

S 296

Norfolk Bird & Mammal Report 2000

THE NATURAL
HISTORY MUSEUM

- 9 AUG 2005

EXCHANGED
GENERAL LIBRARY

Volume 34 part 2

Norfolk Bird Report – 2000

Editor: Giles Dunmore

Editorial	95
Review of the Year	98
Wetland Bird Surveys	105
Norfolk Bird Atlas	108
Systematic List	110
Introductions, Escapes, Ferals and Hybrids	246
Earliest and Latest Dates of Summer Migrants	251
Latest and Earliest Dates of Winter Migrants	252
Non-accepted and non-submitted records	253
Contributors	254
Ringling Report	256
Seventy-five years ago – anecdotes from Norfolk birdwatchers in 1925	266
Norfolk Birdwatching in 1950 Remembered	269
Twenty-five years ago – Memories of 1975	271
Breydon Water and its Birdlife	273
Eleonora's Falcon at Hickling Broad, July 1987 – the first record for Norfolk	282
Slender-billed Gulls at Cley – the second record for Norfolk	284
Isabelline Wheatear at Blakeney Point – the second record for Norfolk	285
The Burgh Castle Bee-eaters – a long-awaited opportunity for Norfolk birdwatchers	288
The House Sparrow in Norwich during autumn/winter 2000 – a population study	289

Norfolk Mammal Report – 2000

Editor: Roy Baker

Editorial	294
The Stoat – Rabbit Enigma	294
Mammals of a Broadland Reserve – Wheatfen	295
What the Cat Brought In!	300
The Hazel Dormouse in Norfolk	303
Barbastelle Bats at Paston Great Barn 1998-2000	307

Published by NORFOLK AND NORWICH NATURALISTS' SOCIETY
Castle Muscum, Norwich, NR1 3JU
(*Transactions* Volume 34 part 2 October 2001)

ISSN 0375 7226

Keepsake back numbers are available from
David & Iris Paull, 8 Lindford Drive, Eaton, Norwich NR4 6LT

Front cover photograph: Bearded Tit (Reg Jones)

Back cover photograph: Grey Heron (Tony Howes)

NORFOLK BIRD REPORT – 2000

Editorial

On behalf of the Society I am pleased to present the annual report on the Birds of Norfolk. To celebrate this special millennium edition articles looking back over the century are included, together with a special feature on Breydon Water.

Acknowledgements

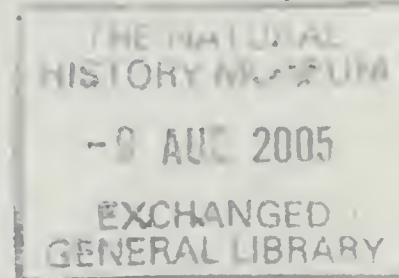
The Editorial Team continues to function and comprises:

- myself - Editor and Joint County Recorder
- Neil Lawton - Joint County Recorder,
- John Williamson - liaison with Norfolk Bird Club and the printers,
- Julian Bhalerao - co-ordinating photographs and sketches,
- Justin Lansdell - co-ordinating articles and dealing with Review of the Year.

I am grateful to them for their encouragement, help, and support. It is pleasing to note that the 1999 Report was awarded third place in the 'British Birds' Report of the Year competition, the final year that it is to take place.

The Report continues to be very much a team effort and without help from many people its production would not be possible. My thanks go to:

- the other compilers of the monthly and annual Record Cards - Dave Bridges, Vince Hanlon, Justin Lansdell, Neil Lawton, Mick Saunt and John Williamson;
- the other authors of the Systematic List - Peter Allard, Andy Benson, Andrew Bloomfield, Dave and Jaequie Bridges, Andy Brown, Pete Clement, Keith Dye, Mick Fiszer, Vince Hanlon, Phil Heath, Gary Hibberd, Ian Johnson, John Kemp, Justin Lansdell, Neil Lawton, Ben Murphy, Mick Saunt, Andy Stoddart, Moss Taylor, Peter Wilson and John Williamson;
- members of the County Records Committee;
- authors of the articles in the Report, in particular Peter Allard who was 'commissioned' to write the paper on Breydon Water;
- the artists and photographers who have made their work freely available;
- Moss Taylor for supplying breeding details from the first survey season of the Norfolk Bird Atlas;
- Bob Ellis and especially Paul Westley for preparing the new location map on the inside back cover;
- Steve Wakeman for the meteorological information;
- Mike Rogers, Secretary of the British Birds Rarities Committee;
- Pat Bonham for his invaluable help in proof-reading the draft Systematic List and correcting the grammar;
- all the many individual contributors and clubs/societies, and in particular Birdline East Anglia, who have contributed records;
- finally my wife Judy for her continued help in typing, layout and in many other ways.



The County Records Committee (Mick Fiszer, Steve Gantlett, Phil Heath, John Kemp and John Williamson) considered a total of 102 records in the year; 13 of these were rejected, mostly as a result of insufficient detail and not owing to an incorrect identification. Three species (Night Heron, American Wigeon and Rose-coloured Starling) will no longer be considered at national level as from 2002. The Committee also reviewed the list of species needing submission of a written description or photographic evidence (and subject to acceptance) prior to publication and decided to delete Green-winged Teal and Lesser Black-backed Gull (*fuscus* race) from the list. The list is now as follows:

Black-necked Grebe (at sea)	Dark-breasted Barn Owl
Cory's Shearwater	Bee-eater
Great Shearwater	Short-toed Lark
Balearic Shearwater	Tawny Pipit
Storm Petrel	<i>Flava</i> Wagtail (continental races except
Night Heron	Blue-headed and Grey-headed)
Purple Heron	Bluethroat (White-spotted only)
White Stork	Aquatic Warbler
Greenland White-fronted Goose	Marsh Warbler
'Small' Canada Goose	Melodious Warbler
American Wigeon	Dartford Warbler
Ring-necked Duck	Pallas's Warbler
Surf Scoter	Chiffchaff (<i>tristis</i> race)
Spotted Crake	Woodchat Shrike
Corncrake	Raven
Buff-breasted Sandpiper	Rose-coloured Starling
Grey Phalarope (in flight at sea)	Serin
Sabine's Gull	Common Rosefinch
Ring-billed Gull	Ortolan Bunting
Caspian Gull	Little Bunting
Ring-necked Parakeet	

With regard to the submission of details, obviously the Committee would expect a far more detailed description of a species such as Ring-billed Gull (which is not only rare in the county but difficult to identify) than a species such as a White Stork. Written descriptions should consist of a brief note of the circumstances of the observation (weather, distance from bird, any other observers, etc), followed by a description of the actual bird(s) and details of any other species nearby for comparison. Written notes should state clearly how a bird was identified. Observers are also requested to include a note of their previous experience of the species and, if relevant, a brief outline of how any confusable species were eliminated. Copies of field sketches (however poor artistically) are often invaluable together with written field notes. It should be noted that on occasions observers may be asked for further details of species not contained in the above list - if records relate to unusual dates, localities, etc.

Editorial Material: Articles for consideration, artwork, photographs and transparencies should continue to be submitted to me at 49 Nelson Road, Sheringham, Norfolk NR26 8DA.

Submission of Records

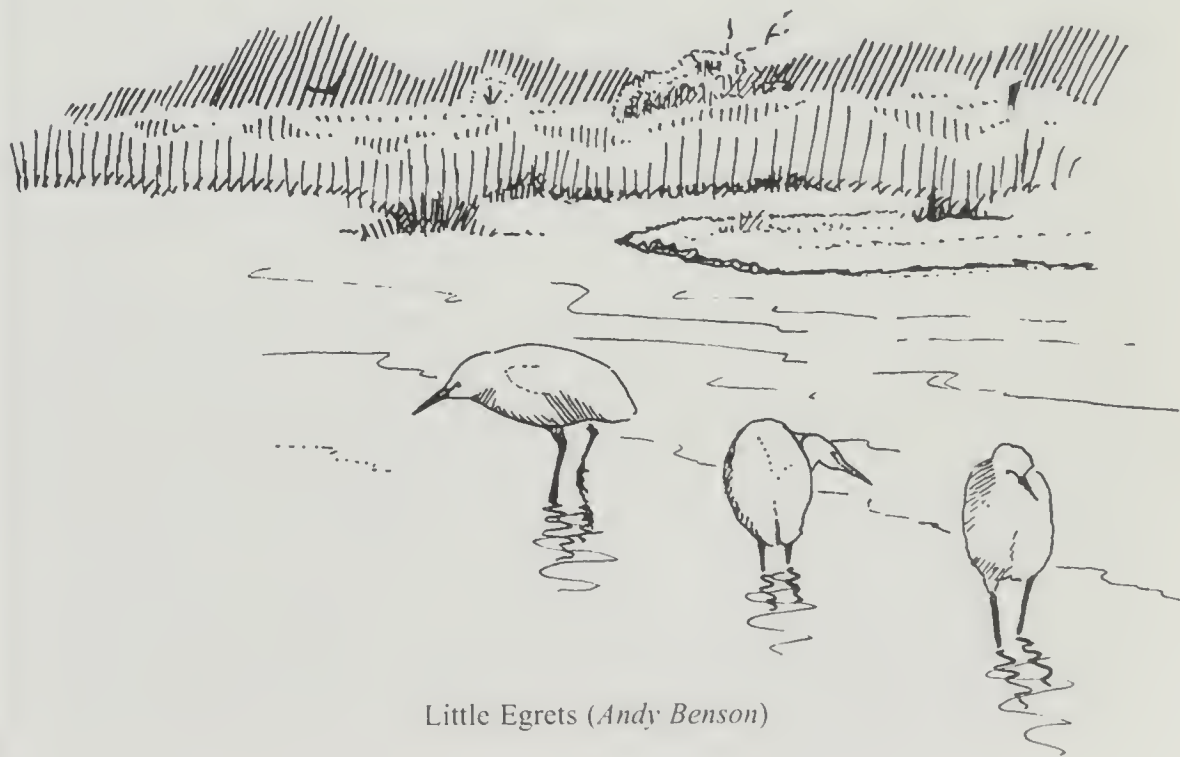
All records for the Systematic List should continue to be submitted to me at 49 Nelson Road, Sheringham, Norfolk NR26 8DA. Preferably these should be submitted on a monthly basis or, if this is not possible, on a 3-monthly or 6-monthly basis. Obviously records can be accepted annually after the end of the year but all observers are requested to submit their notes within a shorter time scale if possible to reduce the pressure of recording in January/February the following year. Receipt of late records causes a major problem in drafting the Systematic List *and observations received after February of the following year cannot be guaranteed for inclusion in the Report*. All records should be listed in the order of species appearing in this Report. Notes will not normally be acknowledged but names of all contributors will be published. To obtain as complete coverage as possible records 'phoned-in' to Birdline East Anglia have been frequently used in the compilation of the List. However, records of national and local rarities have only been included where considered and accepted by the appropriate Committee.

