventions:
    - Changes that follow boundaries used previously and still easily identifiable (eg the succession of Latvia, Estonia and Lithuania or German reunification) use the new political names (eg the old West Germany and East Germany become Germany).
    - Where changes are less clear (eg the rest of the old USSR) or will require new codes (eg the former Yugoslavia) changes await confirmation of boundaries and so are not shown.

SPECIES RECOVERIES AND CONTROLS

- A recovery is where a bird ringed by the group is re-trapped more than 5km away from its original ringing site or is reported dead, not released or released without its ring.

- A control is where a bird not originally ringed by the group, is recovered by the Group more than 5km away from its original ringing site.

When included species are arranged in Voous order and for each species:

- A summary of total ringed and recovered 1990-1999 and the percentage recovery rate is given.
- Some recoveries are presented in a manner which allows some interpretation.
- Some notable recoveries are presented.
- There is a recovery list of selected recoveries if any were received from the BTO during 1999.
- There is a map or maps of recoveries if appropriate.

Each list contains information for a particular recovery in the following order:

1. Ringing Scheme code if not BTO

BLB	Bruxelles, Belgium	ESM	Madrid, Spain	PLG	Gdansk, Poland
CIJ	Jersey, Channel Islands	FRP	Paris, France	POL	Lisbon, Portugal
DFH	Helgoland, Germany	HGB	Budapest, Hungary	SFH	Helsinki, Finland
DDH	Hiddensee, Germany	IAB	Bologna, Italy	SUE	Matsalu, Estonia
DFR	Radolfzell, Germany	ISR	Reykjavik, Iceland	SUK	Kaunus, Lithuania
DKC	Copenhagen, Denmark	NLA	Arnhem, Netherlands	SUR	Riga, Latvia
DKK	Kalo, Denmark	NOO	Oslo, Norway	SUM	Moscow, Russia
ESA	San Sebastion, Spain	NOS	Stavanger, Norway	SVS	Stockholm, Sweden
ESI	Icona, Spain				

2. Ring number.

3. Age when ringed according to the Euring code, figures do not represent years.

1 pullus (nestling or chick).
2 fully grown but of unknown age.
3 juvenile in 1st calendar year.
4 adult at least one year old.
5 hatched in previous calendar year.
6 adult at least two years old.
7 hatched two calendar years ago.
8 adult at least three years old.

Sex if known. M = Male, F = Female.

4. Date and place of ringing, and date and place of recovery.

5. The method of recovery using the conventions shown.

X	found dead
XF	found freshly dead or dying
XL	found dead not recent
+	shot or intentionally killed by man
+F	shot or intentionally killed by man - fresh
+L	shot or intentionally killed by man not recent
SR	sick or injured, released with ring
S	sick or injured not known to have been released
A	alive and probably healthy, fate unknown
AC	alive and probably healthy, now captive
V	alive and probably healthy, caught and released but not by a ringer
N	alive and probably healthy, caught and released but not by a ringer - nesting
VV	alive and probably healthy, ring or colour marks read in the field but not by a ringer
NN	alive and probably healthy, ring or colour marks read in the field but not by a ringer - nesting
R	caught and released by ringer
B	caught and released by ringer - nesting
RR	alive and probably healthy, ring or colour marks read in the field by ringer
BB	alive and probably healthy, ring or colour marks read in the field by ringer - nesting
//	condition on finding unknown

In addition, for many recoveries, the circumstances of recovery are also known e.g. oiled, killed by cat, road casualty etc

6. Distance and direction moved.

FULMAR

The Fulmar colony at Hunstanton is the largest in Norfolk. In 1994 there were 124 pairs that were breeding. On the 7th June 1994 a total of 431 birds were counted sitting on the cliff and 30 more were swimming offshore. Only the colony between Weybourne and Cromer has held similar significant numbers, which in the late fifties numbered 40-50 pairs increasing to 80-90 pairs in 1990. However since then, the numbers of breeding pairs and young fledged annually has drastically declined due to a combination of predation by rats and foxes and loss of nest sites caused by erosion of the cliff.

A similar decline is also apparent at the Hunstanton colony, the reason for this is not yet understood. The number of chicks expected to fledge has decreased almost annually since 1994 when a record 107 were counted. Since 1994 the cliff face at Hunstanton has suffered extensive rock falls and erosion, which has removed many of the lower nesting ledges. Most birds are consequently nesting on the higher ledges, which cannot be reached by ladder. Climbing is not an option due to the extremely unstable nature of the cliff face, which might result in debris being dislodged with disastrous consequences for any chicks. During the last two years, no Fulmars have been ringed by the group. We continue to monitor this colony, counting the number of pairs and chicks on an annual basis.

Annual counts of chicks:
1995 = 67
1996 = 79
1997 = 62
1998 = 51
1999 = 45

Show a decline in the number of chicks expected to fledge that can't easily be explained.

- Total ringed by the Group 124, and recovered 7, recovery rate 5.6%.
- Total recovered by the Group 3.

Photo: Sabine Schmitt

Fig 1: Fulmars breeding at Hunstanton cliffs

- Some recoveries of interest.

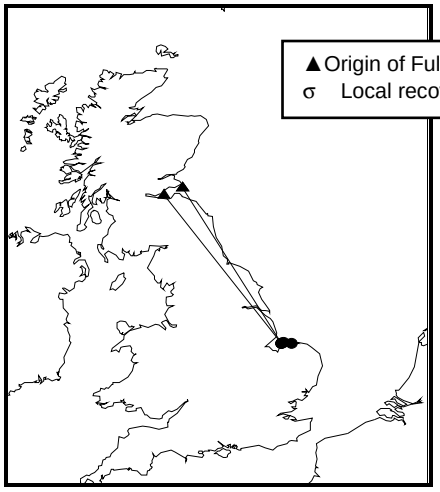
  - This Fulmar at 20 years is the oldest Fulmar recovered by the Group. Ringed as a chick in 1975 at Inchkeith, Fife Region, Scotland, and controlled as a breeding adult at the Hunstanton colony in 1995.

FS36752 1 13.08.75 Inchkeith, Fife, **Scotland** R 05.08.95 Hunstanton 414km SE

  - Two more adult Fulmar at 14 and 15 years old respectively, complete a trio originally ringed as nestlings at colonies in Scotland which have been recovered by the Group at

the Hunstanton colony. They are worth mentioning as they demonstrate the southerly range expansion of this species.

FR24815	1	03.08.81	Isle of May, Fife, **Scotland**	R	23.06.94	Hunstanton		
				X	05.08.95	Hunstanton	409km	SSE
FV79569	1	13.08.80	Inchkeith, Fife, **Scotland**	R	05.08.95	Hunstanton	414km	SE



Map 1: All recoveries of Fulmars.

Fulmars ringed as chicks at colonies in Scotland that moved south east and were subsequently recruited into the Hunstanton colony clearly demonstrate the southerly range expansion of this species.
A count of adults present in 1994 was 461 but not all were breeding (Schmitt 1994). In 1985 the colony fledged about 60 chicks (Slater 1987). In 1994, 107 chicks fledged, almost double that number. An increase, which accords with that seen during the last 200 years (Fisher 1952), and shows an annual increase of approximately 7% per annum of breeding Fulmars in the North Atlantic region. (Cramp et al 1974).

- All other recoveries (6), were of Fulmars either found dead in the immediate vicinity or within 8km of the colony during their first winter.

- There was 1 recovery notified during 1999.

FC75408	1	31.07.93	Hunstanton, Norfolk	X	Holkham, Norfolk	21.08.99	22km	E

MARSH HARRIER

All Marsh Harriers ringed by the Group have been pullus and with the exception of one brood of three chicks, are all part of the core population located around the Wash. Most of which have adopted crop nesting as an alternative to the more traditional reed bed nest sites. Marsh Harriers continue to increase and expand away from the main areas around the Wash.
A nest away from the main stronghold was found almost by accident, the female was observed returning to the nest site. Located in what appeared to be phragmites at first sight, investigation revealed that this reed bed had accreted to such an extent that the common stinging nettle *Urtica dioica* had actually taken over and was dominating the drier areas. The nest was sited in stinging nettles and in this respect may be unique. Marsh Harriers can often be seen hunting farmland well away from the coast. It is possible that other breeding attempts further inland in arable crops go unnoticed. We know, of at least one failed nesting attempt in cereals. This nest was monitored by the author in 1999 and involved an immature male and two females. On one occasion, one female escorted back to the nest by the male displaced a second female from the nest site. The nest was abandoned for no apparent reason, it may just have been due to this young males inexperience.

- Total ringed by the Group 166, total recovered 7, recovery rate 4.2%

- Only been three have been recovered outside the county.

- One each to Cambridgeshire and Humberside respectively and one to France.

FC54474	1	01/07/90	Site confidential	XL	24/06/91	Redbourne, Humberside	100km NW
FC54495	1	28/06/91	Site confidential	XF	15/09/92	Soham, Cambs	71km S

❖ Most notable recovery was of this four year old shot in France.

FC54497	1	03/07/95	Site Confidential	+	17/04/95	Nr Le Havre, **France**	356km S

- There have been no other recoveries during the period covered by this report.

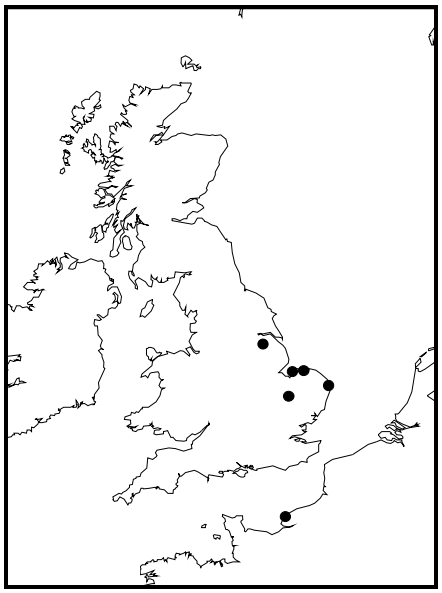


Photo: John Middleton

Fig 2: Marsh Harrier nest in common stinging nettle *Urtica dioica*.

Map 2: All Marsh Harrier recoveries excluding local recoveries.

SPARROWHAWK

- Total ringed by the Group 26, total recovered 2, recovery rate 7.7%.
- There have been no significant recoveries, both were recovered 5km or less away from their ringing site.

- There have been no recoveries during the period covered by this report.

KESTREL

- Total ringed by the Group 40, total recovered 4, recovery rate 10.0%.
- Only three of these involved movements greater than 15km

ER43994	1	30/05/95	Burnham Market	X	14/08/98	Ingoldisthorpe, Norfolk	48 Km SW
EB25339	1	01/07/98	Nr North Creake	X	16/11/98	Nr Fakenham, Norfolk	16 Km SE

❖ Most notable recovery is given below and was received in 1999.

ET07245	1	27/06/98	Burnham Market	X	29/01/99	Doncaster, S Yorks	135km NW

OYSTERCATCHER

- Total ringed by the Group 28, total recovered 6, recovery rate 21.4%.
- Many Oystercatchers are breeding on the arable fields of local farms, there is some evidence that these numbers are increasing.
- Most chicks ringed by the Group are inland.
- This is an example of a chick that was ringed by the Group and controlled by Wash Wader Ringing Group as an adult that was one of these inland bred birds.

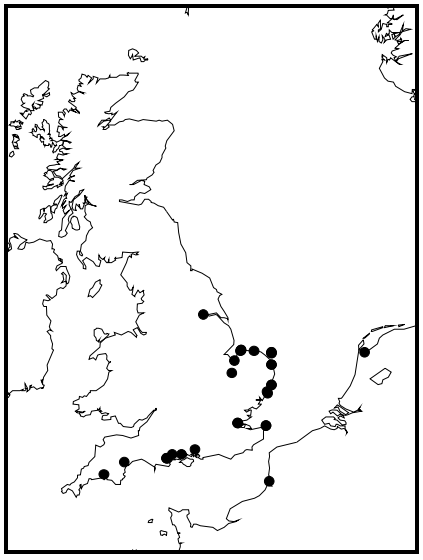
FC49467	1	16/06/93	North Creake	R	10/05/97	Heacham, Norfolk	16km	W

AVOCET

Avocets have been ringed by the group at three locations in Norfolk and at Elmley in Kent. Only details of Avocets ringed at the Norfolk locations are reported here. These colonies are at Holme, Titchwell and a confidential site on the Wash.

- Total ringed by the group 101, total recovered 8, recovery rate 7.9%.
- All were ringed as chicks and also colour-ringed.
- Details of one individual are given which have involved multiple sightings.

ER43950	1	05/08/91	Holme, Norfolk	VV	17/09/91	Halvergate, Norfolk
				VV	31/12/91	Tamar, Devon
				VV	21/03/92	Titchwell, Norfolk
				VV	19/04/92	Farlington, Hampshire
				VV	01/05/92	Stanpit, Dorset
				VV	26/06/92	Sidlesham, Sussex
				VV	31/07/92	Titchwell
				VV	07/08/92	Minsmere, Suffolk
				VV	06/08/94	Breydon, Norfolk
				VV	05/03/95	Titchwell
				VV	10/04/96	Holme
				VV	11/03/97	Titchwell
				VV	07/03/98	Titchwell
				VV	07/03/99	Titchwell
				VV	14/10/99	Middlebere, Dorset



Map 3: Colour-ring sightings and recoveries of Avocets.

- Taylor et al (1999), in *The Birds of* Norfolk state that there had only been two records of Norfolk ringed Avocets, found outside the county. In fact there had been numerous sightings of our colour-ringed Avocets outside the county, but the editors were not aware of these records.
- Not all had been reported as recoveries.

- We have a large database of Avocet colour-ring sightings including other examples of multiple sightings that are not included in this report.

  - This example is of a juvenile seen at the Tamar Estuary where large numbers are known to winter, it was subsequently re-sighted at Brownsea island in 1999.

ET07212	1	13/06/97	Site Confidential	VV 27/11/97	Tamar Estuary, Devon	409km	SW
				VV 28/09/99	Brownsea Island, Dorset		

  - Group colour-ringed Avocets have been seen at a variety of coastal locations:
    - In the south west, in Devon, Dorset and Hampshire.
    - In the south east in Kent.
    - In Suffolk and east Norfolk.
    - In France (one).
    - In the Netherlands (one).

  - The second of the two birds involved in the account given in *The Birds of* Norfolk, has been re-recovered subsequent to publication.

ET07234	1	03/06/98	Site Confidential	VV 29/08/98	Cliffe, Kent	143km	S
				VV 09/04/99	Blacktoft Sand, Humberside	119km	NW

  - It was first sighted in Kent 1998, and subsequently re-sighted at Blacktoft Sands in 1999.

- Only one other recovery was reported in1999.

ET07237	1	27/06/98	Site Confidential	VV	30/04/99	Welney, Cambs	38km	S

This bird chose not to return to its natal site but instead stayed at Welney where it apparently bred.

- All demonstrate the value of a colour-ringing programme.

RINGED PLOVER

This species has been the subject of a comprehensive colour-ringing programme initiated by Paul Fisher and begun by the Group in 1994. Which investigates the effects of predation and human disturbance on a breeding population. The study has showed that the main causes of failure are predation 22%, trampling by humans 10% and desertion due to disturbance 8%. Whilst most eggs hatch at about 24 days, and although fluctuations in temperature have an effect, disturbance is the main cause of prolonged incubation periods with some eggs taking up to 31 days to hatch. The first year included an additional study area at Holme which was then discontinued in order to concentrate on the Snettisham/Heacham population which numbers approximately 60-65 pairs. It has also produced a considerable number of recoveries and sightings. A number of people have worked on this project which involved nest trapping adults and colour ringing these and their chicks. They include Dominic Harmer and the author 1994–1995, Durwyn Liley 1996–1998, Jos Barlow, John Martin and the author 1999. The NWNRG acknowledge the tremendous amount of effort they collectively contributed. The Group will continue this programme as a Retrapping Adults for Survival (RAS) project from spring 2000.

- Total number ringed 825, total recovered 51, recovery rate 6.2%.
- Total number recovered by the Group 8.

Additional effort was made by the Wash Wader Ringing Group to target Ringed Plovers and colour-ring them to assist the study.