During the year I spend a considerable amount of time 'chasing' descriptions of both county and national rarities. I would request that finders of such birds should submit details to me as soon as possible and certainly not left to the end of the year. In the case of national rarities these should be submitted in duplicate. Obviously if other observers have particularly good views of a rarity for example, but were not the finder, then additional descriptions would be gratefully received.

As far as I am aware there are several outstanding records awaiting a decision from the British Birds Rarities Committee at the time of writing (August 2001). One of these still relates to the Blyth's Pipit at Happisburgh in September 1999.

In the 1999 Report I briefly mentioned the question of computerisation of records. Some progress has been made, but not as much as hoped. A great deal of time needs to be spent learning the software and ironing out problems before the final leap is taken.

Giles Dunmore



Little Egrets (Andy Benson)

Review of Year 2000

Justin Lansdell (with weather patterns provided by Steve Wakeham)

The new Millennium began with wet weather as celebrations across the county gave way to a mild early **January** dominated by often strong west or south-westerly winds. As usual a selection of good birds gave an eager army of local birdwatchers much to enjoy and ensured Norfolk remained a favourite destination for visiting enthusiasts.

Amongst these, 3 Black Brants on the north coast, a sizeable flock of Shorelarks at Holkham Bay, small groups of Waxwings and the long-staying pale-headed Long-tailed Tit at Wiveton stood out joining familiar 'friends' the Black-winged Stilt and Broadland Cranes. Star of the show, however, remained the continuing presence of a wandering immature White-tailed Eagle in the west of the county which drew crowds wherever it lingered. Amazingly it was joined by our first adult since 1945 and both birds were witnessed circling together near Barrow Common, surely provided the spectacular of the winter.

As always at this time wildfowl received much attention and with an anticyclone building over the Atlantic on the 13th a spell of cooler north to north-westerlies may have been responsible for record counts of Bewick's and Whooper Swans at Welney while at the opposite end of the county 10,600 Golden Plovers at Breydon was both a county record and reward for diligent observers. A smattering of Scaup and Smew at traditional localities for these hard weather fowl kept interest levels high but, in contrast, in the mid-Yare Valley Taiga Bean Geese, already depleted due to mild conditions, caught out many by making an early departure. Until recently thought of as a poor 'carrier' species Pink-footed Geese hoards swarming over arable in the north-west continued to provide good value birding, hiding Barnacle Geese, wild Greylags, 2 further 'small' Canada Geese and a Greenland Whitefront.

Cool anti-cyclonic weather persisted until the 26th by which time it had forced a massive isolated peak of 2150 Pied Wagtails to the Brigg Street roost in Central Norwich. Always scarce the regular Black-necked Grebe returned to Holkham Park Lake late in the month but was overshadowed by the arrival of a Red-breasted Goose at Wells, a bird which was to remain for two months.

February continued the trend of 'mild and wild' winters with changeable, often wet, weather from the west only broken briefly on the 17th by colder north-westerlies and the only notable snowfall of the month.

Little stirred, although the adult White-tailed Eagle departed out to sea on the 1st leaving the immature bird to complete its 4 month sojourn alone. Without a harsh snap no influx of wildfowl was noted, although the continued presence of at least one drake Green-winged Teal gained extra significance with the bird's new found species status.

The continuing westerly airflow and lack of 'new' birds at least gave ample opportunity to enjoy a cast of considerable quality established in the county for much of the winter. The vast marshes of east Norfolk again hosted a settled Rough-legged Buzzard, Little Egrets continued to light up winter evenings at Titchwell and dominant in the melee at King's Lynn Docks the long-staying Glaucous Gull remained in residence.

Larids were to remain in the forefront of what little excitement the last week of the month brought with a marked movement of Little Gulls off the north-west coast peaking with 750 west at Titchwell. Iceland Gulls are never a common sight this far south and east and therefore one at Walcott, a bird which heralded an influx of at least 7 individuals, was warmly welcomed.

Doubtless tempted north by the mild weather two astonishingly early migrants completed the month; a male Wheatcar at Holkham on the 27th outshone by a grey-rumped winter plumage House Martin tracked from West Runton to Mundesley on the 29th, our earliest ever by 9 days.

If February was slow in terms of bird movement, **March** was positively pedestrian and began with a cool northerly airflow bringing sunshine and wintry showers. Not deterred Wheatcars reached Pentney GP and Winterton on the 4th and next day 2 White Wagtails arrived and the county's earliest-ever Sand Martin was at Wymondham as high pressure built to the south.

Once again mild west to north-westerlies ensued bringing above average temperatures and very little rainfall until fronts finally broke the placid weather on the 23rd. The settled spell enabled more migrants and those traditional harbingers of spring Chiffchaff, Black Redstart, Sandwich Terns and Ring Ouzel made arrivals on cue. More unusual at this time 2 more House Martins visited Ranworth Broad on the 10th, a heavier than normal Hooded Crow passage commenced and the wintering Black-bellied Dipper re-appeared 'in public' at Corpusty/Saxthorpe from the 14th-18th.

Still sunny days brought welcome noises from our breeding birds and the Broads resounded once again to a welcome increase in booming Bitterns, and Lesser-spotted Woodpeckers drummed across the county and reminded us of how elusive they can be during much of the year. The Brecks received visitors to enjoy that most magnificent of accipiters the Goshawk, and Woodlarks sang in higher numbers than at any time in living memory.

The last week saw another record broken, a Sedge Warbler at Buckenham on the 24th while a Redstart back in Stanford TA next day has only been bettered once. An area of low pressure moving south-east across England on the 26th introduced a cold, dull, north-easterly flow and stemmed the trickle of migrants but by then the first Spoonbill and Common Tern had made landfall. Osprey and Whimbrel still battled in before the month closed but persistent cold weather prevented any March Swallows.

For once **April**, much anticipated during the long winter months and too often disappointing, lived up to its billing and provided a month brimmed full of overshoots from both south and east.

Mild south-westerlies brought the month in and the birds responded immediately with a Serin briefly at Sheringham Cemetery on the 1st and next day a pair of White Storks arrived to tour North Norfolk for 6 days. A return to cold north to north-easterlies and a resultant mix of heavy rain and snow on the 3rd-4th shifted much migration but grounded another Black-bellied Dipper at Holkham Park which (already hosting the Storks) gave the site an unlikely double act.

A shifting area of high pressure gave a brief window of southerlies and recovering temperatures lured a male Penduline Tit north to Titchwell on the 8th-9th before strengthening easterlies reduced spring migrants to little more than a trickle.

The welcome return of mild spring weather and a south-easterly flow on the 16th enabled the pace of migration to quicken and many species arrived on schedule and without drama. Thereafter, low pressure developed and remained to the west or south-west of Britain feeding warm, often wet, south to south-westerlies through to the 25th.

With classic overshooting conditions, coupled with wet weather to ground birds, new migrants arrived daily and observers were treated to a run of scarcities. Ring Ouzels gave a strong showing with at least 13 at Cley and Wheatears arrived en masse but a Kentish Plover at Waxham/Horscy and an early Red-throated Pipit at Holme on the 22nd were

clearly more sought after. Next day a Bee-eater called high over Wighton and a drake Ferruginous Duck popped up at Hickling. Our largest movement of Whimbrel for several years commenced on the 24th by which time most common migrants were established while a Hoopoe added a splash of Mediterranean colour to Hunstanton Golf Course next day.

The wind direction swung between east and south-east at the month's end and with it from the avian world emerged an Ortolan, another Serin and most surprisingly in an unprecedented influx, 5 Richard's Pipits.

So ended a month of excitement, but not without its frustrations, particularly for observers who, at the month end, witnessed an apparently settled pair of Spoonbills in The Broads have a nest dismantled by over eager Coots, so ending the prospect of the first successful breeding in the county for over 300 years!

May is a month which gladdens the heart of most observers and comes with a reputation for sought after rarities and reassuringly the new Millennium changed none of that, providing a month of high quality. The curtain raised with high pressure over the north-west of Britain funnelling cool north-easterlies across the country responsible for a surprise Sabine's Gull at Breydon and a short-staying Corncrake at Reepham both on the 1st.

A pattern of high pressure, easterly winds and humid conditions persisted for two solid weeks and resulted in an east European flavour. Temminck's Stints came in numbers not witnessed for many years and a minimum of 550 Black Terns represented a strong showing of this enigmatic tern, but both were forgotten as a pair of Slender-billed Gulls chose Cley as a stage for one day only on the 5th. The first two of four spring Tawny Pipits arrived the same day followed by a Short-toed Lark inland at Breydon and in their wake another Red-throated Pipit frequented Holme on the 7th, completing an impressive supporting cast.

Perhaps surprisingly the pattern was broken by transatlantic arrivals with a smart drake Blue-winged Teal at East Ruston and a Dowitcher sp watched all too briefly at Berney on the 7th, while a Dartford Warbler in the dunes at Winterton may have remained undetected since the previous year.

Exhausted observers would have to wait for a respite, however, as information lines and pagers buzzed late on the 10th with news of 4 Bee-eaters watched going to roost at Burgh Castle. Much sought after with the last twitchable birds in Norfolk as long ago as 1966, residents woke next day to find lanes crammed with birdwatchers in suits wearing binoculars! Fortunately the flock obliged and by the time they drifted off mid-morning few were disappointed.

The warm spell eventually broke on the 16th to bring cooler, showery north-westerlies for the next four days but not before single Purple Heron and Red-footed Falcon and the final 2 Red-throated Pipits of a vintage spring for the species had made brief appearances.

Unsettled weather characterised the remainder of May with a series of depressions pushing westerly winds across southern Britain, accompanied by spells of heavy rain. Unseasonably strong winds brought a White-winged Black Tern at Cley on the 28th, 4 Red-backed Shrikes



Slender-billed Gull (*Phil Jones*)

and an adult male Red-footed Falcon to encore a month of dramatic style with an all star cast.

In **June** warm and humid air over the county by the 3rd resulted in overshooting Woodchats at West Somerton and Holme plus a further Kentish Plover at Salthouse. Traditionally late, a Red-necked Phalarope made a brief feeding frenzy at Buckenham on the 6th before pushing north for the arctic summer, taking with it an unseasonal female Long-tailed Duck which finally left Yarmouth after a two month stay.

An anticyclone tracked east into the continent by the 17th, drawing hot air from the south and raising temperatures to 32°C, with a singing male Common Rosefinch at Old Hunstanton presumably arriving as a result of the warm easterly breeze. Increasingly cooler and showery weather intervened dropping temperatures to 16°C by the 24th, but undeterred, breeding birds went about the crucial job of raising young and news of raptors was encouraging with Marsh Harriers and Hobbies in record numbers.

The weather in **July** was to be some of the duller on record and began with an area of low pressure moving slowly to the south-west of Britain bringing slack, cloudy afternoons for 5 days. Typically, little in terms of bird movement was noted although persistent observers discovered an unseasonal Fieldfare at Pentney GP and an eclipse drake Blue-winged Teal amongst moulting duck hoards at Titchwell.

A deepening low moved south-east into the North Sea on the 10th bringing with it heavy rain and a strong northerly wind. Ahead of this the flag bearer of a record dozen autumn Pectoral Sandpipers had dropped into Cley but attentions turned to the sea as rather cool mid-summer north to north-westerly winds continued through to the 18th. Two Balcaries, a Cory's and the largest Manx Shearwater passage of the year gave seawatchers a smile which was to be all too infrequent in a poor year for that most arduous of birdwatching disciplines.

The high pressure which gripped the county for a few days after the 18th will certainly have assisted Norfolk's treasure chest of breeding birds with news filtering out of a good breeding season for newly established Cormorants at Holkham and at the huge Sandwich Tern colony on Scolt Head where 5000 young were raised, while a further increase in Breckland Stone Curlews were less successful. The melee of activity and cacophony of noise amongst our gulleries and tern colonies once more concealed Roseate Terns and Mediterranean Gulls while in the extreme east, the population of Black Redstarts around Yarmouth fought hard to be heard over the traffic and maintained a toe hold. On the negative side Montagu's Harriers failed for the first time in 18 years, Little Terns were heavily predated and sadly no Marsh Warblers returned to the scene of breeding in 1999. Perhaps the most surprising news was of success of an outrageous 93 singing Redstarts in Stanford TA matched by just 5 elsewhere.

Light north-westerlies veering to easterly on the 21st at least shook up the placid weather and brought a trio of Egrets to Welney with a Cattle Egret emerging from the haze only to be replaced by a Great White Egret two days later, alongside the more usual Little Egret.

The last week saw a shallow area of low pressure moving east accompanied by heavy and thundery showers during the 27th-29th when an adult White-winged Black Tern at



Bee-eaters (*John Geeson*)

Winterton was a typical bird of such stormy conditions, whereas a Ring-necked Parakeet which toured East Norfolk for two weeks had presumably originated closer to home.

August began quietly, but by the 12th a ridge of high pressure had tempted an obliging and well-watched juvenile Purple Heron to Cley/Salthouse, which remained for a week. The warm temperatures were replaced mid-month by more changeable conditions but with a largely south-westerly airflow it remained humid through to the 22nd. Amazingly the first Barded Warbler still reached us by the 17th although a Spotted Crake returning to Titchwell and an adult White-rumped Sandpiper at Cley were more predictable good late summer records.



Purple Heron (*Gary Wright*)

A deepening area of low pressure moved south into Biscay on the 22nd finally introducing an easterly element to the wind dumping the first of 6 Temminck's Stints and the autumn's only marked influx of juvenile Curlew Sandpipers at favoured localities. The warm and short-lived easterlies which resulted as the low moved into the North Sea were to give the last interest of a quiet month enabling keen observers another opportunity to enjoy the subtle frail charms of a Greenish Warbler at Blakeney Point on the 26th. Elsewhere a few common drift migrants made landfall and two further Barded Warblers played the usual game of 'hide-and-peek' in coastal scrub.

Ornithologically the month faded out with little activity apart from a Red-necked Phalarope enjoyed by a single fortunate observer at Snettisham.

The respite many birdwatchers had relaxing over the summer months was abruptly shattered during a **September** full of interest. First was another White-rumped Sandpiper, this time at Welney, remaining for over two weeks drawing admirers from afar, while nearby 37 Yellow-legged Gulls at Saddlebow received less attention but were just as significant.

A deteriorating depression moving south-east across the country on the 2nd-3rd once again set pulses racing as seawatchers dashed to seafront shelters for two days of onshore winds. They were not disappointed with the bulk made up of Arctic Skuas and Bonxies, livened up by smaller numbers of Sooty and Balearic Shearwaters, Poms and Long-tailed Skuas with prizes of 3 Leach's Petrels and a multi-location Cory's Shearwater enjoyed by a fortunate few.

Less dramatic perhaps but passerines were also disturbed by the weather and out of Scandinavia came numbers of Whinchats, 2 Barded Warblers, an Ortolan, Common Rosefinch and 6 Wrynecks. A Red-necked Phalarope remained at Titchwell for 13 days from the 4th and surely had easterly origins too. High pressure to the south finally started to dominate the southern half of Britain during the 9th-11th and with it came a further reminder of why

Norfolk is so precious to us, with a Buff-breasted Sandpiper from the New World and a Tawny Pipit from southern Europe arriving simultaneously on the 10th.

The warm and placid conditions were again not to last, continuing the trend of unsettled and productive weather. The 16th saw the best seawatching of a paltry autumn with Arctic Skuas, as so often, providing the gauge, backed up by a host of more sought-after gems adding quality to a dramatic day. Numbers of Sooties careered by for the only time in the entire autumn, several Leach's Petrels, a smattering of Long-tailed Skuas and Poms, plus 2 Sabine's Gulls, ensured for one day at least observers went home weather-beaten but happy.

The highlight of the autumn was to follow when on the 19th an unprecedented influx of Honey Buzzards across Britain commenced, which was to bring 500 to England and 60 to Norfolk skies, including 11 over Northrepps on the 20th, eclipsing our previous best autumn of 10 sightings in 1993. As the bulk of the surge moved south through the centre of the country sightings continued through to 1st October but it soon became clear that other birds had arrived from the continent. Chief support was provided by 2 Great White Egrets at Strumpshaw, backed by 3 Barred Warblers (in a return to form for the species), 3 Ortolans, two each of Rosefinch, Red-throated Pipit, Tawny Pipit and that most elusive of birds, the Corncrake, a Red-breasted Flycatcher and a rare autumn Bluethroat. However, it was the numbers of common migrants, principally Redstarts and Wheatears, which gave many birders days to remember during a spell which inspired talk of the halcyon days of drift migration.

This warm spell and favourable winds abated for a few days after the 24th but a record 2100 Black-tailed Godwits at Ongar Hill reminded us that estuary wader counts are not restricted to mid-winter and single drake American Wigeon, Ferruginous Duck and Surf Scoter hinted at wildfowl counts to come.

The month closed with a further spell of easterlies and, as is traditional, immediately the quality raised a level with a crop of outstanding rarities. The 30th brought an early Dusky Warbler to Scolt Head, a Radde's to Blakeney Point while just across the harbour the last of a bumper crop of Ortolans was seen at Stiffkey. The 1st of **October** was better still; 2 Pallas's Warblers and a Radde's joined the Dusky at Scolt, another Radde's arrived at Holkham, a Corncrake flushed at Sea Palling was enjoyed by just its finder and a popular Rustic Bunting began a lengthy stay at Stiffkey Woods. Even more amazing was a closely-watched Wheatear on Blakeney Point, which was subsequently identified as Norfolk's second Isabelline Wheatear.

Thereafter the month was dominated by areas of low pressure and it was the wettest October in nearly a century. Only a Red-necked Phalarope surfaced at Titchwell to remain two days and it was not until mid-month when a ridge of high pressure and the only day of easterlies on the 15th that Norfolk received birds of interest, with an incredible 8 Richard's Pipits at Holme, followed next day by an educational duo of Dusky Warbler and 'tristis' Chiffchaff on Blakeney Point. Sadly the easterlies were gone as quickly as they had arrived and the second half of the month was influenced by fronts from the Atlantic giving spells of heavy rain interspersed with occasional sunny days. Chief compensation was provided by yet another Red-necked Phalarope, this time at Cley, and local birdwatchers were left with only the first day of the month as evidence to deflect the myth that Norfolk had lost its sparkle.