- Ten birds were cannon netted on 10/03/96 by WWRG and ringed using NWNRG rings and also colour-ringed.
- Two birds ringed by WWRG and then re-trapped on 06/06/96 also had colour-rings added.

❖ A new Wash longevity record.

BV85945	4	31/08/80	Heacham, Norfolk	R	18/05/95	Snettisham	Local

Originally ringed by WWRG as an adult, this female was recovered by the Group breeding nearly 14 years later.

- Additionally 8 birds that were captured as breeding adults and had been originally ringed elsewhere by other ringer(s), had colour-rings added. Only one has been recovered away from the breeding area. Involving movement of an adult choosing to winter in two different locations in successive winters.

NV47359	4	07/08/89	Butterwick, Lincs	R	07/06/96	Snettisham, Norfolk	25km	ESE
				RR	19/02/97	Nr Sheffield, S.Yorks, Eng	103km	WNW
				VV	11/12/97	Finisterre, **France**	589km	SW

- A number of recoveries have been received which indicate that the local breeding population winter in west and south west Britain and also in France as far south as 46-09N 01-15W. However there have also been several recoveries from northern England and Scotland.

- Examples of birds wintering to the west include.

NV54284	1	20/06/93	Holme, Norfolk	R	01/01/95	Anglesey, **Wales**	310km	W
NV81489	1	02/08/97	Snettisham, Norfolk	VV	22/09/97	Gronant, Clwyd, **Wales**	259km	WNW
NV94270	6	03/07/98	Snettisham, Norfolk	VV	19/09/98	Dublin, **Eire**	448km	W
NV94242	1	13/06/98	Snettisham, Norfolk	RR	29/07/98	Wexford, **Eire**	472km	W
NV82627	4	14/04/96	Snettisham, Norfolk	VV	03/09/99	Nr Dublin, **Eire**	434km	W
NV81405	4	04/06/97	Snettisham, Norfolk	VV	03/09/99	Nr Dublin, **Eire**	434km	W

- To the south west.

NV79052	6F	01/06/94	Snettisham, Norfolk	VV	09/10/95	Nr Bideford, Devon		
				RR	16/10/97	Nr Bideford, Devon	377km	WSW
NV82648	1	02/06/96	Snettisham, Norfolk	VV	31/08/96	Titchfield Haven, Hants	255km	SSW

- Examples of birds wintering in Scotland include.

NV77830	5M	23/06/94	Holme, Norfolk	VV	06/10/98	Leven, Fife, **Scotland**	424km	NNW
NV77855	1	02/07/94	Holme, Norfolk	R	18/12/94	Golspie, **Scotland**	624km	NNW

- Examples of birds moving to winter locations in northern England include recoveries to both the north west and north east coasts.

  - To the north west.

NV77893	1	10/06/96	Snettisham, Norfolk	R	08/08/98	Walney Island, Cumbria	280km	WNW
NV77898	1	14/06/96	Snettisham, Norfolk	VV	31/01/98	Fleetwood, Lancs	259km	WNW

  - To the north east.

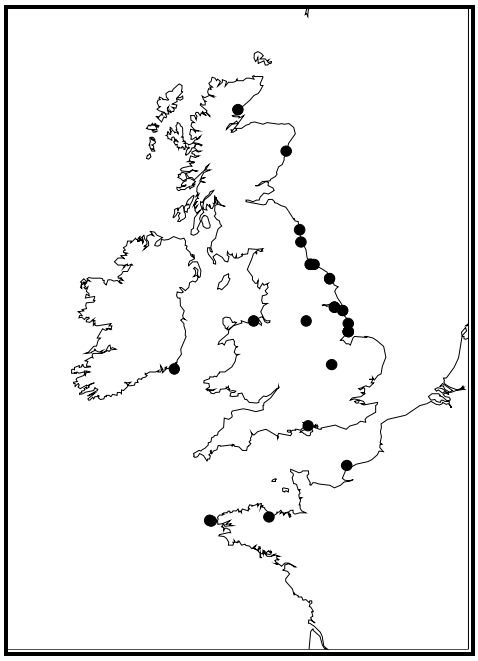
NV94223	1	04/06/98	Snettisham, Norfolk	VV	06/10/98	Cambois, Northumberland	283km	NNW
NV94244	1	13/06/98	Snettisham ,Norfolk	R	05/08/98	Seal Sands, Cleveland	222km	NNW

- Juvenile Ringed Plovers have made some interesting movements to their wintering locations. An example is given of one that moved to Cambridgeshire 58 days after ringing as a chick, and was re-sighted at the Ile De Banneg, Finistere, France, 26 days later.

NV82651	1	14/06/96	Snettisham, Norfolk	VV	11/08/96	Grafham Water, Cambs	81km	SW
				VV	06/09/96	Ile De Banneg, **France**	626km	SW

NV94249	1	14/06/98	Snettisham, Norfolk	VV	29/06/98	Immingham, Humberside	97km	NNW
				VV	23/08/98	South Gare, Cleveland	222km	NNW

The rapid movement of NV94249 was just 15 days after ringing!

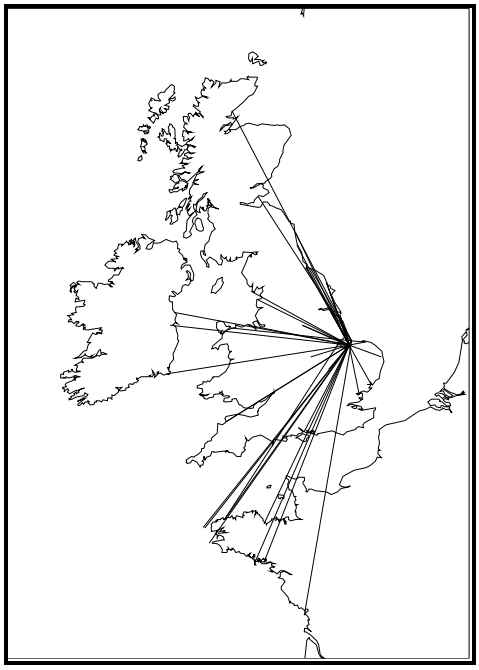


All recoveries/sightings are of different individuals, except for NV82651 seen Grafham Water 11/08/96 and subsequently at Isle of Baneg, Brittany 06/09/96. And also NV94249 seen 29/06/98 Immingham, Humberside and then 23/08/98 South Gare, Cleveland.

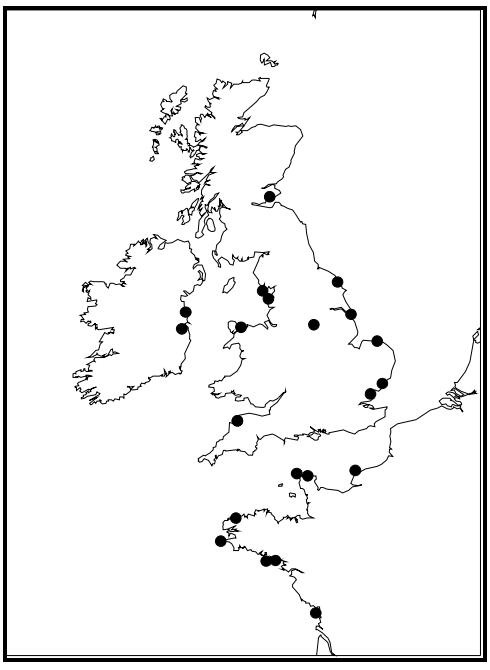
Map 4: Recoveries of juvenile Ringed Plovers in their first winter.

- There were three other recoveries in 1999 in addition to the two to Eire shown above.

NV94291	1	25/07/98	Snettisham, Norfolk	VV	25/07/98	Gibraltar Point, Lincs	25km	NNW
NV94365	1	25/06/99	Snettisham, Norfolk	VV	12/10/99	Spurn Point, Humberside	81km	NNW
NV94322	1	01/06/99	Snettisham, Norfolk	RR	06/09/99	Ile D'Ouessant, France	627km	SW



Map 5: All Ringed Plover recoveries.



Map 6: Winter recoveries of adult Ringed Plovers August-Dec and Jan-Feb .

Photo John Webb

Fig 5: Ringed Plover at nest

LAPWING

- Total number ringed by the Group 236, total recovered 2, recovery rate 0.8%.
- All Lapwings ringed by NWNRG have been pullus.
- There have only been two recoveries, one in 1998 and the other in 1999.

DK14864 1 04/06/91 Holme, Norfolk R 08/08/98 Butterwick, Lincs 30km W

Cannon netted by Wash Wader RG when it was just over 7 years old.

DB45817 1 12/05/99 Flitcham, Norfolk X 05/06/99 Harpley, Norfolk 1km Local

An unfortunate road traffic casualty just 24 days after ringing. Young Lapwings are not fully independent until they are about 33 days old and so it is possible that this chick had actually been led across a road by its parents. The author has encountered numerous broods being walked from one field to another across a road, needless to say they have been promptly ringed!

SANDERLING

- Total number ringed by the Group 86, total recovered 17, recovery rate 19.8%
- Total recovered by the Group 12.

This high recovery rate is due entirely to their winter site fidelity and all involve birds:

1. Ringed by the Group and recovered by Wash Wader RG.
2. Ringed by WWRG and recovered by NWNRG.

All were captured, by both groups at the same site, but at different times. Essentially they are re-traps of both groups birds and so the practice of reporting them as recoveries has been discontinued. Instead we exchange information on these direct.

❖ There has been one notable recovery of a Sanderling ringed by the Group.

NT00141	5	19/01/96	Heacham, Norfolk	R	08/08/98	Gdansk, **Poland**			
				R	11/10/98	Heacham, Norfolk	1,227km	W	

This is the first example of a Sanderling from the Wash to be recovered in Poland and only the second British ringed record. It will have been returning from its Siberian breeding grounds when it was controlled in Poland and then re-captured by the Wash Wader Ringing Group two months later.

TURNSTONE

- Total number ringed by the Group 45, total recovered 3, recovery rate 6.6%.
- Total recovered by the Group 2.

CE88334	6	21/02/88	Heacham, Norfolk	R	25/03/95	Snettisham, Norfolk	Local
CE54846	5	16/04/88	Heacham, Norfolk	R	21/12/96	Heacham	Local

- These two recoveries show the same evidence of winter site fidelity as do Sanderling recovered at this location.

In common with Sanderling they are re-traps of both groups birds and so the practice of reporting them as recoveries has been discontinued. Information on these is also exchanged direct.

- ♦ The re-trap data for both Sanderling and Turnstone are held in the Group Re-trap History database and will no longer feature in the recoveries section of this report unless the age of the bird involved merits inclusion. Such cases will then be reported to the BTO.

BLACK-HEADED GULL

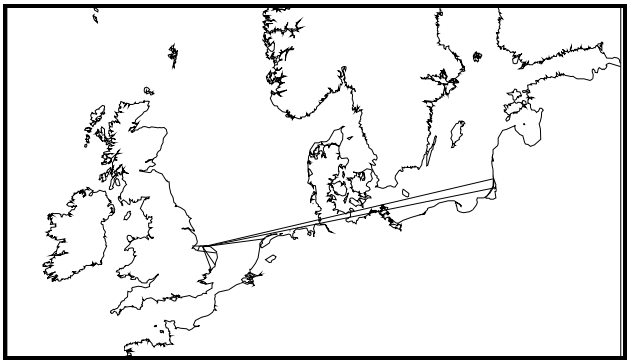
- Total number ringed by the Group 87, total recovered 3, recovery rate 3.4%.
- Number recovered by the Group 4.

- This multiple recovery of the same bird is due entirely to the ringer who read the ring number in the field.

ES51756	5	28/01/96	Burnham Market, Norfolk	RR	15/01/97	Felixstow, Suffolk	117km	SSE
				RR	04/11/97	Aldeburgh, Suffolk	106km	SE

- This recovery of a bird ringed as an adult aged 6 in the Netherlands was at least 19 years old when recovered in Norfolk.

NLA 3183224	6	22/04/73	Vlieland, **Netherlands**	R	07/02/91	Burnham Market, Norfolk	285km	W



Map 7: Recoveries of Black-headed Gulls.

- Two Black-headed gulls recovered by the group have had Baltic origins.

SUK	252146	1	18/06/86	Klaipeda, **Lithuania**	R	04/02/90	Burnham Market, Norfolk	1,355km	WSW
LIK	340214	5	08/05/98	Silute, **Lithuania**	RR	14/02/99	Cley, Norfolk	1,339km	W

There is clear evidence from recoveries that Black-headed Gulls wintering in Norfolk are from colonies to the east and north-east of the British Isles (Taylor et al 1999).

- Two more recoveries were received in 1999.

EH48030	4	31/12/78	Boston, Lincs	RR	14/02/99	Cley, Norfolk	*	Less than 45km

* The threshold distance for a reportable recovery is 45km and so is not given and the record is not treated as a recovery by the BTO.

ET33481	5	27/12/97	King's Lynn, Norfolk	X	01/04/99	Ormesby St Michael, Norfolk	84km	E

BARN OWL

- Total number ringed by the Group 111, total recovered 21, recovery rate 18.9%.
- No barn owls have been recovered by the Group.

- Thirteen of these recoveries were of pullus in their first winter and of these thirteen:
  - At least eight were road traffic victims.
  - The other five were simply recorded as dead by the finder and may obscure other victims of the motor car.

- Over a third of all Barn Owls fledged die in their first winter (Johnson 1990).

  - Most were recovered less than 10 km from their natal site.

- There were eight recoveries during 1999.

GF08125	1	03/07/96	Thornham, Norfolk	XF	20/07/99	Burnham Market, Norfolk	10km	E
GF94868	1	13/06/98	S.Creake, Norfolk	X	16/02/99	West Newton, Norfolk	17km	WSW
GF94889	1	04/06/99	S.Creake, Norfolk	X	21/08/99	Tattersett, Norfolk	6km	SSE
GN08304	1	27/06/99	Nr Burnham Mkt	XF	03/11/99	Docking, Norfolk	7km	WSW
GN08312	1	14/07/99	Flitcham, Norfolk	X	01/10/99	Harpley, Norfolk	5km	ESE
GN08313	1	14/07/99	Flitcham, Norfolk	XF	08/09/99	Hillington, Norfolk	2km	W
GN08315	1	14/07/99	Flitcham, Norfolk	XF	08/09/99	Hillington, Norfolk	2km	W

GN08312, 13 and 15 were from the same nest!

GF94859	1	27/07/97	Syderstone, Norfolk	S	24/04/99	Litcham, Norfolk	15km	SSE

GF94859 was taken into care with a wing injury, it is not known if it survived.

SHORE LARK

Fig 6: Shorelark at Holkham

- Total ringed by the Group 52, total recovered 5, recovery rate 9.6%.

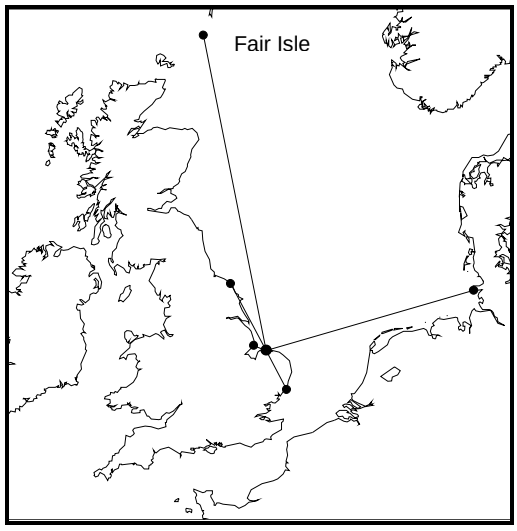
- There were four recoveries during 1999, three were of birds on return migration following the winter spent in Norfolk. The fourth returned to winter in Suffolk.

N697821	2M	31/12/98	Holkham, Norfolk	VV	02/05/99	Hawsker Bottom, N.Yorks	187km	NNW
N697835	2F	31/12/98	Holkham, Norfolk	VV	29/04/99	Gibraltar Point, Lincs	35km	WNW
N697833	2M	31/12/98	Holkham, Norfolk	VV	14/05/99	Fair Isle, Scotland		NNW
N697812	2M	31/12/98	Holkham, Norfolk	VV	14/11/99	Orfordness, Suffolk	111km	SSE

- A Shore Lark ringed at Cley in 1959 was only the second to have been ringed in the British Isles. (Taylor et al 1999).