November continued where October had left off, with low pressure remaining in control. A Desert Wheatear at Holme from the 2nd had clearly struggled here only to shortly meet an untimely end, but it was the next depression moving along the Channel and giving yet more rain and a south-easterly which brought the autumn's Thrush invasion. For several days the skies and coastal scrub echoed to the calls of arriving Redwings and Fieldfares alongside unusual numbers of Ring Ouzels, 2 Pallas's Warblers and a late Pied Flycatcher at Holme

on the 7th, by which time the low had swung northwards into the North Sea to give the last seawatching of the autumn. Little Gulls and Kittiwakes forced themselves past bewildered seawatchers in phenomenal numbers with peak counts of Poms, plus 2 late dusky Balearic Shearwaters and a Grey Phalarope to add spice, while on land a bedraggled Bluethroat popped up briefly at Cley in the wake of the blow. Subsequently a Black Guillemot and 2 Grey Phalaropes appeared inshore on the north coast but the dearth of Little Auks was to continue for the rest of the autumn.

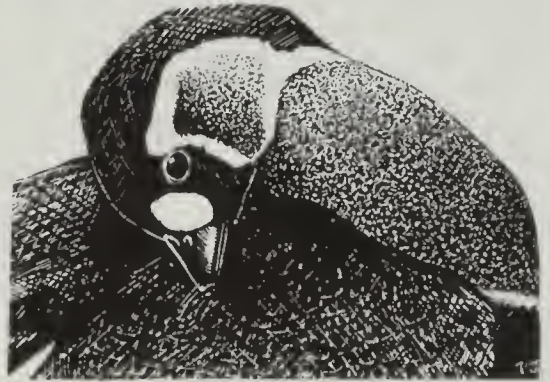
Frontal weather direct from the north Atlantic for the next week grounded an ultra-late Sand Martin at Holkham on the 17th. However, it was not until a deepening low pressure to the west of Ireland moved north-east on the 21st that a surprise Dusky Warbler arrived in seemingly unpromising weather to entertain observers by prancing up and down a wall in Yarmouth Cemetery. With autumn clearly over Little Egrets settled in to winter in unprecedented numbers at Titchwell but on a negative note Purple Sandpipers barely registered in birdwatchers notebooks.

December also saw a mild southerly and south-westerly airflow from North Africa for the first two weeks. Amazingly birds once more responded and out of the Mediterranean came a winter influx of hirundines. Enthralled birdwatchers watched incredulously as flocks of birds wheeled along sheltered seafronts with peak numbers around Cromer where 13 House Martins and 3 Swallows fed actively around hotels and seafront gardens. In smaller numbers the movement was echoed elsewhere and our first December Swift since 1951 was seen three times in the north-west of the county.

Also on the north-west coast large numbers of Little Gulls were evident and countless thousands of Guillemots appeared on the coast which were to remain until the year's end.

A gradual backing of the wind towards the south-east saw temperatures slowly decrease from the 19th as dull and misty conditions predominated in the run up to Christmas. In the east of the county observers made record counts of Wigeon and Pintail at Breydon/Berney, with another record count of Pinkfeet at Scolt Head. A Red-breasted Goose spent the last five days of the year with Pinkfeet in the Egmerc area and the year closed with a major influx of Waxwings, giving birders a belated smartly packaged present.

With the year change the county had a familiar feel to it with Cranes in The Broads for their 21st winter, the Black-winged Stilt resident at Titchwell and into its eighth year, a Black-necked Grebe at Holkham for the fourth successive winter, the returning palc-headed Long-tailed Tit in the Glaven Valley plus regular wintering Smew, Scaup, Shorelarks and roosting Pied Wagtails in huge numbers. However, in a year where a clutch of Caspian Gulls raised interest in large Gulls, Green-winged Teal and Mcaly Redpoll enjoyed new found species status, just one Great Grey Shrike lit up gloomy winter days and only a single Tree Sparrow flock reached three figures, birdwatching and our county's avifauna is surely changing as fast as ever.



Red-breasted Goose (*Phil Jones*)

Wetland Bird Survey 2000

The Complete Wash: *Dave Powell*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Little Grebe	14	27	21	6	-	-	1	9	16	9	23	18
Great Crested Grebe	8	5	29	6	7	34	12	5	25	26	7	12
Cormorant	250	150	91	110	94	85	241	209	402	209	289	19
Grey Heron	18	20	16	14	30	13	32	51	56	22	34	17
Mute Swan	39	14	28	5	9	8	2	32	17	-	15	8
Greylag Goose	269	276	246	63	175	335	174	563	36	11	498	84
Brent Goose	17849	21271	16183	8405	7683	37	30	4	610	4178	10909	4012
Shelduck	6940	5272	4524	3389	2549	1124	2012	815	2013	1189	6034	2101
Wigeon	467	683	477	106	7	2	-	-	1592	1390	899	978
Gadwall	4	17	36	10	10	16	-	2	13	-	5	97
Teal	347	505	268	37	2	12	9	43	511	182	571	517
Mallard	1289	786	513	237	249	338	212	318	1380	782	741	914
Pintail	25	27	17	16	-	-	-	-	59	13	-	8
Shoveler	9	-	1	18	20	11	4	-	10	3	3	39
Pochard	38	19	1	-	1	-	-	-	-	2	20	24
Tufted Duck	51	35	84	45	61	33	49	16	11	-	26	48
Scaup	19	13	8	-	3	1	-	-	-	9	-	10
Eider	220	143	139	215	109	163	79	-	480	3	40	30
Common Scoter	151	28	9	-	-	-	18	-	65	43	403	1635
Goldeneye	45	76	57	1	1	-	43	-	-	1	8	44
R B Merganser	14	56	24	2	-	5	-	2	2	16	5	4
Moorhen	3	27	17	11	14	4	8	8	13	4	9	17
Coot	64	79	75	39	21	33	68	37	30	-	43	49
Oystercatcher	15388	16040	13779	5247	5132	2825	7510	13651	11508	8672	11354	4624
Avocet	-	28	183	183	144	89	472	26	1	-	-	-
Ringed Plover	60	352	145	187	257	112	165	2122	1093	243	29	124
Golden Plover	2646	12411	478	2830	35	40	1801	7627	4189	5703	11840	3863
Grey Plover	7482	4044	7406	10206	12253	1026	959	8289	8389	3762	3346	1079
Lapwing	10784	17786	221	95	22	54	431	1721	2219	5764	21638	1779
Knot	60861	41592	39551	61410	9421	3415	22698	51977	75677	32300	70514	33021
Sanderling	43	150	247	42	609	1141	53	2061	744	21	317	147
Dunlin	36238	35871	43703	31508	44379	921	12112	25622	35820	18728	24939	4550
Ruff	-	-	-	5	1	-	-	19	33	-	-	2
Snipe	10	13	10	-	-	1	-	2	124	7	6	9
Black-tailed Godwit	1095	1295	820	419	23	2	3606	3288	4308	1725	3555	250
Bar-tailed Godwit	13062	11732	8771	4550	1425	763	1929	8224	18620	20045	16566	3330
Whimbrel	-	-	-	2	125	16	189	1306	87	1	9	-
Curlew	3114	5301	4826	3413	845	466	4819	9827	8330	3184	1810	367
Spotted Redshank	1	-	1	-	1	-	27	25	18	-	-	-
Redshank	2719	2086	2852	3522	731	673	2798	4507	6744	1811	1613	836
Greenshank	-	-	-	1	68	1	129	445	244	28	-	-
Common Sandpiper	-	-	-	-	47	2	23	38	8	-	-	-
Turnstone	706	386	430	121	361	21	191	567	649	76	202	67
Black-headed Gull	17716	7604	1904	1766	2059	1510	2700	6426	4712	3233	8708	846
Common Gull	2922	1843	726	305	508	170	1474	3682	334	83	752	121
L B B Gull	1	5	4	49	1400	797	356	176	35	246	1139	13
Herring Gull	8589	6334	2135	960	5314	3008	3081	6781	2671	1457	2332	232
G B B Gull	178	182	62	56	118	127	734	784	1303	432	1235	58
Sandwich Tern	-	-	-	-	43	3	310	242	96	1	-	-
Common Tern	-	-	-	-	36	10	53	297	64	-	-	-
Little Tern	-	-	-	-	28	56	39	7	-	-	-	-

Wetland Bird Survey 2000

North Norfolk Coast: *Michael Rooney*

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Red-throated Diver	11	9	-	-	-	-	-	-	6	7	25	28
Little Grebe	69	57	72	50	68	21	40	77	60	52	69	61
Great Crested Grebe	6	22	2	5	2	3	3	5	5	15	24	33
Cormorant	72	92	66	58	137	77	105	294	246	240	125	68
Little Egret	3	8	3	1	-	-	4	7	3	8	12	11
Grey Heron	23	29	33	18	19	18	46	55	32	43	26	17
Mute Swan	86	84	50	41	84	75	83	93	92	66	65	56
Pink-footed Goose	2883	8685	1014	7	-	1	-	-	2	1519	6338	23799
White-fronted Goose	343	300	-	-	-	14	-	2	-	-	-	66
Greylag Goose	1289	693	808	451	672	1022	1151	2911	2106	1232	1332	1246
Canada Goose	72	98	94	39	60	303	243	303	140	237	87	85
Barnacle Goose	4	-	-	-	-	13	1	1	1	1	1	1
Brent Goose	8833	8838	6343	1615	602	4	-	5	558	4637	9265	8381
Egyptian Goose	22	10	35	39	52	143	61	207	36	51	42	55
Shelduck	955	768	451	381	356	247	151	98	37	168	527	783
Wigeon	18950	14785	10630	698	122	15	13	94	2873	14368	20083	17424
Gadwall	177	146	149	99	172	240	66	247	216	235	224	228
Teal	2433	1276	1111	336	36	46	120	1099	3200	2823	4186	2748
Mallard	1076	915	610	427	500	244	287	689	1243	1309	994	961
Pintail	673	723	119	1	1	-	4	3	202	216	986	668
Shoveler	56	131	123	71	108	69	39	153	148	203	175	103
Pochard	36	49	45	28	45	8	5	13	33	60	66	44
Tufted Duck	70	117	101	128	113	85	34	37	95	59	50	48
Eider	16	25	26	22	54	85	42	21	28	16	7	25
Long-tailed Duck	-	38	49	2	1	-	-	-	-	-	4	6
Common Scoter	-	1917	403	1854	56	3014	15	40	500	84	606	115
Goldeneye	152	221	98	39	-	-	-	-	-	3	40	112
R B Merganser	56	104	80	20	16	3	-	-	2	23	103	80
Ruddy Duck	-	-	-	3	8	4	7	11	6	4	2	-
Water Rail	4	4	1	-	2	-	1	2	3	8	2	4
Coot	895	1094	674	460	529	184	344	749	656	323	544	711
Moorhen	387	441	288	201	263	83	88	257	179	205	270	244
Oystercatcher	3970	3393	2708	1531	1313	964	1291	2212	1958	3109	3354	2247
Avocet	10	89	321	284	414	316	78	35	17	-	10	8
Ringed Plover	344	393	315	240	507	408	291	1310	1519	1013	339	187
Golden Plover	1796	3442	530	-	11	-	-	1066	1848	3376	3302	3386
Grey Plover	2277	1485	415	1043	824	316	66	765	1431	1830	1075	560
Lapwing	7752	8744	1333	592	735	233	369	637	1741	2025	3268	2964
Knot	2384	3356	215	321	329	217	3	4589	29908	28324	29636	2356
Sanderling	671	630	368	1684	1713	470	96	646	1387	837	515	680
Dunlin	4148	5064	1460	739	660	12	621	821	1523	1682	2337	2637
Ruff	44	72	35	30	13	6	67	179	78	106	103	4
Snipe	69	188	92	56	18	2	3	80	70	141	119	88
Black-tailed Godwit	46	93	70	278	64	58	191	197	70	119	11	4
Bar-tailed Godwit	1842	1172	346	133	282	7	168	283	2391	3483	1196	608
Whimbrel	-	-	-	1	92	-	43	56	19	-	2	-
Curlew	1863	1283	753	646	90	55	1234	2312	1465	887	1241	1303
Spotted Redshank	2	3	3	2	-	1	7	11	11	7	11	4
Redshank	1473	1087	914	646	411	236	1011	1330	1201	867	1359	1172
Greenshank	3	-	3	1	29	3	66	142	119	38	7	1
Common Sandpiper	-	-	-	1	47	1	12	35	16	1	-	-
Turnstone	146	416	241	276	443	130	118	207	480	464	348	461

Wetland Bird Survey 2000

Breydon and Berney: *Peter Allard*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Little Grebe	4	6	8	16	10	6	15	15	6	7	2	3
Great Crested Grebe	2	3	2	3	6	20	40	33	37	18	3	5
Cormorant	83	72	79	37	41	60	99	114	109	72	72	78
Spoonbill	-	-	1	2	3	5	3	4	4	-	-	-
Mute Swan	144	154	116	52	124	75	75	57	53	41	21	74
Bewick's Swan	115	132	48	-	-	-	-	-	-	2	16	28
Pink-footed Goose	5400	6600	3700	-	-	-	-	-	10	600	1650	4540
White-fronted Goose	51	18	23	-	1	-	-	1	1	1	1	1
Greylag Goose	69	33	15	12	17	35	64	56	193	335	265	106
Canada Goose	47	23	6	8	12	19	13	54	180	87	78	71
Brent Goose	3	-	-	1	-	-	-	-	2	1	14	4
Egyptian Goose	5	-	-	3	5	4	9	7	2	13	1	6
Shelduck	190	187	291	227	317	428	385	57	56	93	558	220
Wigeon	14130	12800	4510	428	28	5	1	13	1100	2800	12450	15700
Gadwall	52	103	109	34	36	21	-	1	3	13	41	39
Teal	1365	2345	1436	1162	75	38	38	59	500	1360	3683	4237
Mallard	357	154	126	48	97	132	85	92	186	160	219	448
Pintail	204	148	107	12	2	-	-	3	48	171	413	446
Garganey	-	-	1	2	4	6	1	3	3	-	-	-
Shoveler	150	356	214	104	18	29	17	6	78	207	620	539
Pochard	25	5	27	16	11	20	12	10	1	13	17	28
Tufted Duck	22	17	13	16	12	13	10	6	5	2	6	19
Seaup	1	-	-	-	-	-	-	1	-	-	1	2
Coot	1192	860	537	-	-	-	-	-	-	-	493	1476
Oystercatcher	34	112	229	175	108	133	246	138	41	26	39	46
Avocet	64	177	139	114	82	164	362	519	490	320	61	134
Lt Ringed Plover	-	-	-	1	1	3	1	4	-	-	-	-
Ringed Plover	81	84	53	32	305	38	68	242	204	124	53	84
Golden Plover	10600	10100	1420	650	17	-	460	1550	1150	4450	7300	8750
Grey Plover	54	58	40	18	80	5	8	10	10	32	25	28
Lapwing	17700	8400	1500	258	240	210	500	500	600	3100	7600	14100
Knot	191	162	44	41	148	7	16	12	32	71	156	362
Sanderling	5	4	1	16	9	-	2	2	2	2	6	7
Little Stint	-	-	-	-	5	2	-	2	4	4	-	2
Curlew Sandpiper	-	-	-	1	3	-	11	21	11	2	-	-
Dunlin	3160	3850	1713	2482	1921	15	511	543	711	1610	3385	3220
Ruff	55	144	78	73	27	3	12	10	12	20	6	18
Snipe	207	10	37	79	7	2	19	22	145	121	30	7
Black-tailed Godwit	807	387	328	419	119	172	964	1387	1131	1020	1155	954
Bar-tailed Godwit	21	25	20	57	165	-	6	9	17	22	12	28
Whimbrel	-	-	-	37	71	1	15	12	2	-	1	-
Curlew	987	892	691	431	51	229	664	885	1042	839	797	1022
Spotted Redshank	3	7	4	9	3	2	1	2	8	8	4	4
Redshank	819	715	1092	828	122	171	611	853	1245	919	829	1054
Greenshank	-	-	-	12	54	4	11	12	9	28	-	-
Green Sandpiper	-	-	-	-	-	3	5	6	2	-	1	-
Wood Sandpiper	-	-	-	-	3	-	6	3	3	1	-	-
Common Sandpiper	-	-	-	11	16	-	17	8	4	-	-	-
Turnstone	7	6	13	12	16	2	15	15	12	9	7	12
Little Gull	-	-	1	1	6	11	4	4	1	-	-	-
Black Tern	-	-	-	-	5	-	3	13	-	-	-	-

Norfolk Bird Atlas

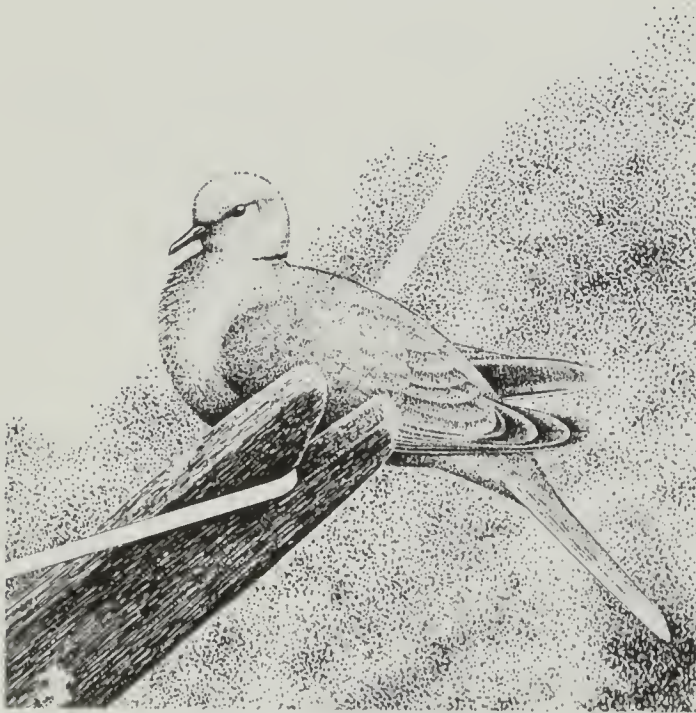
Moss Taylor

During the summer of 2000, fieldwork for the Breeding Season Survey of the Norfolk Bird Atlas (NBA) commenced. The recording unit is the tetrad, of which there are 1455 in Norfolk. In the year 2000 a total of 128 tetrads (8% of the county total) was surveyed twice, once between the beginning of April and mid-May, and once between mid-May and the end of June. Some results from these two 'set' visits are given below; they do not include any supplementary records. Additional results are given in many of the individual species' accounts in the Systematic List, along with the average number of pairs per occupied tetrad.

The figures given in the table represent the percentage of tetrads in which that species was recorded on at least one of the two visits in 2000 and the overall percentage of tetrads occupied by that species during fieldwork for the first Norfolk Atlas in 1980-85 (Kelly 1986).

Although different tetrads will be covered in subsequent years, it is hoped that year-on-year comparisons can be made between the relative abundance of many of the common and widespread species, as expressed both as a percentage of the number of tetrads in which the species is found and also as the average number of pairs recorded per occupied tetrad.

The differences in the number of occupied tetrads between the first summer's fieldwork and that from the 1980-85 tetrad atlas reveal some patterns. There is evidence of a reduction in the range of Lapwing, Turtle Dove, Cuckoo, Lesser Spotted Woodpecker, Willow Tit, Tree Sparrow and especially Redpoll, while Sparrowhawk, Stock Dove, Collared Dove, Great Spotted Woodpecker, Pied Wagtail, Whitethroat, Blackcap, Magpie and Jackdaw are amongst the species that are now more widespread. Many of these changes are in line with those identified nationally by the BTO's Common Birds Census and Breeding Bird Survey.