- Up to the end of 1997 the grand total that had been ringed in Britain was only 108 and only 1 had ever been recovered (Toms et al 1999).

- A single catch of 44 by the Group on the 31st December 1998 plus 8 captured in January 1999, increased the total caught in Britain (based on figures up to 1997 previously quoted), by nearly 50%!



Map 8: Recoveries of Shorelarks.

- Two birds colour-ringed in December 1998 returned to the study site and were re-sighted in the winter of 1999/2000.

N697845	2M	31/12/98	Holkham, Norfolk	RR	30/01/00	Holkham, Norfolk
N697848	2F	31/12/98	Holkham, Norfolk	RR	30/01/00	Holkham, Norfolk

- Another was sighted in Schleswig-Holstein, Germany in February 2000 in an area where many Shorelarks are known to winter.

N69841	2M	31/12/98	Holkham, Norfolk	RR	21/02/00	St Peter-Böhl, Schleswig-Holstein, **Germany**	545km	ENE

SAND MARTIN

- Total ringed by the Group 498, total recovered 13, recovery rate 2.6%.
- Total recovered by the group 21.

- The study was carried out at Hempton household refuse tip.

- Previously a quarry used for sand and gravel extraction, it was then used as a refuse tip by Norfolk County Council until it was full and then capped.

- Plans to fill the site completely, including the colony, were brought to the attention of North West Norfolk RG early in 1990, the Group promptly drew attention to the colonies existence, to both the County Council and the land owner Atlas Aggregates.

- An agreement was brokered whereby restoration work at the site would have to make provision to take account of, include and preserve the Sand Martin Colony.

- However despite every ones efforts a decline which began in 1993, continued and less than ten pairs were present in 1996, the colony was finally abandoned in 1997.

Figure 7: The colony at Hempton.

Figure 8: The double net system used to cover the full height of the quarry face.

- Sand Martins ringed by the Group and recovered in August and September show a clear south or south-easterly direction.

H899036	3J	22/07/92	Hempton, Norfolk	R	29/08/92	Isle of Grain, Kent	152km	S
H453064	3J	26/07/91	Hempton	R	09/09/91	Icklesham, Sussex	211km	S
H621147	3J	30/07/92	Hempton	R	12/09/92	Icklesham	211km	S
J367002	4	19/07/93	Hempton	R	30/08/93	Icklesham	211km	S
J367049	3J	28/07/93	Hempton	R	30/08/93	Icklesham	211km	S
J367055	3J	28/07/93	Hempton	R	28/07/93	Icklesham	211km	S
H847982	4	15/07/92	Hempton	R	08/08/94	Icklesham	211km	S
J476735	3J	09/07/94	Hempton	R	21/08/94	Icklesham	211km	S
H847940	3J	11/07/92	Hempton	R	18/08/92	Sandwich Bay, Kent	177km	SSE
H847947	3J	11/07/92	Hempton	R	19/07/92	Dunwich, Suffolk	82km	SE

- It is known that Sand Martins fly south using 'traditional' routes and gather at south coast roosts in large numbers prior to departing for the Biscay coast of France (Mead & Harrison 1979).

- Birds recovered at the colony have been:

1. Initially captured and ringed locally during the breeding season.

KK06451	4	24/05/94	Pensthorpe, Norfolk	B	03/07/94	Hempton, Norfolk	4km	W
KK06456	4F	03/07/94	Pensthorpe	B	03/07/94	Hempton	4km	W
KK06372	4	19/05/94	Pensthorpe	B	03/07/94	Hempton	4km	W
KK06369	4F	19/05/94	Pensthorpe	B	09/07/94	Hempton	4km	W
KK06367	4	19/05/94	Pensthorpe	B	15/07/94	Hempton	4km	W
KK06386	4M	24/05/94	Pensthorpe	B	15/07/94	Hempton	4km	W

The Nature Reserve and Wildfowl Collection at Pensthorpe was probably used considerably by the adults breeding at the colony as a feeding area. The only other nearby source of open water is the River Wensum.

2. Ringed in autumn while on passage to the winter quarters and recovered as breeding adults at the colony in a later year.

F450029	3	06/09/89	Icklesham, Sussex	B	01/08/91	Hempton, Norfolk	211km	N
F8211340	3	26/08/90	Icklesham	B	26/07/91	Hempton	211km	N
H13 1199	3	25/09/90	Icklesham	B	01/08/91	Hempton	211km	N
H137621	3	03/09/91	Icklesham	B	11/07/92	Hempton	211km	N
H984246	3	12/09/92	Icklesham	B	03/07/94	Hempton	211km	N
H441757	3J	22/08/91	Isle of Grain, Kent	B	09/07/94	Hempton	198km	N
FRP3858952	3	11/08/91	Congis Sur Therouanne **France**					
				B	26/07/92	Hempton	450km	NNW
FRP3875029	3	20/08/91	St Vigor d'Monville, **France**					
				B	15/07/92	Hempton	370km	N

3. Ringed in late summer possibly at other colonies.

F782844	3	28/07/91	Horncastle, Lincs	B	15/07/92	Hempton	77km	SE
H816078	3J	04/07/92	Radley Sand Pit, Oxon	B	19/07/93	Hempton	190km	NE

4. Have been birds, which may have switched colonies or were using the colony as a stop over.

H665221	3J	27/06/92	Delamere, Cheshire	R	06/08/92	Hempton	237km	E
H665161	4F	14/06/92	Delamere, Cheshire	R	22/07/92	Hempton	237km	E

H665161 had a brood patch when captured and we are not sure whether it was actually breeding or was already on return migration.

5. Been birds possibly with origins from the colony, already on autumn migration when initially captured at Dunwich, and then returning to breed in subsequent years.

H114746	3	19/07/91	Dunwich, Suffolk	B	15/07/92	Hempton	82km	NW
H114650	3	26/08/91	Dunwich	B	11/07/92	Hempton		
				B	28/07/93	Hempton		
				B	03/07/94	Hempton	82km	NW

❖ Finally this has to be the star.

H453052	3J	26/07/91	Hempton, Norfolk	R	28/11/92	Djoudj, **Senegal**	4,317km	SSW

The intensive ringing operation at Djoudj in northern Senegal produced over 300 recoveries of British and Irish ringed Sand Martins. Even more remarkable for many of the ringers from the UK who took part in these expeditions, was that they were actually there when their birds were recovered, including the author and Phil Atkinson!

Map 8: All Sand Martin recoveries.

SWALLOW

- Total ringed by the Group 1,891, total recovered 10, recovery rate 0.5%.
- No Swallows have been recovered by the Group.

- Swallows ringed by the Group were mostly either:

  - Targeted and caught at autumn roost sites.

  - Ringed as pullus.

  - A small number have been captured during other ringing operations.
- The two recoveries presented below are of siblings from the same nest, caught by the same ringer (on different days), at the same site!

H453046	1	21/07/91	N.Creake, Norfolk	R	25/09/91	King's Lynn, Norfolk	32km	SW
H453047	1	21/07/91	N.Creake	R	05/09/91	King's Lynn	32km	SW

- As well as the two examples above of Swallows ringed as pullus and recovered in their first autumn, others include:

N044151	1	18/07/97	Stanhoe, Norfolk	R	05/09/97	Hempton, Norfolk	14km	SE
N290965	1	12/06/98	Snettisham, Norfolk	R	25/08/98	Norwich, Norfolk	59km	ESE
N766801	1	05/06/99	N.Creake, Norfolk	R	19/07/99	Weybourne, Norfolk	29km	E

- N766801 was the only swallow recovery in 1999.

❖ Most notable recovery is of this unfortunate swallow that was caught for food and eaten!

J583102	4	26/08/94	Holme, Norfolk	+F	06/04/95	Boje Enyi, **Nigeria**	5,243km	S

One of 6 birds from the UK, that had also suffered the same fate.

An Immense Swallow Roost in Nigeria

We can gain a full understanding of the processes affecting the population sizes of our summer migrants only if we know of changes that are taking place in the wintering grounds of these species, changes which include hunting and habitat degradation. During their first surveys of *Picathartes* in south-east Nigeria in 1987, John Ash, John Barker, Phillip Hall, Karl-Heinz Loske and Gerhard Nikolaus received information from local people about a site where the locals caught large numbers of European Swallows for food. This group planned a special visit for early 1995 to extend the *picathartes* survey, and to investigate the Swallows.

- So ran the headlines on page 8 of the September – October edition of BTO News where a full account of these remarkable events can be found.

- The story was also described in Magazin des Nabu, Ausgabe 2/96 published by Naturschutzbund Deutschland.

- An estimated 200,000 swallows were being harvested from the roost annually by the local villagers as a protein source.

  - The roost was estimated to hold one million birds.

- Over 160 recoveries were authenticated.
- Many of these originated from at least 14 European countries.

- A campaign by various interested organisations led to funds becoming available that enabled a pig rearing unit and an edible snail production facility to be set up. Making alternative forms of protein available to the villagers.

DIPPER

- Total ringed by the Group 2, recovered 1, recovery rate 50%.

- The British race *C. c. gularis* is largely sedentary.

- The amount of chestnut exhibited on the underparts can vary considerably in birds from both Scandinavia and the Continent (Cramp et al 1977–94).

- There is also a considerable overlap in biometrics (Svennson 1992).

- The two birds ringed by the Group would most likely have been of Scandinavian or Central and West European origins belonging to the nominate race *C. c. cinclus* or *C. c. aquaticus* although the British race *C. c. gularis* could not be ruled out.

- The problem of definite racial identification is best avoided (S. Omerod pers comm), instead it may be better to describe these birds as showing the characteristics of other races.

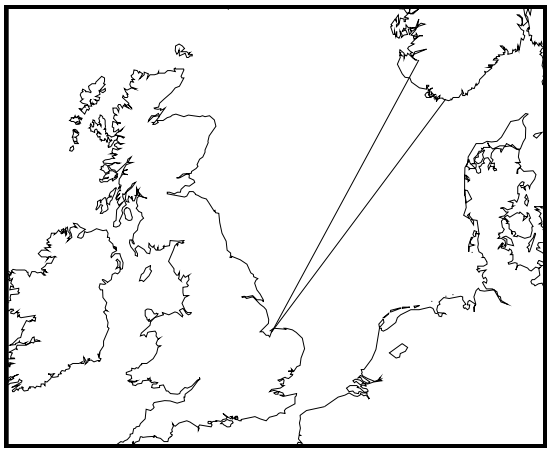
- Six have been ringed in Norfolk and although some were also colour-ringed there is no evidence to suggest that they return to the same location in subsequent winters. (Taylor at al 1999).

- The Dipper ringed by the Group in February 1991 and recovered the next winter in Suffolk supports this idea.

XR36588 5 16/02/91 Burnham Market, Norfolk R 14/11/91 Belstead, Suffolk 105km SSE

DUNNOCK

- Total ringed by the Group 1,560, Total recovered 9, recovery rate 0.58%.
- Recovered by the Group 2.



Map 9: Dunnock recoveries from Norway.

❖ Notable recoveries include:

NOS E432103	3	04/09/93	Giljastolen, Rogaland, **Norway**	R	18/09/95	Holme, Norfolk	744km	SSW
NOS E820404	3	13/08/98	Ronekilen, Vest-Agder, **Norway**	R	03/10/98	Snettisham	721km	SW

Both of these would be of the nominate race *P. m. modularis*.

- There had been 8 recoveries of Norwegian ringed Dunnock in Britain up to 1996 (Toms et al 1996).

- There was one Dunnock recovery reported in 1999.

N401954	3J	30/05/98	Snettisham, Norfolk	R	02/05/99	Holme, Norfolk	14km	NE

ROBIN

- Total ringed by the Group 1,275, total recovered 8, recovery rate 0.6%.
- Recovered by the Group 2.

- Most interesting.

K403941	4M	09/06/96	Snettisham, Norfolk	R	24/05/98	Sandringham, Norfolk	7km	SE

  - This Robin was ringed and then recovered by the group in circumstances that the odds of this occurring would require calculation by the Turf Accountants, William Hill!

  - En route from Snettisham to Hillington, the author stopped for a coffee break at Sandringham. The spot selected was chance. A Robin was observed using a fence post as a lookout, that it was ringed aroused some curiosity! A spring net was duly baited and set and hardly was the author back in the car when the trap was sprung.

  - Why this bird which was thought to be breeding at Snettisham, moved to Sandringham is not known, perhaps a case of being upwardly mobile or even of social aspirations!

❖ Most notable.

NOS E834483	3	23/09/98	Kristiansand, Vest-Agder, **Norway**	R	10/10/98	Holme, Norfolk	747km	SW

This Robin would be of the continental race *E. r. rubecula*.

  - Large ‘falls’ of Robins in autumn have occurred and the ‘fall’ in October 1998 was reputed to be the largest ever recorded in the County.

- There was only one Robin reported in 1999.

N697331	3	16/08/98	Burnham Market, Norfolk	R	01/09/99	Holme, Norfolk	12km	W

WHEATEAR

- Total ringed by the Group 917, total recovered 2, recovery rate 0.2%.
- Recovered by the Group 1.

Figs 9 & 10: Male (left) and female (right) Wheatears.

- Wheatears have been the subject of a study by the Group which begun in 1990 to investigate:
  - The timing of arrival of spring migrants of the Greenland race *O. o. leucorhoa* at the study area on the north west Norfolk coast.
  - The abundance of the Greenland race.
- For many years birds of the Greenland race *leucorhoa* were considered to pass through Norfolk only in small numbers:
- Up until 1998 maximum counts of birds considered to be *leucorhoa* in the field had not exceeded 29 (Taylor et al 1999).
- Some results from our study indicate that birds on passage in March are predominately of the nominate race *oenanthe*, the Greenland race *leucorhoa* begin to arrive in mid April and in May the Greenland race *leucorhoa* outnumber the nominate *oenanthe* (Middleton 1996).
- This is a recovery of a bird of the nominate race *O. o. oenanthe* ringed as a juvenile on North Ronaldsey, Orkney.

F223678 3J 28/06/89 N.Ronaldsey, **Scotland** R 21/04/90 Holme, Norfolk 734km SSE

It would have been returning from its wintering area in the Senegambia.

- Another bird of the nominate race *O. o. oenanthe*, having survived its journey south the previous winter, and ringed while on return migration from its West African winter quarters became victim to a raptor, possibly by a Merlin on its breeding grounds.

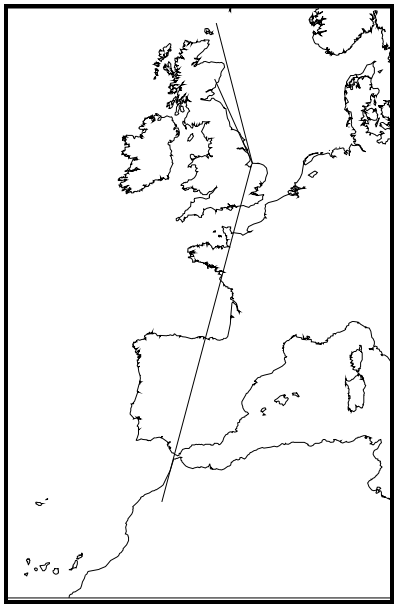
F082437 6M 31/03/97 Holme, Norfolk X 16/07/97 Nr Banchory, Grampian, **Scotland** 486km NNW

❖ Any recovery of a Wheatear is noteworthy, and this one especially so, although the circumstances for this bird rather unfortunate! The recovery details simply state alive

captive but whilst its eventual fate is unknown it was probably destined for the pot.

K939169	28/04/97	6M	Snettisham, Norfolk	AC	20/04/98	Khouribga, **Morocco**	2,279km	SSW

No less than 75 British ringed Wheatears have been recovered in Morocco.



Map 10: Wheatear recoveries

Fig 11: 2nd year Male *Oenanthe. o. leucorroa*

- There is a suggestion from colour-ringing studies being carried out on the German Island of Helgoland that the Greenland race *leucorhoa* have a different stopover strategy to that of the nominate *oenanthe* (V. Dierschke pers comm).