Collared Dove (*Phil Jones*)

<i>Species</i>	<i>%</i> <i>2000</i>	<i>%</i> <i>1980-85</i>	<i>Species</i>	<i>%</i> <i>2000</i>	<i>%</i> <i>1980-85</i>
Sparrowhawk	63	9	Whitethroat	90	54
Kestrel	79	72	Blackcap	83	45
Red-legged Partridge	84	90	Chiffchaff	78	52
Grey Partridge	41	37	Willow Warbler	84	77
Pheasant	91	93	Goldcrest	64	40
Moorhen	87	82	Spotted Flycatcher	41	47
Lapwing	41	53	Long-tailed Tit	79	46
Stock Dove	73	50	Marsh Tit	26	21
Wood Pigeon	96	96	Willow Tit	4	16
Collared Dove	87	47	Coal Tit	56	36
Turtle Dove	59	81	Blue Tit	93	93
Cuckoo	58	75	Great Tit	91	90
Swift	82	75	Nuthatch	27	27
Green Woodpecker	60	23	Trcecreeper	41	34
Great Sp Woodpcker	70	37	Magpie	84	43
Lesser Sp Woodpecker	4	18	Jackdaw	85	36
Skylark	98	97	Carrion Crow	90	40
Swallow	93	95	Starling	92	95
House Martin	79	85	House Sparrow	90	95
Pied Wagtail	91	53	Tree Sparrow	11	36
Wren	93	93	Chaffinch	93	93
Dunnock	91	95	Greenfinch	90	86
Robin	92	93	Goldfinch	82	86
Blackbird	95	98	Linnet	83	83
Song Thrush	83	96	Redpoll	4	31
Mistle Thrush	79	65	Bullfinch	44	60
Lesser Whitethroat	38	20	Yellowhammer	82	89

Percentage of tetrads in which each species was recorded on at least one of the two visits in April-June 2000 compared with the summers of 1980-85.

More observers are needed to undertake fieldwork for this important winter and breeding season survey, which has never before been attempted at a county level in the British Isles. Anyone interested in taking part should contact Moss Taylor, 4 Heath Road, Sheringham NR26 8JH.

Systematic List

Introduction

The order used follows the sixth edition of the *Checklist of Birds of Britain and Ireland* published by the BOU in 1992, as amended 1998 and 2000. The English names that are most familiar have been retained. Unless otherwise stated, all observations are of single birds and refer to 2000. The following abbreviations are used in the species accounts:

BO = Bird Observatory	NBA = Norfolk Bird Atlas
BBRC = British Birds Rarities Committee	NBC = Norfolk Bird Club
BF = Sugarbeet Factory	NBR = Norfolk Bird Report
BOU = British Ornithologists' Union	NNR = National Nature Reserve
BTO = British Trust for Ornithology	NR = Nature Reserve
CP = Country/Coastal Park	RSPB = Royal Society for the Protection of Birds
ESA = Environmentally Sensitive Area	SM = Saltmarsh
FM = Fresh Marsh	STW = Sewage Treatment Works
GC = Golf Course	TA = Training Area
GM = Grazing Marsh	WeBS = monthly Wetland Bird Survey counts
GP = Gravel Pit	WM = Water Meadows
	WWT = Wildfowl & Wetlands Trust

Where tables are used in the species accounts these refer to monthly maximum counts for main sites unless otherwise stated. A dash indicates that no count details have been received or none present. For wildfowl and waders, the data used derives generally from the monthly WeBS counts although if higher totals are available these are used instead; readers are also referred to the tables giving composite counts for the Wash, North Coast and Breydon/Berney which should be read in conjunction with the individual species accounts in the Systematic List. WeBS thresholds for International/National importance have been inserted for all relevant species.

Whilst many records to the west of Sheringham town are in the Sheringham Bird Observatory recording area, for the sake of simplicity most records are referred to as 'Sheringham' only. The area referred to as 'Lakenheath Washes' is that part of the new RSPB reserve situated within Norfolk. Where details of breeding birds are given at Holkham NNR for example these refer, unless otherwise stated, to the grazing marshes at Burnham Norton, Burnham Overy and Holkham.

Readers will note that where applicable details have been used from the first year's summer survey of the forthcoming Norfolk Bird Atlas. This does not allow a year-by-year comparison as with the BTO's Breeding Birds Survey but in county terms is far more comprehensive. Two caveats, however, must be noted. Firstly the NBA survey does not necessarily prove that breeding is taking place although it is most likely. Secondly the 128 tetrads surveyed were not necessarily a cross section of the average countywide habitat. Inevitably, in the first instance, the areas covered by the volunteers tended to be the most visited sites, often on the coastal strip.

Whilst a considerable proportion of the county's coastline to the north-east runs on a north-west/south-east axis to simplify matters movements have been quoted as east/west and north/south. Hence records to the west of Happisburgh are listed east/west as appropriate and those to the east as north/south.

Observers' initials are given for all national and county rarities and for a few other exceptional records. Normally the initials of the finder(s) are given (where known), and if applicable initials of observers who have also submitted detailed descriptions.

Red-throated Diver*Gavia stellata**Common passage migrant and winter visitor; rare in summer*

Recorded all months. Monthly max (including birds in flight and on sea) for coastal waters illustrate clear importance of north-east and east coasts. Note absence of records from Wash and small numbers in Burnham Overy-Blakeney Hbr area:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Hunstanton-Scolt Head	11	10	1	6	16	135	44
Burnham Overy-Blakeney Hbr	-	1	-	-	-	5	20
Blakeney Point-Happisburgh	157	200	13	21	12	102	340
Eccles-Hopton	139	188	50	6	20	50	400

National importance (winter): 50

Few large counts in first winter period. Max on sea Jan of 50 Winterton 2nd and in Feb 200 Overstrand 22nd. Movements involving 100 or more: 114 Mundesley Jan 21st, 106 22nd, 157 23rd, 153 Feb 6th and 102 26th (all west), 188 north Sea Palling also Feb 26th and 139 north Horsey (1 hr) Jan 15th. Numbers fell rapidly from March 18th when 50 Horsey. Last double-figure count 13 Sheringham March 28th. In April singles Happisburgh 1st, Scolt Head 5th and 6th, and Beoston Bump 13th. Thereafter Titchwell May 14th. Cley June 30th, Mundesley July 11th, Yarmouth 15th, Sheringham 25th, Scolt Head and Cromer Aug 25th, and Walcott 31st.

Numbers built slowly in Sept and Oct when highest counts 12 west 9 east Sheringham Sept 15th (0620-1620) and 20 Horsey Oct 4th. More numerous Nov and Dec. Other than 80 west 55 east Holme Nov 28th, all other counts of 100 or more from east and north-east of county: *Nov* 100 Sheringham 7th and 102 18th; *Dec* 202 east 8 west Sheringham 24th, 73 west 27 east 25th and 102 26th, 100 Mundesley 26th and 27th, 283 west 57 east 28th and 295 west 29th, 267 Sea Palling 18th and 120 23rd, and 400 Winterton 3rd.

Inland: Berney Jan 7th and Horsey Mere 24th.

Black-throated Diver*Gavia arctica**Uncommon passage migrant and winter visitor; exceptional in summer*

Very few recorded in first winter period: Titchwell Jan 1st/2nd and Feb 24th, Scolt Head Jan 4th and 9th, Cley Feb 20th, Salthouse Jan 1st, Sheringham March 1st, 2 Overstrand Feb 22nd, Weybourne Sept 30th; 1-2 Sheringham Sept 23rd-Nov 19th with 4 Nov 6th; Cromer Oct 30th; Mundesley Nov 7th and 12th/13th; 2 Waxham Dec 23rd; Winterton Nov 5th and 2 Dec 3rd.

Great Northern Diver*Gavia immer**Winter visitor and passage migrant in small numbers; exceptional in summer*

Widespread along north coast but in small numbers in first winter period: Holme occasionally Jan 23rd-April 18th; 1-2 Titchwell Jan 26th-Feb 24th and April 6th/7th; Holkham Bay Jan 6th and 31st, and March 8th; Blakeney Hbr Jan 2nd-9th and 31st; Cley Jan 1st; West Runton March 3rd; Overstrand Jan 2nd. Also singles on east coast Winterton Jan 3rd and 22nd.

First of autumn Cley Sept 16th followed by singles Overstrand 17th and Titchwell 30th. Subsequently in Oct Hunstanton 21st; Holme 17th, 20th and 30th; Titchwell 1st, 9th and 21st; Scolt Head 20th; Holkham Bay 1st; Cley 22nd; Salthouse 15th; Sheringham 6th (2) and 29th; Overstrand 31st; Walcott 10th; Waxham 21st and 28th.



Great Northern Diver (*Pete Sewell*)

More numerous after first week of Nov, with majority between Blakeney Hbr and Mundesley and with unusual numbers involving birds moving mainly westwards. At Sheringham 12 8th, 6 9th and 5 (plus 4 east) 12th, and 6 Mundesley 11th. Elsewhere max 3 Hunstanton 7th, 2 Holme 13th and 30th, 3-4 Titchwell 18th, 3 Holkham Bay 27th, 2 Blakeney Hbr 20th, 3 Blakeney Point 13th and 30th, and 2 Walcott 13th. Singles also reported on one or more days in Nov from Stiffkey, Cley, Salthouse, Weybourne, Overstrand, Happisburgh, Sea Palling and Caister. Numbers remained high in Dec with max of 3 Hunstanton 19th, 3 Holme 2nd, 2 Titchwell 1st and 2nd, 3 Holkham Bay 9th, 2 Wells Channel 29th, 2 Stiffkey 16th, and 5 Blakeney Hbr 23rd and 27th, 2 Cley and 2 Weybourne both 15th. Singles on one or more days Brancaster, Burnham Overy, Salthouse, Sheringham, West Runton, Cromer, Mundesley and Walcott.

Inland: Horsey Mere Nov 25th.

Little Grebe

Tachybaptus ruficollis

Resident, passage migrant and winter visitor

Found throughout the county with monthly max at regularly counted sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Holme	8	9	10	8	4	6	5	14	9	13	7	7
Thornham-Brancaster	11	12	9	6	4	4	7	10	6	16	28	21
Holkham Park Lake	14	16	10	18	7	4	-	16	22	5	3	1
Cley-Salthouse	12	9	14	8	3	2	14	16	10	5	18	17
Breydon/Berney	4	6	8	16	10	6	15	15	6	7	2	3
Welney	-	7	12	16	2	7	3	4	6	5	1	-
East Wretham Heath	4	8	28	22	28	24	44	30	-	-	-	-

Additional counts of 10 or more: 10 Bawsey Pits April 24th, 10 Buckenham Tofts Nov 19th, Burnham Norton 11 July, 14 East Ruston Sept 9th, 15 Heigham Sound Jan 3rd and 12 10th, 17 Hockwold Jan 8th, 13 Holkham NNR Jan, 25 March and 49 May, 19 Lakenheath Washes Aug 13th, 27 21st and 25 Sept 9th, 20 Lynn Point Oct 17th, 12 Morning Thorpe Sept 14th, 12 Pensthorpe Nov 5th, 11 Pentney GP Oct 17th, 23 Snettisham Nov 2nd and 24 Dec 20th, 22 Stanford Water Sept 22nd and 18 Oct 6th, 18 Swanton Morley GP Sept 24th, 14 Tottenhill GP Dec 14th, 39 Wensum valley (Swanton Morley-Taverham) Jan 26th, and 17 Whitlingham Lanc GP Sept 24th.

Reports received of at least 126 breeding pairs (pairs in brackets): Bergh Apton, Bittering GP (2), Breydon/Berney (15), Cley, Creaking Gate Lake (3), Devil's Punchbowl (Croxtton), East Ruston/King's and Mown Fens (9), East Wretham Heath/Lang Mere (12), Holkham Park Lake (8), Holkham NNR (37), Holt GP, Holme (7), Horsey, Kelling WM, King's Lynn BF, Lakenheath Washes, Lopham Fen (6), Lynford Lake, Lyng-Easthaugh GP, Merton Pool (2), Pensthorpe, Raynham Lake (2), Sheringham BO, Sheringham Park, Sparham GP, Stanford TA (Bagmore Pit, Buckenham Tofts, Fowlmere, Stanford Water, West Toft Mere), Titchwell (3), Wheatfen and Whitlingham Lane GP.

Migrants (at sea) Sidstrand March 31st, April 16th and Aug 24th, Kelling/Weybourne Oct 15th and Sheringham Nov 11th.

Great Crested Grebe

Podiceps cristatus

Resident breeder, passage migrant and winter visitor

Found throughout the county in both coastal and inland waters with monthly max at regularly counted sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hunstanton	17	5	-	12	-	-	7	-	5	6	14	5
Holme	2	12	19	13	6	2	-	-	3	7	12	18
Thornham-Scolt Head	11	2	2	25	1	4	9	3	4	15	25	-
Breydon/Berney	2	3	2	3	6	20	40	33	37	18	3	5
Barton Broad	12	24	40	49	28	41	66	35	34	25	14	5
Ranworth Broad	11	18	16	13	17	24	42	44	28	12	11	5
Rockland Broad	8	14	26	16	22	12	28	18	14	8	6	2
Welney	4	14	33	24	24	33	10	7	4	3	9	10

Other counts of 20 or more: 40 Hickling Broad April 23rd, 27 R Ouse Relief Channel Magdalen-Saddlebow Jan 22nd and Feb 18th, and 21 Pentney GP Jan 15th.

Daily movements regular at Holme mid-Nov to year end with max 41 east 12 west Nov 30th, 53 east 20 west Dec 2nd, and 41 west Dec 13th and 21st.

A total of 77 breeding pairs reported (pairs in brackets): Blickling Park Lake, Colney GP (3), Cranwich GP, Fustyweed GP (Elsing), Hickling Broad (27), Lakenheath Washes (3), Lynford GP, Lyng-Easthaugh GP (3), Ranworth Broad, Raynham Lake, Sennowe Park (3), Snetterton GP (4), Snettisham, South Acre GP, Sparham GP (3), Sparham Pools (3), Swanton Morley GP (3), Thompson Water, Tottenhill GP (3), UEA Broad (4), Welney (4), Wheatfen (2), Wissington BF (2) and Wissington New Cut (2).

Red-necked Grebe

Podiceps grisegena

Passage migrant and winter visitor

In first winter period all but one record, Breydon March 2nd, from nearshore waters west of Wells: Hunstanton Jan 15th/16th, Feb 12th and 15th, March 5th, and April 11th and 13th; 3 Holme Feb 20th; 1-2 irregularly Titchwell Jan 5th-Feb 27th, and one April 8th-12th; Brancaster Jan 26th and April 8th; 1-3 Holkham Bay Jan 1st-3rd and 3 Feb 22nd.

First returning bird juv at Cromer Aug 6th/7th. Thereafter, much more widespread and numerous: Heacham Nov 2nd; 1-2 Hunstanton Dec 19th-23rd; 1-2 Holme Sept 1st-Dec 17th; 1-2 Titchwell Aug 31st-year end; 3 west Scolt Head Sept 3rd then 1-2 Sept 16th-Nov 16th; 2 Burnham Overy Oct 15th; 1-4 Holkham Bay Oct 14th-Dec 18th with 6 Nov 23rd and Dec

3rd; Blakeney Point Nov 17th; Blakeney Hbr Dec 23rd; 1-2 Cley Sept 3rd-Dec 19th with 6 west Nov 8th; Salthouse Sept 2nd and 28th; Weybourne Sept 30th; 1-4 Sheringham Sept 2nd-Dec 2nd; Cromer Aug 22nd, Sept 3rd and Oct 29th; Overstrand Nov 13th; 5 west Mundesley Nov 11th, 4 west 12th and 2 Dec 20th; 2 Sea Palling Nov 10th; Waxham Nov 25th and Dec 23rd.

Inland: Tottenham GP Dec 19th.



Red-necked Grebe (*Andy Benson*)

Slavonian Grebe

Podiceps auritus

Winter visitor and passage migrant, mainly during autumn

As usual majority in nearshore waters Hunstanton-Scolt Head: 1-2 Hunstanton Dec 19th-24th; Holme 5 Feb 20th, singles Feb 24th-March 12th and intermittently Oct 16th-Dec 17th, with 3 Oct 20th, 2 23rd and Dec 5th; 1-2 Titchwell Jan 1st-Feb 27th, singles March 25th, April 19th, July 17th and 31st, Sept 29th, and 1-4 Oct 5th-Dec 28th; 2 Brancaster Jan 26th; Scolt Head Jan 14th and 3 Nov 16th.

Also regular Holkham Bay where 2 Jan 1st and singles 2nd and 26th, 1-4 Nov 23rd-Dec 14th, with 6 on 9th, and Blakeney Point/Hbr where Jan 18th and Nov 18th-year end with 2 Nov 2nd and Dec 17th, and 3 Dec 14th. Elsewhere Snettisham Jan 1st, Stiffkey SM Dec 17th-30th, 2 Cley Nov 3rd, Cromer Oct 22nd, Mundesley Nov 11th, Sea Palling Nov 7th and Breydon Aug 27th.

Inland: Horsey Mere Jan 16th-30th and East Ruston Dec 3rd-15th.

Black-necked Grebe

Podiceps nigricollis

Scarce passage migrant and winter visitor

For third successive year a long-staying bird Holkham Park Lake Jan 29th-March 11th and Dec 16th-27th. All other records: Blakeney Hbr Jan 2nd (PJH), Holkham Bay Jan 31st (MAWA), Strumpshaw Feb 12th, 2 Gunton Park Lake April 5th, Hickling Broad April 9th, Lakenheath Washes April 26th, Welney May 13th, Wissington BF June 4th, Cantley BF June 22nd, 25th and July 29th with 2 there July 27th/28th, south Winterton July 25th (INS), Pentney GP Aug 29th and Sept 22nd-Oct 12th, and Burnham Overy Dunes Oct 8th and 15th.

Records including initials of observers relate to birds at sea (see Editorial).

Fulmar

Fulmarus glacialis

Breeder, some remaining all year; regular coasting and storm movements

Offshore movements disappointing, with no noteworthy counts until summer when in July 44 west Mundesley 12th and 50 Cley 15th. Highest counts of year in Sept but numbers still relatively low. On 2nd 155 east 43 west Scolt Head, 145 east Sheringham (7 hrs) and 33 south Eeclles (1715-1930). On 3rd 83 east 67 west Scolt Head and 48 south Eeclles (0630-0815), and on 16th 50 west 35 east Scolt Head and 150 Sheringham (0630-1620). Only other movement of note 37 west Holme Dec 14th.

At the county's main breeding colony at Hunstanton 129 occupied ledges Jan 13th, with 100 active pairs during March and 45 downy young Aug 11th typical for recent years. Last birds seen here Sept 25th with first returning birds Oct 22nd, 64 by Nov 7th and 200+ in Dec. The 100 pairs present in March suggests that some non-breeding birds are present

during the year, not breeding until at least 6-12 years old, and that predation may be an issue, possibly involving rats, which are present along the cliffs in large numbers.

Only other breeding records 5-6 nesting pairs Seratby Cliffs and up to 6 on cliffs at West Runton/Sheringham but total/success not known. No records from Cromer or other north-east sites and all breeding/summering records would be welcome.

No inland records as such but singles inland up R Ouse at King's Lynn Aug 5th, south inland over Thornham May 22nd, Winterton Church July 7th (apparently prospecting for nesting sites), over Yarmouth Town Centre June 2nd, and at Breydon on June 8th, 22nd and July 7th.

A blue-phase bird east Titchwell April 14th was only record for year and the least for a decade, reflecting the generally poor year for seabirds.

Cory's Shearwater

Calonectris diomedea

Annual vagrant from Mediterranean/North Atlantic; most during autumn

Another poor year for the third consecutive year, with only records singles west Mundesley July 10th (MDF), east at Cley (RBr *et al*) and Sheringham Sept 2nd (DHR *et al*).