  - Wheatears of the nominate race *oenanthe* quickly resume their onward migration.

  - The Greenland race *leucorhoa* stay at the stopover site longer, sometimes for several days or more.

- In order to test this hypothesis and also ascertain whether this also applies to spring passage migrants in north west Norfolk:

  - Beginning in spring 2000 all Wheatears captured by the Group at the study site will be colour-ringed.
  - Feather samples will be collected for DNA analysis (in collaboration with the German, Institute fur Vogelforschung, Willhemshaven).

BLACKBIRD

- Total ringed by the Group 2,458, total recovered 37, recovery rate 1.5%.
- Total recovered by the Group 4.

- Large numbers of migrants from breeding areas in Fennoscandia and Germany occur in autumn, sometimes arriving as early as September and continue until early December.

  - Whilst many are moving through Norfolk to destinations further west.

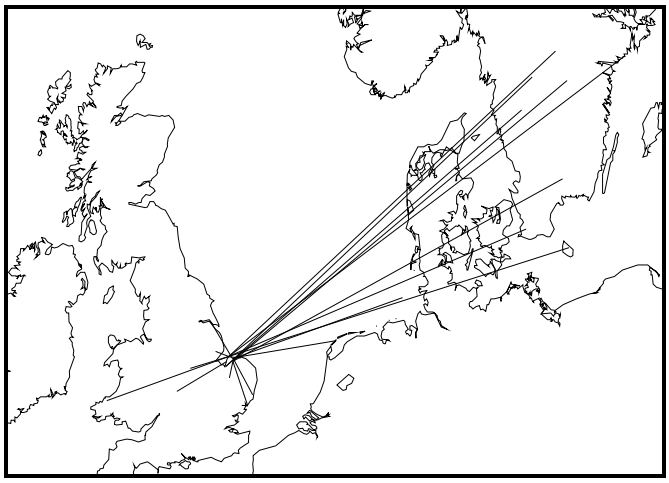
RH76123	3F	10/11/90	Holme, Norfolk	XF	11/03/91	Nr Cardigan, Dyfed, Wales	365km	WSW
RJ32631	3M	29/10/91	Snettisham, Norfolk	XF	01/03/93	Nr Ofchurch, Warwickshire	157km	WSW

- There are some, which undoubtedly winter in the county.

- Blackbirds recovered by the Group have included one each from Sweden, Denmark and Germany.

SVS4288562	6F	09/04/93	Nr Stockholm, **Sweden**	R	17/11/93	Holme, Norfolk	1,255km	WSW
DKC8947149	6M	24/10/93	Christianso, **Denmark**	R	04/02/96	Holme, Norfolk	988km	WSW
DFH7762951	6M	11/04/96	Helgoland, **Germany**	R	28/01/97	B.Market, Norfolk	495km	WSW

The bird ringed on Helgoland would probably have originated from Fennoscandia.



Map 11: Blackbird recoveries.

- A number of Blackbirds that were ringed by the Group in winter have been recovered:
  - Six of these were in Sweden.

XR65867	4M	17/11/91	Holme, Norfolk	X	15/04/92	Nr Lyrestad, Skaraborg, **Sweden**	1,065km	NE
RK59575	4F	19/11/93	Holme, Norfolk	XF	20/02/95	Svedala, Malmohus, **Sweden**	868km	ENE
RK59763	5F	05/02/94	S.Creake, Norfolk	XF	10/09/94	Blidingsholm. Kronoberg, **Sweden**	983km	ENE
RK59765	5M	05/02/94	S.Creake, Norfolk	X	23/10/94	Vaderstad, Ostergotland, **Sweden**	1,074km	NE
RP45191	5M	30/12/96	King's Lynn	X	12/06/98	Frufallan, Vastergotland, **Sweden**	969km	NE
RP45185	4M	29/12/96	King's Lynn	XF	15/02/99	Skara, Skaraborg, **Sweden**	1,026km	NE

  - One in the Netherlands was recovered while on return migration

RJ04109	6M	07/02/91	Burnham Market	X	16/04/91	Oost-Vlieland, **The Netherlands**	292km	E

- Movements within a winter include the following.

RH76149	5F	08/02/91	N. Creake, Norfolk	X	09/03/91	Aldeburgh, Suffolk	100km	SE
RR72225	4F	02/11/95	Kilnsea, Humbs	R	17/03/96	Burnham Market, Norfolk	95km	SE
RP40732	3F	13/11/98	Holme, Norfolk	XF	14/12/98	Stickney, Nr Boston, Lincs	39km	WNW

- Harder to explain are these recoveries of birds ringed in one winter and recovered in a subsequent winter.

RK59812	5M	20/02/94	S. Creake, Norfolk	XF	17/11/94	Northwold, Nr Thetford, Norfolk	40km	SSW
RK59845	5M	22/02/94	S. Creake, Norfolk	XF	16/09/97	Felixstow, Suffolk	112km	SSE

Were these migrants choosing two different locations in subsequent winters, or did they simply decide to stay and not return?

- There were four recoveries received during 1999, three were local to the original ringing location and not given here.

RP45185	4M	29/12/96	King's Lynn	XF	15/02/99	Skara, Skaraborg, **Sweden**	1,026km	NE

RP45185 was the only recovery received during 1999 that moved any distance, it is our seventh Swedish recovery.

FIELDFARE

- Total number ringed by the Group 241, number recovered 3 *, recovery rate 1.2%.

  * 2 recoveries of the same bird.
- No Fieldfares have been recovered by the Group.

- The extreme wariness of Fieldfares has contributed to less than 1,000 being ringed in Norfolk (Taylor et al 1999).

- Figures presented at the Norfolk annual ringers meeting for the years 1991 – 1999, and reported by A. Hale in Norfolk Bird and Mammal total 585, although this total may be incomplete due to non return of totals by some ringers.

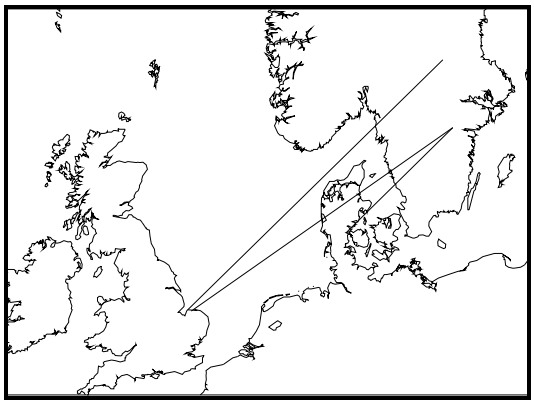
- For the Group to have ringed 24.1% or 41.2% of these totals, depending on whichever baseline is adopted, reflects the effort made by members to capture this species.

- Despite the low numbers ringed in the county there have been 34 recovered abroad, about half of these in Fennoscandia, mostly in a narrow band across Norway, Sweden and Finland (Taylor 1982).

- A number of Norfolk ringed Fieldfares, recovered during the breeding season have been in Fennoscandia, the two recoveries shown below are no exception.

RE59109	5F	04/02/96	Holme, Norfolk	X	17/06/96	Nr. Kopparberg, **Sweden**	1,220km	NE
RJ04020	5M	11/02/91	Burnham Market	V	25/06/92	Valstorp, Ostergotland, **Sweden**	1,122km	NE
				X	22/02/93	Kolding, Jylland, **Denmark**	639km	ENE

❖ The multiple recovery of RJ04020 is remarkable. Caught and ringed in the garden at Burnham Market during a particularly cold spell in February 1992. Not only was it the only Fieldfare ever caught in the garden, it was the only Fieldfare ever seen in the garden where it had evidently acquired a taste for the chips normally reserved for the Starlings.



The recovery of RJ04020 first in Sweden and then in Denmark is depicted in the map shown opposite.

Map 12: Fieldfare recoveries.

SONG THRUSH

- Total number ringed by the group 555, number recovered 2, recovery rate 0.4%.
- No Song Thrushes have been recovered by the Group.

- Of the two recoveries received by the group:
  - One was of a juvenile recovered after just 82 days.

RS25202	3J	18/08/91	Brancaster, Norfolk	X	08/11/91	Brancaster	Local

  - Research carried out by the BTO's Demography Unit and reported by Toms in BTO News Nov/Dec 1997 revealed that there has been a marked decline in survival rates of first year Song Thrushes.

- The other recovery is given below.

RS25230	3	12/11/93	Holme, Norfolk	X	26/04/96	Wimbotsham, Norfolk	40km	SSW

Recoveries from more than 5,000 Song Thrushes ringed in Norfolk have shown that locally bred birds move south and west in autumn (Taylor at al 1999). It is not known in this case whether, it is late dispersal by a juvenile, or involves immigration by a Continental migrant. Large numbers of migrants occur from September.

SEDGE WARBLER

- Total ringed by the Group 880, number recovered 14, recovery rate 1.6%.

- There has been 1 recovery by the Group of a French ringed Sedge Warbler, we are waiting for ringing details. Given the speed at which the French ringing scheme processes recoveries this could take some time!

Sedge Warblers ringed and recovered by the group were at Snettisham Coastal Park, Holme or at the River Burn, Burnham Market.

- Some recoveries of juvenile Sedge Warblers in autumn are given below.

J277752	3J	01/08/94	Holme, Norfolk	R	14/08/94	Etang De Trunvel, **France**	661km	SSW
K009568	3J	17/08/97	Holme, Norfolk	R	17/09/97	Villeton, Lot-et-Garonne, **France**	958km	S
N427642	3J	12/08/99	Holme, Norfolk	R	13/08/99	Burnham Market, Norfolk	12km	E
P175063	3	24/08/99	Burnham Market	R	29/08/99	Icklesham, Sussex	228km	S

- Juvenile Sedge Warblers sometimes undertake journeys in apparently 'wrong' directions i.e. a 180º reversal of the expected direction. Are these true cases of 'reverse' migration or simply extended post juvenile dispersal?

J768090	3	20/08/94	Icklesham, Sussex	R	23/08/94	Holme, Norfolk	230km	N
N617200	3	27/08/99	Icklesham, Sussex	R	30/08/99	Burnham Market, Norfolk	228km	N
N617483	3	28/08/99	Icklesham, Sussex	R	30/08/99	Burnham Market, Norfolk	228km	N

- Recoveries of adults known to be breeding.

J973512	4M	10/06/95	Burnham Market	R	06/06/96	Weybourne, Norfolk	26km	E

This adult male, known to be breeding when first captured apparently moved to another location.

N880192	4M	07/07/99	Burnham Market	R	11/08/99	Pitsea Marshes, Basildon, Essex	158km	S

A recovery of a breeding adult during its autumn migration.

- Breeding season recoveries of adults originally ringed as juveniles at another location.

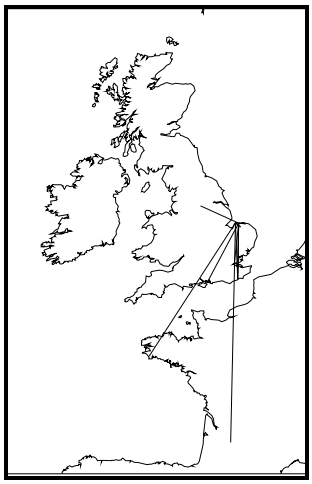
J583036	3J	30/08/94	Holme, Norfolk	R	10/07/95	Shereford, Norfolk	23km	SE
K756921	3	10/08/96	Nr Portsmouth, Hants	R	04/05/99	Burnham Market, Norfolk	265km	NNE
N353263	3J	20/07/98	Nr Weybourne, Norfolk	R	16/07/99	Burnham Market, Norfolk	26km	W

K756921 a juvenile ringed whilst on its autumn migration reveals its origins with this recovery.

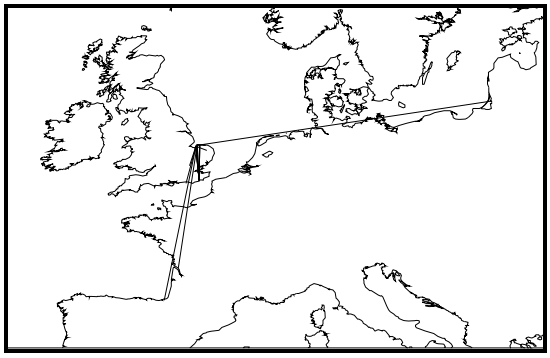
- There was one other recovery received in 1999 other than those reported above.

N091166	3J	02/09/98	Nr Barnsley, S.Yorks	R	03/08/99	Burnham Market, Norfolk	160km	ESE

It would be an adult already undertaking its autumn migration.



Map 13:
Recoveries of Sedge Warblers.



Map 14:
Recoveries of Reed Warblers.

REED WARBLER

- Total number ringed by the Group 1,357, number recovered 13, recovery rate 0.96%.
- Total recovered by the Group 4.

Most Reed Warblers ringed and recovered by the group were at Snettisham Coastal Park, Holme or at the River Burn, Burnham Market.

- Adult Reed Warblers recovered during the breeding season and in autumn include the following.

  - Breeding season recoveries.

F082472 4 30/04/97 Holme, Norfolk R 22/07/97 Burnham Overy, Norfolk 12km E
This Reed Warbler may have been en route for its breeding site when first captured in spring.

H226115 4M 20/07/91 Earlham, Norfolk R 31/05/92 Snettisham, Norfolk 60km WNW
May have moved to a different breeding location.

H469629 3 03/09/94 Beachy Head, Sussex R 08/07/95 Snettisham, Norfolk 242km N
Caught as a juvenile during its autumn migration and recovered at its breeding site.

H701252 4 24/07/92 Icklesham, Sussex R 11/05/96 Holme, Norfolk 230km N
More difficult to interpret, was it a failed breeding bird in'92 and was returning south early or did it switch to a different location to breed in '96.

  - Autumn recoveries.

N880337 4 30/07/99 Burnham Market R 06/08/99 Icklesham, Sussex 228km S
J292933 4F 30/06/95 Snettisham, Norfolk R 16/08/99 Icklesham, Sussex 219km S

- Juvenile Reed Warblers recovered during autumn migration include the following.

J367646 3J 17/09/93 Snettisham, Norfolk R 10/10/93 Icklesham, Sussex 219km S
J277723 3J 24/07/94 Holme, Norfolk R 30/08/94 Mortagne Sur Gironde, **France** 837km S
J583087 3 03/09/94 Holme, Norfolk R 14/09/94 Icklesham, Sussex 230km S
K008366 3J 20/07/95 Snettisham, Norfolk R 12/08/95 Rye Meads, Hoddesdon, Herts 126km SSW

- In addition the following were received in 1999.

N887331	3	30/07/99	Weybourne, Norfolk	R	14/08/99	Burnham Market, Norfolk	27km	W
P175253	3	02/09/99	Burnham Market	R	10/09/99	Icklesham, Sussex	228km	S

- Most interesting and also gratifying were these recoveries of Reed Warbler pullus.

H453033	1	15/07/91	Snettisham, Norfolk	R	17/08/93	Icklesham, Sussex	221km	S
K008016	1	02/07/95	Snettisham, Norfolk	R	04/09/96	Icklesham, Sussex	221km	S
P083105	1	14/07/99	Snettisham, Norfolk	R	29/08/99	Burnham Market, Norfolk	22km	ENE

❖ Most notable recoveries.

H545400	4	25/05/92	Snettisham, Norfolk	R	25/09/93	Irun, Guipuzcoa, **Spain**	1,072km	S

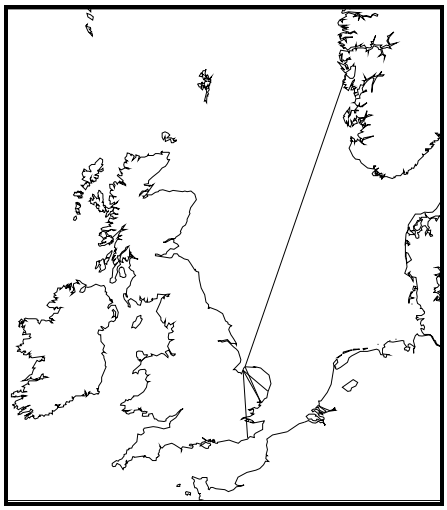
LIK	2	19/07/99	Ventes Ragas, Silute					
VV92260			**Lithuania**	R	13/08/99	Burnham Market, Norfolk	1,359km	W

A very rapid movement in just 25 days, recovered far to the west of its expected route this bird would be expected to have moved through mainland Europe. However no doubt it would re-orientate and move in a SW direction.

- Based on information published in Ringing & Migration (Toms et al 1998), up to 1996 no Reed Warbler had been recovered from any of the Baltic states, this bird from Lithuania is probably the first from this region to be recovered in Britain.
- The 1999 recoveries, six in all, have been dealt with in the preceding groupings of recoveries.

WHITETHROAT

- Total number ringed by the Group 566, number recovered 3, recovery rate 0.5%.
- Recovered by the Group 2.



Map 15: Whitethroat recoveries.

- All recoveries of Whitethroats have been in autumn.

J367070	3J	30/08/93	Holme, Norfolk	R	13/09/94	Trimley St Mary, Suffolk	124km	SSE
K403139	3	21/09/95	Snettisham, Norfolk	R	24/09/96	Felixstowe, Suffolk	120km	SSE
K481968	4	11/05/96	Dunwich, Suffolk	R	07/09/96	Snettisham, Norfolk	103km	NW
K651265	3J	02/08/96	Snettisham, Norfolk	R	22/08/96	Icklesham, Sussex	221km	S

❖ Most notable was.

NOS								
E638377	3	24/08/96	Turoy, Hordaland**, Norway**	R	20/09/96	Holme, Norfolk	873km	SSW

This was only the 2nd recovery of a Scandinavian ringed Whitethroat. Up to the end of 1995 only 15 foreign ringed Whitethroats had been recovered. During 1996 three recoveries of Norwegian Whitethroats (2nd-4th), were reported to the BTO (Toms et al 1998).

BLACKCAP

- Total number ringed by the Group 2,299, number recovered 7, recovery rate 0.3%.
- Recovered by the Group 9.

Most Blackcaps ringed and recovered by the Group have been at three main locations mostly at Snettisham Coastal Park, Holme and the River Burn, Burnham Market, although small numbers have been ringed elsewhere.

- The Willow Carr site at Burnham Market has been outstanding and in 1999 no less than 896 Blackcaps were captured here. This single year site total contributed to over 50% of Blackcaps (1,769), ringed in Norfolk in 1999. (calculated from figures presented at the annual Norfolk ringers meeting March 2000).

- Blackcaps recovered by the Group include:

BLB 3977178	5M	06/05/91	Zwin, West-vlaanderen, **Belgium**	XF	05/05/92	Stanhoe, Norfolk	250km	NW
B853303	4F	19/05/94	Thetford, Norfolk	R	13/09/95	Snettisham, Norfolk	56km	NNW

- Recoveries of Blackcaps apparently migrating in the 'wrong' direction.

H019532	3F	12/09/92	Nr Hoddesdon, Herts	R	17/09/92	Burnham Mkt, Norfolk	137km	NNE
BLB4848045	2M	30/08/93	Jupille, Liege, **Belgium**	R	19/10/93	Holme, Norfolk	435km	NW
N697751	3M	01/10/98	Burnham Market	XF	15/10/98	Nr Llanelli, Dyfed**, Wales**	358km	WSW
P100207	3J	15/07/99	Queen Mary Res., Surrey	R	04/09/99	Snettisham, Norfolk	173km	NNE

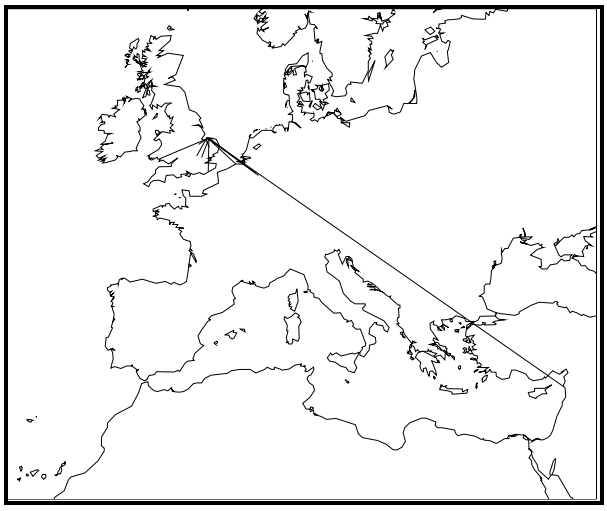
All are movements of juveniles in their first autumn.

- Ringed by the Group and recovered include:

K651215	3J	21/07/96	Burnham Market, Norfolk	R	15/09/96	Icklesham, Sussex	228km	S

- Recoveries received in 1999.

N701696	3M	29/08/98	Nr Peterborough, Cambs	R	29/05/99	Snettisham, Norfolk	60km	NE
P083255	3J	31/07/99	Snettisham, Norfolk	R	02/09/99	Holme, Norfolk	14km	NE
N554445	3J	21/06/99	Nr Sheringham, Norfolk	R	24/08/99	Burnham Mkt, Norfolk	28km	W
K939496	3JM	17/08/97	Snettisham, Norfolk	R	07/05/99	Burnham Mkt, Norfolk	22km	ENE
N697596	3JM	15/09/98	Burnham Market, Norfolk	XF	11/04/99	Nr Norwich, Norfolk	59km	SE
P083138	3J	18/07/99	Snettisham, Norfolk	R	30/0899	Weybourne, Norfolk	47km	E
BLB 6998255	3M	24/08/99	Piringen, Limburg, **Belgium**	R	17/09/99	Burnham Mkt, Norfolk	400km	NW



Map 16: Blackcap recoveries

❖ Most notable recovery is the one found in **Syria.**

F082414 5M 07/05/96 Holme, Norfolk +F 10/03/97 Nr Al Ladhiqiyah, **Syria** 3,383km SE

It was the first British ringed Blackcap recovered in Syria.

- Scandinavian Blackcaps and those from populations to the east of 12º E migrate in an easterly direction towards Cyprus and the Levant. Blackcaps from populations in western Europe including Britain migrate in a south westerly direction towards southern France and Iberia. This recovery is difficult to explain in terms of population origin. Most likely it was from one of the populations normally expected to migrate to the east in autumn, and on return passage in spring '96 was too far west. That it survived and returned to its wintering area in autumn '96 is apparent, and its subsequent return migration might indicate its true origins more accurately. Although it came to an unlucky end by a hunter.

CHIFFCHAFF

- Total number ringed by the Group 584, number recovered 2, recovery rate 0.3%.
- Recovered by the Group 2.

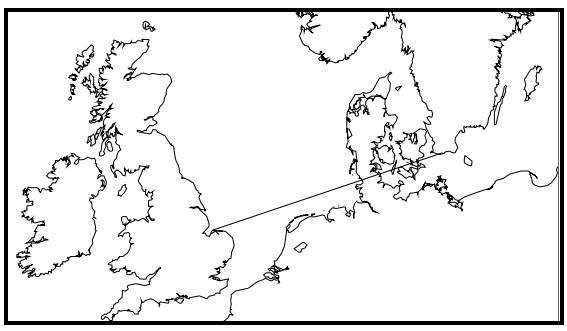
- Chiffchaff recoveries include the following:

6Y1042	3J	14/05/96	Weybourne, Norfolk	R	06/04/97	Holme, Norfolk	39km	W
8G8222	3J	20/07/97	Burnham Mkt, Norfolk	R	05/09/97	Nr Kettlestone, Norfolk	18km	SE

- There was one recovery reported to the Group in 1999.

8C0967	3J	21/07/99	Burnham Mkt, Norfolk	R	31/07/99	Snettisham, Norfolk	22km	WSW

Although comparatively few Chiffchaffs are ever recovered, the Group managed to re-trap this one at Group sites 22 km apart. We thought it deserved to be treated as a recovery in view of the distance involved and the chances of this actually happening.



Map 17: Recoveries of Chiffchaffs, only the Swedish bird moved any significant distance.

❖ Most notable recovery was this Swedish Chiffchaff.

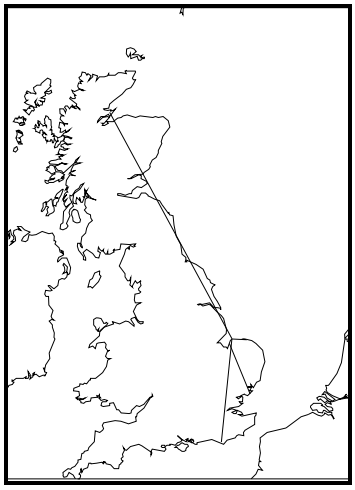
SVS
Z34679 2 21/09/97 Nr Skurup, Malmohus**,**
Sweden R 05/11/98 Holme, Norfolk 884km WSW

Up until 1996 there had only been three recoveries of Swedish ringed Chiffchaffs in Britain (Toms at al 1996).

- Expeditions to Senegal during the winters of 1990 – 1993, revealed that British Chiffchaffs were wintering there with one ringed on The Calf of Man recovered in March 1991. Four ringed there at Djoudj were subsequently recovered in south west Britain. The distances involved were in excess of 4,000 km each way.

WILLOW WARBLER

- Total number ringed by the Group 836, number recovered 1, recovery rate 0.12%.
- Number recovered by the Group 2.



Map 18: Willow Warbler recoveries.

After leaving Britain, Willow Warblers head south west for southern France and the Iberian peninsula.
Some reach West Africa and at least two were recovered in northern Senegal during the intensive expeditions 1990 – 1993. Their destinations were thought to be even further south.

- Some Willow Warbler recoveries.

3L3150 3 10/09/95 Litlington, Sussex R 21/04/96 Holme, Norfolk 244km N

Ringed on the south coast while on its autumn passage, this bird was on its return migration.

8W2541 3J 08/07/95 Snettisham, Norfolk R 12/08/95 Nr Frinton-on-sea, Essex 129km SSE
2L8733 3J 12/08/94 Loinnbuie, Highland Region, Scotland R 26/08/94 Holme, Norfolk 607km SSE

Both of these were undertaking their autumn passage, 2L8733 took just 14 days to reach Norfolk.

GOLDCREST

- Total number ringed by the Group 748, number recovered 1, recovery rate 0.1%.

9F7062 3M 30/09/93 Holme, Norfolk V 20/03/94 Nr Sleaford, Lincs 64km W

After stunning its self, flying into a window, it was released after being in care.

- Number recovered by the Group 1.

4D6664 3F 04/10/98 Weybourne, Norfolk R 13/10/98 Holme, Norfolk 38km W

- Some years, large numbers of Goldcrests arrive in autumn from Fennoscandia and the Continent. These arrivals usually coincide with high pressure weather systems in Scandinavia and north easterly gales.

Fig 12: Aberrant plumaged Goldcrest caught at Snettisham

LONG-TAILED TIT

- Total ringed by the Group 864, number recovered 3, recovery rate 0.4%.
- Total recovered by the Group 3.

Considered to be mainly sedentary any recovery of this species involving any distance must be worth mentioning. The four recoveries all presented below fit this category.

❖ Notable recoveries.

4L7809	2	12/10/95	Weybourne, Norfolk	R	11/10/96	Burnham Market, Norfolk	28km	W
4L7812	2	12/10/95	Weybourne, Norfolk	R	11/10/96	Burnham Market, Norfolk	28km	W
4L7816	2	12/10/95	Weybourne, Norfolk	R	11/10/96	Burnham Market, Norfolk	28km	W

A family party, which had stayed together and were recovered almost to the day, one year later.

9L6913	2	19/10/97	Snettisham, Norfolk	R	02/06/99	Bury St Edmunds, Suffolk	71km	SSE

This was the only recovery worth mentioning that was received in 1999. There was one other that was local.

BLUE TIT

- Total ringed by the Group 2,090, number recovered 5, recovery rate 0.2%.
- Recovered by the Group 1.

Most group members do not operate garden feeding stations in order to attract this species for ringing. Blue Tits that are ringed have been incidental to mist netting sessions for other species. All recoveries have been local except for:

H028423	3F	01/09/91	Holme, Norfolk	R	03/05/92	Snettisham, Norfolk	11km	SW

And recovered by the Group.

K496849	6	06/03/96	Banningham, Norfolk	R	22/03/97	Burnham Market	42km	WNW

JAY

- Only 4 Jays have been ringed, 1 was recovered, recovery rate 25%.

DA64026 6F 29/05/93 Burnham Market +F 23/04/94 Burnham Market, Norfolk Local

Shot by a local farmer to protect gamebirds.

MAGPIE

- Total number ringed 21, number recovered 2, recovery rate 9.5%.

- Over 150 Magpies have been ringed in Norfolk, only one has been recovered outside the county.

ER43970 1 03/06/91 Snettisham, Norfolk +F 22/05/94 Fulstow, Lincs 71km NNW

- Only two other movements over 10 km have been recorded of which this was one.

ER43973 2 17/08/91 Burnham Mkt, Norfolk +F 07/10/91 Narford, Nr Swaffham 31km SSW

Keepers undertaking predator control as part of game management caught both in Larsen traps.

JACKDAW

- Total ringed 19, recovered 1, recovery rate 5.3%.

Jackdaws ringed by the Group have all been pullus at two study sites. One is a ruined church and the other is a colony of Jackdaws which are nesting in a local church tower. The number of nest sites available is limited and so the study aims to investigate juvenile dispersal.

ET07262 1 29/05/99 Burnham Mkt, Norfolk XF 22/10/99 Watton, Norfolk 41km S

Reported to the Group in 1999, it was our first Jackdaw recovery.

STARLING

- Total number ringed 2,262, number recovered 32, recovery rate 1.4%.
- Total recovered by the Group 7.

- In autumn large numbers of Starlings begin to arrive from Europe mostly in October and November, sometimes in late September. Observers on the north west coast of Norfolk have witnessed vast numbers flying along the coast at Snettisham in a westerly direction. These originate from Fennoscandia, the Baltic States, Germany, Russia and The Netherlands.

- Not all continue to move through the county however, many stay and join the ranks of local residents. These continental migrants are targeted by the Group and are captured with ‘whoosh’ nets at baited garden sites. They are particularly attracted to surplus and waste fried chips supplied by the local fish and chip shop!

Map 19: Starling recoveries.

- Starlings ringed overseas and recovered by the Group include the following:

SUK								
V015983	3M	05/07/89	Ventes Ragus**, Lithuania**	R	04/03/91	Burnham Mkt, Norfolk	1,358km	W
DFH								
7768946	3M	21/09/97	Helgoland, **Germany**	R	05/11/98	Holme, Norfolk	504km	WSW
SFH								
A617011	1	29/05/98	Vehkalahti, **Finland**	R	13/12/98	Burnham Mkt, Norfolk	1,811km	WSW

- Ringed by the Group and recovered abroad:

RK89616	6F	15/01/96	Burnham Mkt, Norfolk	R	21/02/96	Kortwoude, Friesland, **The Netherlands**	366km	E
RK89719	5F	06/02/96	Burnham Mkt, Norfolk	X	16/05/98	Naikai, Mazeikiai**, Lithuania**	1,442km	ENE
RK89772	5F	16/03/96	Burnham Mkt, Norfolk	XFShot	17/11/96	Loon Plage, Nord, **France**	239km	SSE
RP45092	4F	10/12/96	Burnham Mkt, Norfolk	R	05/04/97	Surgavere, Viljandi, **Estonia**	1,667km	ENE
RP76258	6M	25/01/98	King's Lynn, Norfolk	XF	20/01/99	Roden, Statenlaan, Drente, **The Netherlands**	403km	E

- Recovered by the Group.

RK35446	5F	02/02/94	Stallingborough, Lincs	R	10/01/96	Burnham Mkt, Norfolk	94km	SE
RK70856	4F	12/02/97	Boston, Lincs	R	08/12/97	Burnham Mkt, Norfolk	49km	E
RK88714	5M	12/01/97	Nr Runcorn, Cheshire	R	22/01/99	Burnham Mkt, Norfolk	231km	E

- Ringed by the Group and recovered.

RJ04146	3F	07/09/91	Holme, Norfolk	XF	11/12/91	Nr York, N. Yorks	164km	NW
RE20388	3M	15/12/90	Burnham Mkt, Norfolk	XF	17/01/92	Snettisham, Norfolk	19km	WSW
RJ62635	3M	31/05/92	Snettisham, Norfolk	XF	11/10/94	Ingoldisthorpe, Norfolk	5km	ESE
RJ04101	5F	06/03/91	Burnham Mkt, Norfolk	X	12/08/97	Cleethorpes, Humberside	85km	NW
RP45476	3F	21/12/97	King's Lynn, Norfolk	X	20/07/98	Nr Ely, Cambs	49km	S
RP45521	5M	02/03/97	Stanhoe, Norfolk	R	21/12/98	Seaton Sluice, Northumberland	279km	NNW
RP76318	3M	20/09/98	Snettisham, Norfolk	X	20/12/98	Heacham, Norfolk	5km	NE
RP38108	3F	08/11/96	King's Lynn, Norfolk	XL	19/05/98	Nr Clolchester, Essex	102km	SSE
RK89954	3F	23/11/96	Hempton, Norfolk	X	01/01/99	Sculthorpe, Norfolk	3km	NW
RK89896	4F	22/11/96	Burnham Mkt, Norfolk	X	05/02/99	Nr Boston, Lincs	45km	W

- There were two other local recoveries in 1999 in addition to the recoveries described earlier.

TREE SPARROW

- Total number ringed by the Group 98, number recovered 1, recovery rate 1.0%.
- No Tree Sparrows have been recovered by the Group.

- Small numbers have been ringed at Beacon Hill, Burnham Market, also at Choseley and Abbey Farm, Flitcham.

- A small colony of Tree Sparrows bred at Beacon Hill, Burnham Market until 1992. They used an old building until it was demolished. Shortly after they completely deserted this area.

- The grain drying barns at Chosely regularly attracted small flocks in winter although very few were ever caught.

- Currently this species is being studied at Abbey Farm, Flitcham. Most winters several small flocks are attracted to tail corn put out for them and also for Yellowhammers, and finches (mostly Chaffinch). Additionally most years areas of fat hen *Chenopodium album* are grown especially for them.

- Some nest boxes have been provided although take up has been disappointing. A few pairs have chosen to nest in various holes in farm buildings and some of these have been ringed birds.

- The number of birds breeding on the farm does not reflect the numbers present in winter and many of these obviously disperse to breeding sites elsewhere.

- One has been recovered in 1999.

J126815	4	13/03/99	Flitcham, Norfolk	XF	23/05/99	Nr Dereham, Norfolk	19km	E

CHAFFINCH

- Total number ringed 1,696, number recovered 5, recovery rate 0.3%.
- No Chaffinches have been recovered by the Group.

- Beacon Hill, near Burnham Market was one of the main sites where Chaffinches were caught by the Group from late summer and continued through the winter. Tail corn put out for the gamebirds attracted flocks sometimes in excess of 100. A decline in the number visiting the site was first noted in 1997 and this has continued until the present.

E835470	3M	05/08/88	Nr Burnham Market	R	09/10/93	Nr Burnham Market	Local	1,891 Days
H028377	5M	28/07/91	Holme, Norfolk	R	01/04/97	Holme, Norfolk	Local	2,074 Days

Both re-trapped near the original place ringed at just over 5years and nearly 6years respectively.

H89963	3M	25/08/93	Nr Burnham Market	X	22/06/97	Thornham, Norfolk	11km	WNW
J476788	3M	24/09/94	Nr Burnham Market	R	16/03/95	Egmere, Norfolk	7km	ESE
K997010	3M	08/11/96	Gaywood, Nr King's Lynn	XF	17/04/98	King's Lynn, Norfolk	4km	WSW

Rather curious that all five recoveries were of males.

BRAMBLING

- Total number ringed by the Group 79, number recovered 1, recovery rate 1.3%.
- None have been recovered by the Group.

- In some years large numbers of Brambling have been present in winter. Attempts to catch these, principally at North Creake failed. Despite up to 1,000 visiting an un-harvested linseed field. The problem of large fields and where to site nets always presents a dilemma. Whatever we decided – the Bramblings thought different! Attempts to locate their roost – which might have concentrated them to the nets – were unsuccessful.

- Most Bramblings caught were at Beacon Hill, Burnham Market although this site no longer attracts winter finches.

❖ This must rank as our most notable recovery of a Brambling. Not simply because it's the only one! Found 524 km WNW in a subsequent winter it is thought that this is the longest movement of a Brambling within southern England.

H453456	3F	05/10/91	Nr Burnham Market	R	17/03/94	Magherafelt, Londonderry, **N.Ireland**	524km	WNW

GREENFINCH

- Total ringed by the Group 1,861, total recovered 19, recovery rate 1.0%.
- Total recovered by the Group 11.

- In 1991 between January – May, over 600 Greenfinch were captured in the garden at Burnham Market as a result of targeting this species. Although there were a number of local recoveries none were recovered any distance away.

  - At todays ring prices this would have cost over £138.00. Currently there are no plans to repeat this exercise. Deliberate targeting of this species has now been discontinued although we continue reluctantly to ring them if captured.
  - Seven birds were controlled.

NN76381	4F	29/03/89	Holme, Norfolk	R	16/02/91	Burnham Market, Norfolk		
				R	07/05/91	Burnham Market, Norfolk	14km	E
VB46713	3M	14/12/90	Nr Banbury, Oxon	R	20/04/91	Burnham Market, Norfolk	179km	ENE
VC81753	3M	21/10/90	Sheringham, Norfolk	R	31/03/91	Burnham Market, Norfolk	30km	W
VC90673	3F	05/08/90	N.Creake, Norfolk	R	23/04/91	Burnham Market, Norfolk	4km	N
VH34585	4M	23/01/91	Brancaster, Norfolk	R	20/04/91	Burnham Market, Norfolk	8km	ESE
VH61570	4F	02/02/91	Beechamwell, Norfolk	R	27/04/91	Burnham Market, Norfolk	39km	NNE
VJ56722	5F	17/02/91	East Winch, Norfolk	R	24/04/91	Burnham Market, Norfolk	31km	NNE

- There has been a number of recoveries of birds ringed at other Group sites.

VJ11810	3M	20/10/90	Holme, Norfolk	V	19/02/91	Hunstanton, Norfolk	6km	SW
VJ63483	3F	26/10/91	Snettisham, Norfolk	R	23/11/91	Immingham, Humberside	93km	NNW
VJ99420	4M	17/09/93	Snettisham, Norfolk	R	01/01/94	Heacham, Norfolk	5km	NE
VK44450	5M	20/02/91	N.Creake, Norfolk	X	27/11/93	Frampton, Nr Dorchester, Dorset	330km	SW
VN81606	3F	21/08/95	Beacon Hill, Norfolk	R	10/12/95	Kintbury, Berkshire	198km	SSW
VN81584	3M	19/08/95	Snettisham, Norfolk	R	16/01/96	Holme, Norfolk	14km	NE
VN63172	3F	21/09/96	Holme, Norfolk	X	11/04/97	Hunstanton, Norfolk	6km	SW
VV71807	5M	04/02/98	Holme, Norfolk	X	06/07/98	East Barsham, Norfolk	22km	ESE
VV71829	5M	21/03/98	Holme, Norfolk	XF	11/05/98	Barnetby, Humberside	93km	NW

- Recoveries by the Group include the following.

VE57785	5M	16/02/90	East Winch, Norfolk	R	20/02/91	North Creake, Norfolk	28km	NE
VH69990	5M	08/02/92	Kelling, Norfolk	R	05/05/92	Burnham Market, Norfolk	25km	W
VP03482	3M	21/11/94	Weybourne, Norfolk	R	27/08/95	Beacon Hill, Norfolk	28km	W
VK15592	5F	04/05/95	Manby, Lincs	R	15/01/96	Holme, Norfolk	53km	SE

- There were no recoveries of Greenfinch received in 1999.

SISKIN

- Total number ringed by the Group 553, number recovered 16, recovery rate 2.9%.
- Total recovered by the Group 15.

- Prior to 1994 only about 250 Siskins were ringed annually in Norfolk. In 1994 between mid January and April there was an exceptional influx in many Norfolk gardens, which resulted in over 3500 Siskins being trapped and ringed. Following this amazing event over 3000 were ringed in 1995 and again in 1997. In all of these years there were no appreciable numbers present in the King's Lynn area.

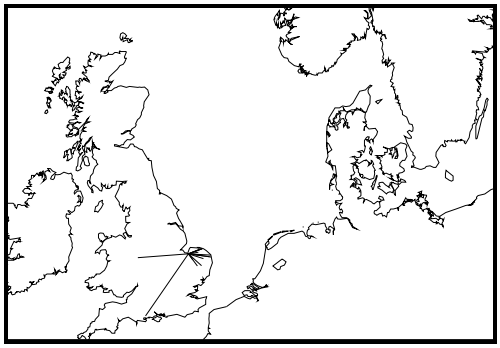
- Between January and early May 1998 for the very first time an unprecedented number of Siskins appeared in the King's Lynn area of Norfolk. In just two gardens, separated by approximately 2 km, the group captured 553 Siskins.

- Analysis of the recoveries and controls that resulted were discussed by Schmitt & Middleton (1998) in NWNRG annual report 1998 and are summarised below.

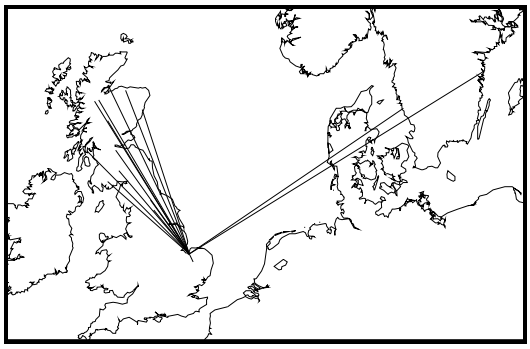
  - Controlled in King's Lynn

J916355	5F	26/03/95	Shifnal, Shropshire	R	10/04/98	King's Lynn, Norfolk	189km E
N383649	5M	24/02/98	Wimbourne Minster, Dorset	R	08/04/98	King's Lynn, Norfolk	275km NE
N155142	5F	06/02/98	Hillborough, Norfolk	R	10/03/98	King's Lynn, Norfolk	29km NW
KV43457	5M	13/03/98	Sheringham, Norfolk	R	01/04/98	King's Lynn, Norfolk	54km WSW
KV43494	5M	13/03/98	Sheringham, Norfolk	R	01/04/98	King's Lynn, Norfolk	54km WSW
N345892	5M	01/02/98	Rollesby, Norfolk	R	01/04/98	King's Lynn, Norfolk	80km W
K460218	6F	02/03/98	Nr Guist, Norfolk	R	05/04/98	King's Lynn, Norfolk	37km W
N384670	3F	22/10/97	Winterton Holmes, Norfolk	R	07/04/98	King's Lynn, Norfolk	83km W
K888545	5F	21/02/98	Hevingham, Norfolk	R	09/04/98	King's Lynn, Norfolk	53km W
N542261	5F	21/02/98	Nr Diss, Norfolk	R	09/04/98	King's Lynn, Norfolk	56km NW
N510880	5F	08/03/98	Sheringham, Norfolk	R	10/04/98	King's Lynn, Norfolk	54km WSW
J628816	4F	20/03/98	Norwich, Norfolk	R	12/04/98	King's Lynn, Norfolk	59km WNW
N369619	5M	01/03/98	Ormesby, Norfolk	R	14/04/98	King's Lynn, Norfolk	86km W
N318956	5M	23/03/98	Weybourne, Norfolk	R	19/04/98	King's Lynn, Norfolk	50km WSW
N312394	5F	14/02/98	Nr Diss, Norfolk	R	18/04/98	King's Lynn, Norfolk	64km NW
				R	30/03/99	Garboldisham, Norfolk	16km SE

- Except for the first two recoveries of birds that were originally ringed much further west, almost without exception all involved late winter movements of Siskins ringed elsewhere in Norfolk that moved to King's Lynn. This is shown in Map 20 below.



Map 20: Late winter Siskin movements to King's Lynn Jan – May 1998.



Map 21: Recovery locations of Siskins ringed in King's Lynn Jan – May 1998.

- Siskins ringed in King's Lynn and recovered elsewhere are shown in Map 21 above.

N290779	5M	10/04/98	King's Lynn, Norfolk	R	12/04/98	Ickburgh, Norfolk	31km SSE

The only Siskin that returned to a location south of King's Lynn, perhaps to a breeding area in Thetford Forest.

N290613	5M	01/03/98	King's Lynn, Norfolk	R	08/04/98	Kingstonia,Nr Ripon, N.Yorks	199km NW
K496748	4M	23/02/98	King's Lynn, Norfolk	X	23/04/98	Mossdale, Dumfries, **Scotland**	384km NW
N290621	5M	07/03/98	King's Lynn, Norfolk	R	17/05/98	Nr Kildary, Highland, **Scotland**	623km NNW
N290792	5F	12/04/98	King's Lynn, Norfolk	X	31/05/98	Craigielands, Dumfries, **Scotland**	379km NW
N290811	4M	18/04/98	King's Lynn, Norfolk	R	23/05/98	Auchlee, Grampian, **Scotland**	506km NNW
N401777	6M	14/04/98	King's Lynn, Norfolk	XF	13/05/98	Bathgate, Lothian, **Scotland**	436km NW

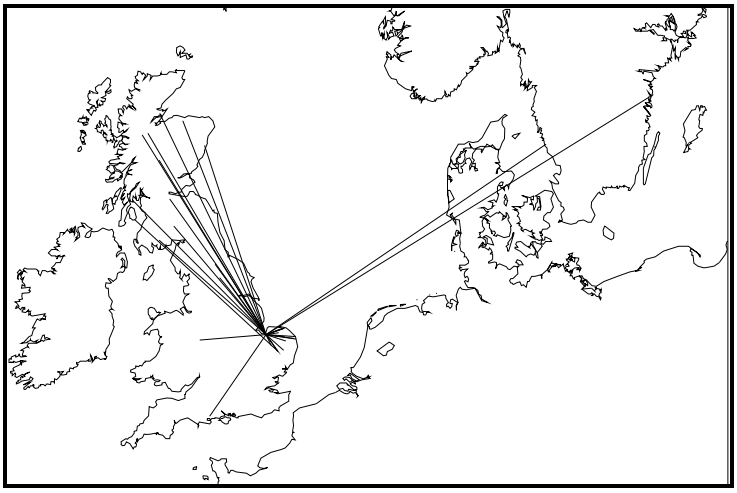
This batch of recoveries indicate quite clearly the origins of Siskins that were in the King's Lynn area in the late winter of 1997-98. Most were believed to be from the Scottish breeding population.

N290605	6M	28/02/98	R	11/10/98	Haradsskar, Gryt, **Sweden**	1,200km	ENE

This was the first of two recoveries to Sweden, the second was reported in 1999 and is given below.

N290546	5F	08/02/98	R	17/05/99	Tomich, Highland, **Scotland**	604km	NW
N290713	5M	05/04/98	X	09/05/99	Fochabers, Grampian, **Scotland**	582km	NNW
K496761	5M	23/02/98	R	20/03/99	Drumla, Strathclyde, **Scotland**	466km	NW
N290861	5F	02/05/98	R	01/03/99	Kames, Strathclyde, **Scotland**	505km	NW
N401594	6F	18/03/98	R	21/03/99	Balnain, Highland, **Scotland**	598km	NNW
N401785	5M	14/04/98	XF	21/04/99	Gilling West, Richmond, N.Yorks	232km	NW
N290768	5F	10/04/98	X	29/04/99	Nr Pitlochry, Tayside, **Scotland**	529km	NNW
N401572	6M	10/03/98	R	03/03/99	Nygrannas, Halland, **Sweden**	896km	ENE

- The 1999 recoveries presented above reveal some interesting facts.
  - Apart from the first two Siskins recovered in the breeding season which may or may not have moved south for the winter, the rest appear either to have chosen to winter near to their breeding area or to have returned much earlier than they did in 1998.
  - It is tempting to speculate that N401572 which was recovered the next winter actually chose to stay in Sweden rather than migrate south.



Map 22: All Siskin Recoveries

LINNET

- Total number ringed by the Group 352, number recovered 3, recovery rate 0.9%.
- No Linnets have been controlled by the group.

J623906	3F	02/12/95	Salthouse, Norfolk	R	30/10/97	Weybourne, Norfolk	3km	N

Captured at our Snow Bunting feeding station and most likely local in origin judging by its subsequent recovery.

K03960	3F	09/06/96	Snettisham, Norfolk	R	29/03/97	Raversidje, West-vlaanderen, **Belgium**	247km	SE

Three other Norfolk ringed Linnets have also been recovered in Belgium.

N697031	3F	04/07/98	Beacon Hill, Nr Burnham Market	XF	28/01/99	Tollesbury, Essex	130km	S

This was the only Linnet recovery in 1999.

TWITE

- Total number ringed 52, number recovered 1, recovery rate 1.9%.

- This colour ringing study was undertaken by Group member Phil Atkinson as part of his PhD.

- The programme aimed to investigate:
  1. The Wash as a staging post for south-eastern birds.
  2. Home range and movements in mid winter.

- Twite flocks tended to disappear from Norfolk in mid-December.

- Only one colour-ringed bird was recovered.

J126794 3F 02/12/94 Brancaster Marsh, Norfolk VV 15/01/95 Holkham, Norfolk 11km E

- Numbers of wintering Twite have declined drastically in recent years.

REDPOLL

- Total ringed by the Group 24, recovered 1, recovery rate 4.2%.
- None have been recovered by the Group.

- Our only recovery of a Redpoll.

J583926 5 20/03/96 Holme, Norfolk XF 10/05/96 Stratford St Mary, Suffolk 115km SSE

BULLFINCH

- Total ringed by the Group 198, Number recovered 1, recovery rate 0.5%.
- No Bullfinches have been recovered by the Group.

- Our only recovery of a Bullfinch.

J126801 3M 17/11/93 UEA, Norwich, Norfolk X 07/01/94 Mile Cross, Norwich 5km NE

SNOW BUNTING

- Total number ringed by the Group 1,793, number recovered 76, recovery rate 4.2%.
- Recovered by the Group 11.

- The Snow Bunting study was begun in 1991 and has been continued every year since then.

  - Norfolk is at the southern edge of their range and we get mostly females (80%) and mostly young birds (80% in females 90-95% in males). In some years we get almost exclusively the dark Icelandic *insulae* race which follows that of the Scottish and Dutch pattern, but in others we can get a 50:50 ratio of Icelandic/Scandinavian (*nivalis*) birds in Norfolk.
    Nivalis tend to arrive later and come across the North Sea via Belgium & Holland.
  - All Snow Buntings ringed by the Group have also been colour-ringed.

  - Colour ringing has produced an incredible number of recoveries, far more than could be expected from metal rings alone.

- The colour-ringing programme has generated a large database of re-sightings both within and between winters.

- This has enabled us to build re-trap histories for a large number of birds.

- Some of these histories provide fascinating evidence of the movements of Snow Buntings around the North Norfolk coast.

Ring No.	*Rt*	*Date*	*Age/Sex*	*Place*	*Interval*	*Years & Days*
VN81693	N	17/01/1997	5F	OHU		
	S	10/12/1997	4F	SNE	327 days	0y, 327d
	R	06/01/1998	6F	HNB	354 days	1y, 2d
	S	01/11/1998	6F	HNB	653 days	1y, 301d
	R	07/01/1999	6F	HNB	720 days	2y, 16d
	S	28/11/1999	6F	HNB	1045 days	2y, 341d
	R	13/12/1999	6F	HNB	1060 days	3y, 4d
VP19772	N	19/01/1996	5F	HNB		
	R	31/01/1997	6F	HLK	378 days	1y, 26d
	S	31/12/1997	6F	HNB	712 days	2y, 8d
	S	20/02/1998	6F	HNB	763 days	2y, 59d
	S	28/11/1999	6F	HNB	1409 days	4y, 1d
VP19652	N	09/01/1995	5F	SAL		
	R	23/01/2000	6F	SAL	1840 days	5y, 80d

- VP19652 at 5 years and 80 days between re-trapping is the oldest and we have no idea where this female had been during the intervening time.

- Scientific aims and objectives of the study:

1. To colour ring all Snow Buntings captured to generate sightings and recoveries.

2. Use these sightings and recoveries to obtain a picture of between site movements in a particular winter and also between winters. To investigate other patterns of movement of our colour marked population within Britain.

3. To determine the age, sex and racial composition of the flocks wintering in Norfolk both within and between winters.

4. To compare the results of this study with that of others notably Banks et al (1989, 1990), Smith, R.D (1992). and Smith et al (1993), Jukema J. and Fokemma, J.(1992), and Findley, P. (1991-1994).

5. To validate ageing and sexing criteria proposed by Banks et al (1990) and Smith (1992) of Snow Buntings in winter plumage.

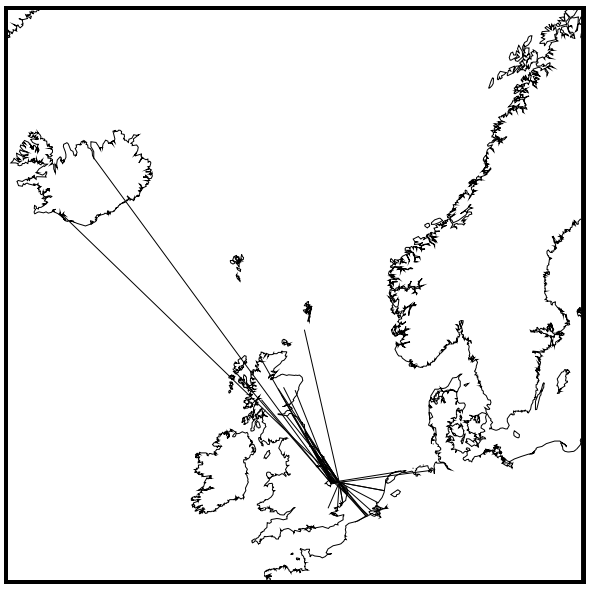
6. Use techniques proposed by Banks et al (1990) to racially assign Snow Buntings in winter plumage.

7. To compare the racing techniques proposed by Banks et al (1990) with an alternative technique described by Jukema and Fokkema (1992) which utilises a more comprehensive system of feather tract scoring.

8. To evaluate which of the scoring systems is most reliable, and if found to rank equal, to recommend that the method proposed by Banks, which simply estimates the amount of dark on primary 9 (or the second innermost) as a percentage score of the visible portion of the feather is the simplest to apply.

9. To catch Snow Buntings in winter in Norfolk and using the techniques outlined above age, sex and racially assign all those captured.

10. To publish papers in the relevant journals of the results. Atkinson, P (in prep).



Map 22: All recoveries of Snow Buntings.

- Snow Buntings are capable of very rapid movements and this example is of an adult female that moved north west to the Lincolnshire coast in one day.

VN81899	6 F	14/02/1997	Salthouse, Norfolk	RR	15/02/1997	Nr Mablethorpe, Lincs	63 km NW

- Many other recoveries have been received of birds that have moved short distances across the Wash to Gibraltar Point and other Lincolnshire locations, usually in late winter.

VN26506	5 F	19/01/1993	Titchwell, Norfolk	VV	10/12/1993	Saltfleet, Lincs	57 km NW
VP19831	3 F	26/11/1995	Holkham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	34km WNW
VP19779	5 M	19/01/1996	Heacham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	22km NNW
VP19794	5 F	19/01/1996	Heacham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	22km NNW
VP19795	5 F	19/01/1996	Heacham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	22km NNW
VR98537	5 F	17/02/1996	Heacham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	22km NNW
VR98540	5 F	17/02/1996	Heacham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	22km NNW
VR98541	5 F	17/02/1996	Heacham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	22km NNW
VR98545	5 M	17/02/1996	Heacham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	22km NNW
VR98546	5 F	17/02/1996	Heacham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	22km NNW
VP19772	5 F	19/01/1996	Heacham, Norfolk	RR	03/03/1996	Gibraltar Point, Lincs	22km NNW
VR98584	4 F	05/12/1997	Salthouse, Norfok	VV	09/11/1998	Gibraltar Point, Lincs	54km WNW
VS42584	3 F	28/11/1998	Salthouse, Norfolk	RR	19/01/1999	Gibraltar Point, Lincs	54km WNW
VS54636	3 F	31/12/1998	Holkham, Norfolk	R	23/01/1999	Gibraltar Point, Lincs	36km WNW
VJ11853	6 M	02/01/1991	Hunstanton, Norfolk	R	03/03/1991	Kilnsea, Humberside	78km NNW
VR98677	4 F	29/12/1997	Holkham, Norfolk	VV	28/02/1998	Tetney Marsh, Lincs	78km NW

- In February the Norfolk wintering population gain small amounts of fat and weight before departing for east coast destinations further north west and to Scotland.

VP19729	3 M	09/12/1995	Salthouse, Norfolk	VV	03/03/1998	Nr Filey Brigg, N. Yorks	167km NNW
VS54727	5 F	16/01/1999	Salthouse, Norfolk	VV	11/02/1999	Nr Filey Brigg, N. Yorks	167km NNW
VX48329	5 M	14/02/1998	Salthouse, Norfolk	VV	03/03/1998	Nr Filey Brigg, N. Yorks	167km NNW
VN26596	5 F	19/01/1993	Titchwell, Norfolk	R	06/03/1993	Redcar, Cleveland	213km NNW

VN26684	3 F 09/11/1993	Salthouse, Norfolk	R	20/12/1993	South Gare, Cleveland	236 km NW
VN26654	3 F 09/11/1993	Salthouse, Norfolk	R	07/02/1994	South Gare, Cleveland	236 km NW
VJ99449	5 F 22/01/1994	Salthouse, Norfolk	R	07/02/1994	South Gare, Cleveland	236 km NW
VN26797	3 F 17/12/1993	Holkham, Norfolk	R	26/12/1993	South Gare, Cleveland	223 km NW
VX48223	5 F 06/01/1998	Heacham, Norfolk	R	21/02/1998	South Gare, Cleveland	218 km NW
VP19719	3 M 09/12/1995	Salthouse, Norfolk	VV	17/02/1996	DruridgeBay,Northumberland	311kmNW
VP19758	3 M 09/12/1995	Salthouse, Norfolk	RR	11/01/1998	Newbiggin, Northumberland	304 km NW

- Although arrival in Scotland is generally later than at east coast destinations. Once here fat and weight gain will proceed until take off weights are achieved.

VN26507	5 F 19/01/1993	Titchwell, Norfolk	VV	13/02/1994	Nr Dunbar, **Scotland**	395km NW
VN26582	5 M 19/01/1993	Titchwell, Norfolk	R	05/03/1993	Nr Braemar, **Scotland**	503km NNW
VJ99447	5 M 2/01/1994	Salthouse, Norfolk	RR	11/03/1994	Cairn Gorm, **Scotland**	555 km NW
VX48263	5 F 24/01/1998	Salthouse, Norfolk	RR	18/02/1998	Musselburgh Lagoons, Lothian Region, **Scotland**	427 km NW
VX48273	5 F 24/01/1998	Salthouse, Norfolk	R	25/03/1998	Fair Isle, **Scotland**	751km NNW
VX48208	5 F 06/01/1998	Heacham, Norfolk	VV	10/04/1998	Laxford Bridge, Highland, **Scotland**	698km NNW
VP19789	5 F 19/01/1996	Heacham, Norfolk	VV	07/05/1996	Allt-na-reigh, **Scotland**	543km NW
			VV	09/05/1996	Harris, Western Isles, **Scotland**	743 km NW

- Whilst there is evidence to suggest that some Snow Buntings are winter site faithful. Other birds move around the coast both within and between winters.

VR98608	3 F 27/12/1997	Salthouse, Norfolk	VV	11/01/1998	Snettisham, Norfolk	46km WSW
VR98510	5 M 14/02/1996	Salthouse, Norfolk	VV	01/02/1998	Holme, Norfolk	37 km W
VR98596	3 F 05/12/1997	Salthouse, Norfolk	VV	01/02/1998	Holme, Norfolk	37 km W
VR98601	3 F 05/12/1997	Salthouse, Norfolk	VV	01/02/1998	Holme, Norfolk	37 km W
VS42514	3 M 28/11/1998	Salthouse, Norfolk	VV	04/12/1998	Holme, Norfolk	37 km W
VR98555	3 M 05/12/1997	Salthouse, Norfolk	VV	11/01/1998	Titchwell, Norfolk	34 km W
VR98581	4 F 05/12/1997	Salthouse, Norfolk	VV	11/01/1998	Titchwell, Norfolk	34 km W
VR98605	3 M 27/12/1997	Salthouse, Norfolk	VV	11/01/1998	Titchwell, Norfolk	34 km W
VR98607	3 F 27/12/1997	Salthouse, Norfolk	VV	11/01/1998	Titchwell, Norfolk	34 km W

- Movements from the North and North west coasts to destinations further south west in Norfolk, and south and east in Suffolk and Essex are harder to explain but small populations are regularly wintering in the Great Yarmouth area of Norfolk and in Suffolk where some interchange has occurred.

VP19765	3 F 09/12/1995	Salthouse, Norfolk	VV	31/01/1996	Kessingland, Suffolk	75 km SE
VN26670	3 F 09/11/1993	Salthouse, Norfolk	R	03/01/1994	Foulness Point, Essex	148 km S
VX48321	5 F 24/01/1998	Salthouse, Norfolk	RR	18/12/1998	Great Yarmouth, Norfolk	150km SSW
VP19717	3 F 02/12/1995	Salthouse, Norfolk	VV	17/01/1999	Great Yarmouth	150km SSW
VB73068	5 M 01/02/1997	Felixstow, Suffolk	R	20/12/1997	Salthouse, Norfolk	109 km N
VV42994	5 F 30/01/1999	Felixstow, Suffolk	R	20/02/1999	Salthouse, Norfolk	109 km N
VR98574	3 F 05/12/1997	Salthouse, Norfolk	RR	22/12/1997	Covehithe, Suffolk	78 km SSE
			RR	11/01/1998	Covehithe, Suffolk	75 km SSE
VR98570	3 F 05/12/1997	Salthouse, Norfolk	RR	08/02/1998	Covehithe, Suffolk	75 km SSE
			RR	17/02/1998	Covehithe, Suffolk	75 km SSE

- These recoveries of Snow Buntings ringed in Scotland and controlled in Norfolk suggest that they were already migrating north when captured in Scotland in March and were then controlled in a subsequent winter in Norfolk. This was also most likely the case with the bird from Seaton Carew, that was ringed in February, we have already shown numerous examples of Norfolk ringed Snow Buntings returning to the Cleveland coast in February.

NR38500	5 F 22/03/1989	Lecht, Grampian Region, **Scotland**	R	02/01/1991	Hunstanton, Norfolk	527 km SSE
VE59994	5 F 02/03/1990	Cairn O'Mount, Grampian, **Scotland**	R	02/01/1991	Hunstanton, Norfolk	491 km SSE
VH58334	6 F 22/02/1990	Seaton Carew, Cleveland	R	02/01/1991	Hunstanton, Norfolk	220 km SSE

- Controls have occurred from Belgium (3) and from The Netherlands. The Dutch ringed bird was controlled in two consecutive winters at Salthouse and a Belgian ringed bird to which the Group added a colour combination was seen the next winter at Dunkirque, France.

31V70148	3 M 25/11/1996	Knokke, **Belgium**	R	24/01/1998	Salthouse, Norfolk	234 km NW
BLB			R	04/11/1998	Nr Dunkirque, **France**	
32V82267	3 M 08/12/1996	Zeebrugge**, Belgium**	R	31/01/1997	Holkham, Norfolk	244 km NW
BLB						
4077871	3 F 15/12/1997	Zeebruge**, Belgium**	R	16/01/1999	Sathouse, Norfolk	230 km NW
BLB						
B887349	3 F 05/12/1996	Castricum**,**				
		The Netherlands	R	17/02/1997	Salthouse, Norfolk	241 km W
			R	24/01/1998	Salthouse, Norfolk	415 Days

- Snow Buntings ringed in Norfolk have been recovered in Germany (1), Holland (4) and Iceland (2).

VP19897	4 F 02/12/1995	Salthouse, Norfolk	VV	25/01/1998	Bremen, **Germany**	502 km E
VP19730	3 F 09/12/1995	Salthouse, Norfolk	VV	08/11/1998	Maasvlakte, Zuid-Holland, **The Netherlands**	233 km ESE
VR98609	3 F 27/12/1997	Salthouse, Norfolk	VV	08/11/1998	Veerse Dam, Zeeland, **The Netherlands**	229 km SE
VJ44503	6 F 13/01/1991	Hunstanton, Norfolk	XF	02/01/1993	De Balg, Schiermonnikoog, **The Netherlands**	392 km E
VN26594	5 F 19/01/1993	Titchwell, Norfolk	R	27/11/1993	Zwin, Zeeland, **Netherlands**	259 km SE
VN81690	5 F 17/01/1997	Hunstanton, Norfolk	R	28/02/1998	Akureyri, **Iceland**	1755 km NW
VR98582	3 F 05/12/1997	Salthouse, Norfolk	R	17/03/1998	Hvolsvollur**, Iceland**	1731 km NW

❖ The star bird! We reproduce e-mails that were received from Iceland.

Dear sir.
I live hear in Hvolsvöllur, in the south of Iceland. Last winter it was one snow buntings hear than was markt with colored mark on his right leg. The color was red,Yellow and red. If you have any idé of where he was markt, I would be wery pleast to hear about it.
This year I heve only seen tvo markt snow buntings with a alomineum mark and thouse mark is proubeble from markening hear in Iceland. Bout, I do not now about any markening here with plastik color.
I send you also a poto of this bird, and you hafe to excuse my spelling.

Kveðja frá Íslandi
Þorsteinn Jónsson
Njálsgerði 5
860 Hvolsvelli, Iceland

Hello!
Thank you very much for your email. Yes, it is one of the birds ringed here in south-east England by the NW Norfolk Ringing Group.
On the photograph I can see the right leg. I expanded the photo you sent to 400% and zoomed in on the legs and the colours look as though it had orange,yellow,red on the right leg. Did you see the left leg? To identify where it was marked I also need the combination on the left leg. There will be one metal ring and zero or one other plastic colour rings.

Figure 13: Our colour-ringed Snow Bunting in Iceland.

Hallo again !
You made me happy yesterday. I was smiling all day alonge, and still smiling when I vent to sleep.
About the other leg of our fellow, we saw it several times. The ring was singel metal ring. I sheeket me pitchure last night, but I seem to have no photos of that leg.
This snowtittlingur was heare in Mars '98, and was seen several times.
My best regards, Þorst.

Dear Þorst
Great news - I can let you know where it was ringed! details are:

Ring No VR98582 L:Metal, R:OYR
Age/Sex: 1st year female
Date: 5 December 1997
Site: Salthouse, Norfolk, UK. 52-57N 01-06E

YELLOWHAMMER

- Total number ringed by the Group 263, number recovered 1, recovery rate 0.4%.
- Recovered by the Group 1.

J561828 3M 03/09/94 Nr Wells, Norfolk R 21/08/95 Beacon Hill, Nr Burnham Mkt 11km WSW

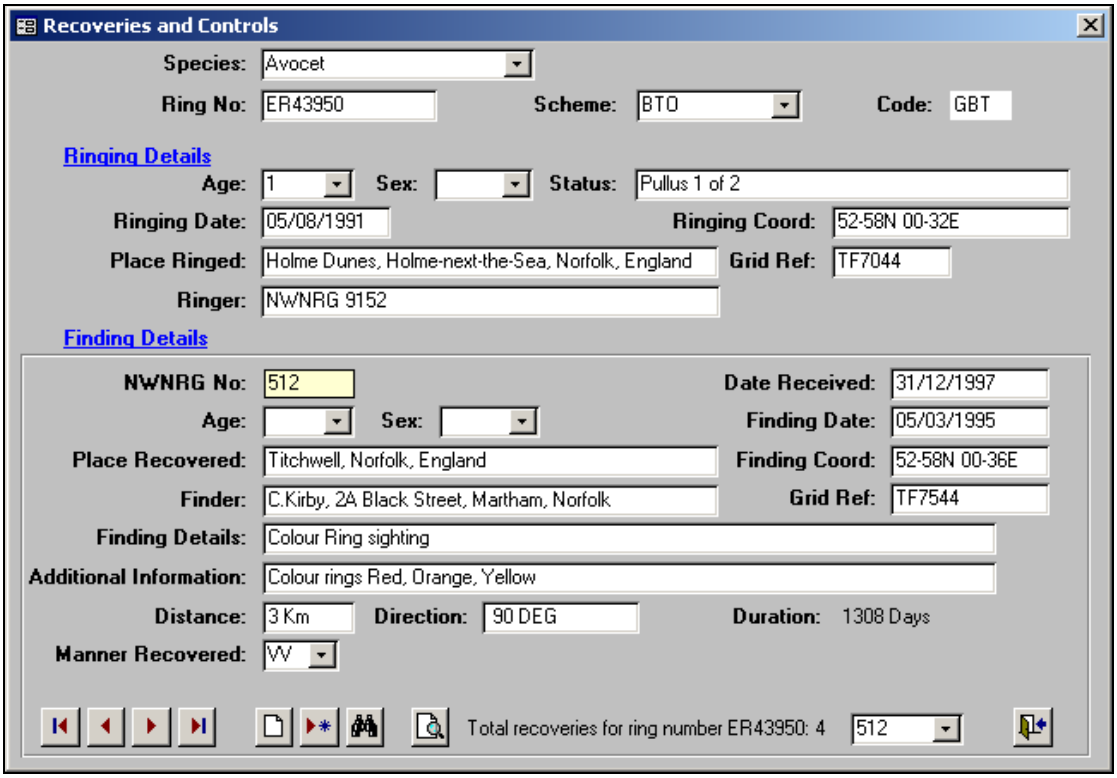
- There is some evidence that this species is declining throughout the county. The formerly widespread winter flocks that frequented winter stubbles have been much less abundant in recent years. Despite an extensive search of farmland in north west Norfolk in the early months of 1996 very few were found (Taylor et al 1999).
- Yellowhammers that used to frequent the corn tailings put down for game birds at Beacon Hill have been non-existent in recent years and this supports the previous assertion.

COMPUTER DEVELOPMENTS

Kelvin Baldwin

During 1997 there was an ever-increasing requirement to develop and maintain a computer based recovery system which would allow monitoring, analysis and reporting of individual or groups of species. After much thought it was decided that a Microsoft Access database would be designed and developed to fit these requirements. After much on-going improvement the recovery database is almost complete and performs all the tasks identified in the original requirement. Figure 1 illustrates the recovery input screen.

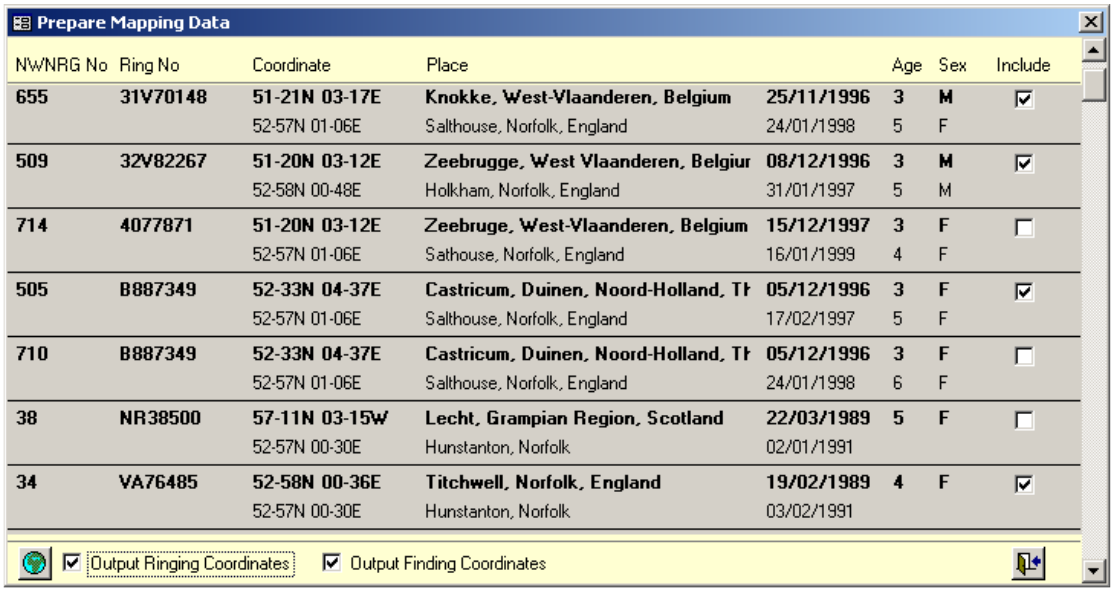
Figure 1: recovery input screen



Once data has been input into the recovery database it can be analysed and reports produced either on screen or exported to Word or Excel for graphing purposes. With the ready availability of Versamap, which can be downloaded from the Internet, a requirement of the database was that it would be able to prepare recovery data for mapping using this software package. One useful feature of the database is a function to prepare mapping data depending on selection criteria. Once the selection has been completed, ringing, finding or both co-ordinates can be output to a Versamap PRN file. The conversion of standard co-ordinates to the format required by Versamap is accomplished within the database. All the maps produced in this report were generated in this way.

Figure 2 illustrates mapping data preparation.

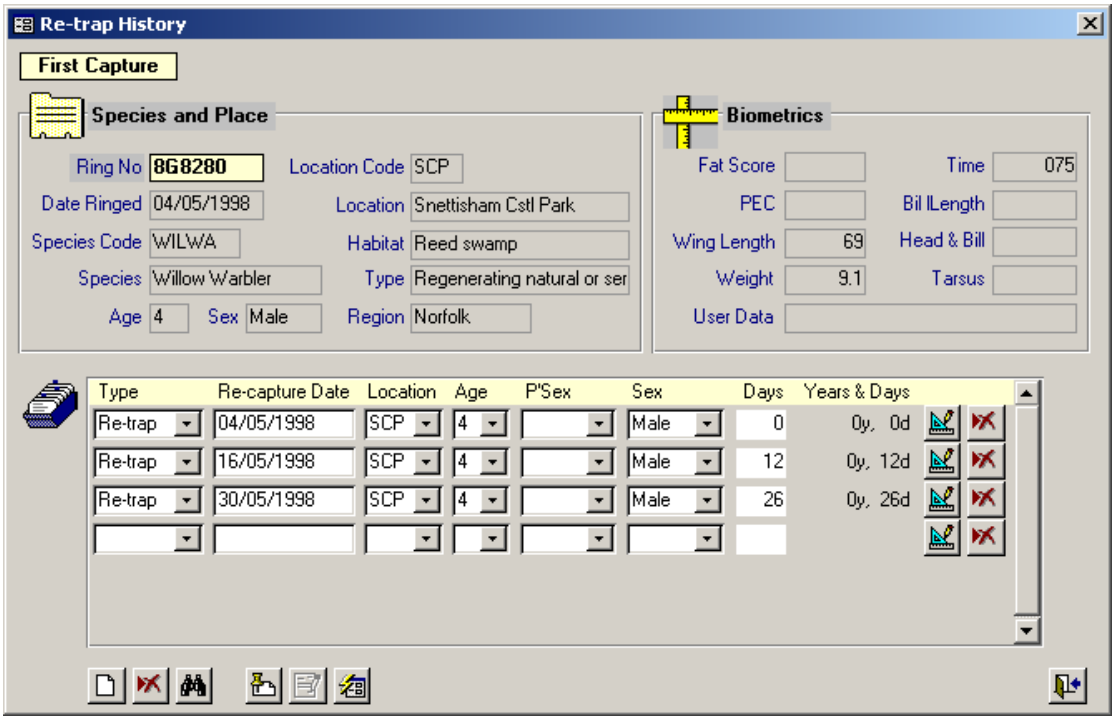
Figure2: mapping preparation screen



With the successful implementation of the recovery database it was soon realised that there was a need for a re-trap database which would enable data entry and analysis in a similar way as the recovery database. After an initial specification was produced it was realised that a re-trap database would only be successful if it could some how integrate with B-Ring as B-Ring was currently being used to input all ringing data.

Development work began and a prototype was soon developed, including integration with B-Ring. After much refinement a working version was released. Figure 3 illustrates the re-trap input screen.

Figure 3: re-trap input screen



The database works by dynamically reading in data from B-Ring and presenting this *read-only* data in the ***Species and Location*** and ***Biometrics*** sections. Re-trap data can then be input in the tabular grid below. As with the recovery database reports can be produced depending on selection criteria and either viewed on the screen or exported to Word or Excel for graphing purposes and analysis preparation.

Both the recovery and re-trap databases are at a stage where minimal enhancements and changes are required. Database development is now focusing on other aspects of bird ringing so a ***fully integrated application suite*** is developed.

With the increased use of the internet and web sites becoming an essential media vehicle it is intended that the Northwest Norfolk Ringing Group develops its own web site to cover such areas as:-

- Group membership
- Group projects and status
- Ringing totals
- Discussion forums

The web site is currently being designed and it is hoped that it will be launched in the summer of 2000.

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NORTH WEST NORFOLK RINGING GROUP MEMBERSHIP 1999

Secretary : Mike Reed Chair : John Middleton Treasurer : Terry Hallahan

Full member	Associate member	Honorary member
Phil Atkinson	Ged Andrews	Kelvin Baldwin
Colin Cross	Durwyn Liley	
John Middleton	Jos Barlow	
Mike Reed	Jim Scott	
Trevor Girling		
Terry Hallahan		
Sabine Schmitt		

Associate membership is designed especially for those who wish to support the group but not necessarily be involved in all, or indeed any of its ringing activities. It is therefore particularly suitable for students who may wish to join the group for a limited period in order to pursue a particular project. Associate members may attend Group meetings but not vote on issues affecting Group Policy.

Membership:
Prospective members will be vetted by the group.
Prospective trainees must complete 3 months probation.
Trainees must be able to demonstrate that they have the dedication necessary to progress through to a permit upgrade.
All trainees requiring a permit upgrade must show a satisfactory level of ringing competence.
All members will respect the confidentiality necessary regarding Schedule 1 species.

Finance:
Members will pay an annual subscription, which currently is £10 for full members and £5 for associate membership. Honorary membership may be conferred where an individual has links with the Group but may not necessarily be a ringer.
Members are responsible for their own permit fees and renewals.
Non-member visiting ringers will be asked to contribute to ring costs.
Expenditure will be restricted to group equipment and expenses where considered justified.

Equipment:
All equipment purchased by the group will remain the property of the group.
Should the group disband the equipment will be divided amongst group members and any remaining funds donated to the BTO.
Personal equipment used by the group remains the property of the individual concerned.

Procedure for Ring Purchase

'A' permit holders may purchase rings in the groups name quoting the group number 9152. The ring string numbers must be notified to the group secretary.
C permit holders including specific C may only purchase rings direct from the BTO (quoting the group number 9152) with the permission of their Trainer who should endorse the official BTO order form accordingly.
When the C permit holder receives rings that they have ordered from the BTO, the ring string numbers must be notified to their Trainer who will in turn notify the group secretary.
Trainees are not permitted to purchase rings. The rings that they use, initially will be provided by their trainer, who will be reimbursed by the trainee for the rings that the trainee has used.

Training

The group has a structured training programme based on the acquisition of skills. We operate in a variety of habitats throughout the year.

All group members, not just Trainees, are encouraged to take the opportunity to ring with other ringers or groups. In this way experience can be obtained in different situations, sometimes gaining an insight into specialist methods or techniques such as cannon netting which couldn't be provided within the NWNRG. Group members, especially Trainees are encouraged to participate in ringing courses, where they will meet a wide variety of fellow ringers and Trainers. These occasions provide welcome opportunities for the exchange of ideas and information.

Group thinking is that advancement should be via a recognised ringing course and that Trainers within the Group should not upgrade their own Trainees. In this way independent assessment of ability will occur, which in itself is also a measure of the training received and therefore of the Trainer.