Sooty Shearwater

Puffinus griseus

Autumn passage migrant, most during northerly gales; rare at other times

After a series of spring/summer records in recent years, none until one Horsey July 15th. No further records until second half of Aug when 2 off Wells 20th, singles east Sheringham 21st and Scolt Head west 25th and east 27th. Highest counts of autumn during Sept with peak days 2nd, 3rd and 16th. On 2nd east Holme, 2 west Titchwell, 4 west Scolt Head, 2 Blakeney Point, 5 Cley, 3 Sheringham and 2 Sea Palling (1715-1930). On 3rd 6 west Holme, east Titchwell, 4 west Scolt Head, 3 Cley, 14 west Sheringham (0700-1000), 10 east 6 west Cromer (0645-1415), 2 west Overstrand, 10 west Mundesley, 3 Sea Palling, 2 Horsey and 14 north Winterton. On 16th 6 west Holme, 12 west Scolt Head (all day count). 3 west one east Weybourne (0630-0815), 28 west Sheringham (0620-1620) and one West Runton. Only other records during month 2 north Winterton 21st and singles west Holme 23rd and north Horsey 30th.

Passage during rest of autumn very poor when in Oct singles west Mundesley 6th, north Waxham 7th, east Cley 10th and west Eeoles 28th. In Nov all records 7th when singles Hunstanton, Titchwell, east Sheringham and Sea Palling.

Manx Shearwater

Puffinus puffinus

Passage migrant with majority during autumn movements

First records of year May when Holme 3rd, 20 east Sheringham. 4 east Cromer and 7 east Paston 27th, 3 Sheringham 28th and 5 east Cromer 29th. Numbers reported in June remained small with records on just 5 dates: 2 east Mundesley 3rd, 25 south Hunstanton and 4 west Holme 23rd, 4 west Mundesley 24th, one east Holme, 2 Sheringham and 2 west Mundesley 25th, and 4 south Sea Palling 27th. Best month of year July when recorded on 10 dates, most 11th, 15th and 16th. On 11th 2 east Holme, 2 west Scolt Head, 2 west Weybourne, 25 west Sheringham (0900-1200), 3 west Beeston Bump, 18 west Mundesley and one Paston. Best counts of year 15th when 15 south-west Hunstanton, 74 Titchwell, 154 east Cley, 247 east Sheringham, 25 east Cromer, 20 west Mundesley, 14 south Walcott and 12 Horsey. Numbers smaller on 16th when 11 west Cley, 13 Sheringham, 28 west Mundesley, one west Bacton and 5 Winterton. Other noteworthy counts during July 10 west Mundesley 12th and 20 Sheringham 29th. Only Aug records 2 Sheringham 21st, and singles east Scolt Head 25th and Mundesley 31st.

Reported on 9 dates in Sept, most 2nd when one east Holme, 8 west Scolt Head, one Cley, 29 Sheringham, 16 east Cromer and one Sea Palling, and 3rd when 3 west Holme, 10 west Sheringham, 4 east 4 west Cromer (0645-1415), 8 west Mundesley, 2 north Sea Palling (0630-0815) and 9 Winterton. Only other counts of note 16th when 3 east Holme, 11 east 2 west Scolt Head and 9 west 7 east Sheringham. No Oct records and only one in Nov at Hunstanton 7th, which was also last of year.

Balearic Shearwater

Puffinus yelkouan

Annual in small numbers during autumn

A poor year with only records north-east Hunstanton Nov 7th (MW), 3 east Sheringham Sept 2nd (D&JB DHR *et al*) and one Nov 7th (GWF IGJ AR *et al*), Mundesley July 11th and 16th, and Sept 2nd (MDF), and Winterton Sept 3rd (INS).

Storm Petrel

Hydrobates pelagicus

Almost annual late autumn visitor, often in stormy weather

Only record one picked up long-dead Cart Gap Aug 7th, which may have related to a bird on spring passage. The poorest year since 1992, when there were no records either alive or dead.

Leach's Petrel

Oceanodroma leucorhoa

Gale-blown visitor mostly during autumn

A very poor year with records on just two dates in Sept. On 3rd 3 west Sheringham and on 16th 2 west Holme, 2 west Scolt Head, 4 Cley, one west Weybourne and 4 east Sheringham.

Gannet

Morus bassanus

Passage migrant, most during autumn gales

Recorded in all months of year, but numbers small until spring when in May 50 Titchwell 3rd, 40 Hunstanton 18th, 103 east Scolt Head 20th and 20 Holme 22nd. Similar numbers offshore in June when best counts 38 east Scolt Head 3rd, 40 Hunstanton 23rd, 60 Mundesley 24th and 100 Sheringham 25th. Highest July counts of 30 west 18 east Scolt Head and 60 Sheringham 11th, 180 west Mundesley 12th, 30 north Hunstanton, 200 Cley, 200 east Sheringham (1105-1520), 150 Mundesley and 60 Horsey 15th, and 230 west 180 east Mundesley 16th.

Recorded daily in Aug, but all counts small and no large counts until Sept when best days 2nd, 3rd, 16th and 17th. On 2nd 185 east 55 west Scolt Head, 240 west Sheringham (0545-1145), 100 east East Runton, 20 south Waxham and 49 Horsey. On 3rd 90 west 24 east Scolt Head, 180 east 20 west Sheringham, 165 west 32 east Cromer (0645-1415) and 150 east Overstrand. On 16th 155 west 16 east Scolt Head, 65 west Weybourne (0730-1030), 150 west 30 east Sheringham (0620-1620), and on 17th 150 west Holme and 170 east 60 west Sheringham. Other counts of note during month 175 west Scolt Head 19th and 40 west Burnham Overy 30th. In Oct highest counts 60 west Holme, 600 west Cley (0830-1400) and 120 west Sheringham 7th, 300 east Sheringham 8th (1000-1100), 250 east Sheringham 11th, 122 south Waxham 21st, and 70 north Hunstanton, 45 west Titchwell, 60 Walcott and 159 Waxham 28th. Still reported daily in Nov most 7th when 57 north Hunstanton and 101 east Sheringham. In Dec small numbers regularly seen with best count 52 Sheringham 25th.

Only inland record an imm Sparham Sept 16th, which was found grounded in a stubble field after an overnight storm and was caught and released on Sparham GP. Once released it

made so much noise that every bird on the gravel pit departed; although still present early next day it was not present later.

Cormorant

Phalacrocorax carbo

Increasing winter visitor and passage migrant; sporadic breeder

Monthly counts from roost sites:

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Snettisham	-	-	-	-	23	53	95	97	92	58	-	-
Titchwell	1	1	6	6	6	33	63	77	106	82	3	1
Ranworth Broad	293	249	182	93	-	-	-	-	81	222	148	118
Welney	227	232	*301	87	42	30	52	65	98	148	189	197

National importance (winter): 130

* Reserve record

Additional roost counts: Filby Broad 31 Dec, Fritton Lake 60 Nov, Holkham GM 200 July and 80 Aug, Sennowe Park 44 Dec, Whitlingham Lane GP 12 Nov, and Raynham Lake where up to 5 occasionally noted coming in to roost. At Barton Broad 25 Jan and 44 Dec where birds gather before flying to Ranworth Broad roost late afternoon. There were a number of counts where it was not clarified whether they referred to roosts or just daytime gatherings when at Earsham 30 Aug, Lady Broad 61 Sept, Lyng-Easthaugh GP 34 Dec and Sparham GP 32 Dec. Largest counts of hightide/loafing birds: Scolt Head 110 Sept (birds from here roosting at Titchwell and Holkham), Cley 46 Aug and 62 Sept (all departing to the south-west at dusk), Overstrand 43 on groynes Oct, Breydon 83 Jan, 72 Feb, 79 March, 99 July, 114 Aug and 109 Sept (all roosting at Fritton Lake), and Buckenham 101 March. Clearly additional roosts await discovery and roost sites presumably exist near Cley and at other places in the Wensum valley.

There was some evidence of migration in autumn when 30 west Overstrand Sept 3rd, 21 high in off sea from north-west Holme Oct 17th and 59 high in off sea from north-west in 3 groups Scolt Head Oct 19th.

After the first breeding on north coast last year, numbers increased dramatically at Holkham GM where 39-42 pairs nested (6 in 1999). These birds were all not surprisingly identified as *sinensis* race birds in line with other recently established colonies in southern England. Also 12 pairs at Narford, with 11 nests in Scots Pine and one in an oak. Increase in summer sightings noted in Wensum valley, which may point to possible future breeding.

Shag

Phalacrocorax aristotelis

Autumn and winter visitor with occasional wrecked birds inland

In first winter period singles Wells Hbr Jan 1st, Lynn Point Feb 22nd and an imm Breydon March 21st-31st. Only spring record one on sea Beeston Bump April 12th.

No further records until late summer/early autumn when first south Winterton July 30th. Passage in second half of year best for several years especially in Nov and Dec. In Aug singles Scolt Head 9th, Sheringham 5th, 7th, 13th and 15th, and Walcott 8th. Numbers recorded remained small in Sept when 3 Overstrand 17th, 2 Weybourne 30th and singles at 5 other north coast sites on 5 additional dates. In Oct 2 Cley 21st and Cromer 30th, with singles Sheringham 22nd, 27th and 31st, and Overstrand 31st. Recorded most days in Nov,

with best counts 4 Mundesley 11th-13th, 3 Cromer 1st, 2 Sheringham 7th, and 9th-11th, 2 Waxham 18th and singles Hunstanton, Scolt Head, Holkham, Wells, Cley, Happisburgh and Sea Palling. In Dec highest counts 6 Brancaster Hbr 17th, 3 Sea Palling 18th, 2-3 Sheringham 12th and singles at all sites listed the previous month.

Inland: in autumn single Norwich (Cow Tower-New Mills Yard) Aug 16th and then in second winter period Welney Nov 13th and found dead Dec 18th, Saddlebow Relief Channel Dec 19th, Holme (on grazing marsh) Dec 20th/21st and Pentney GP 26th/27th.

Bittern

Botaurus stellaris

Rare resident breeder; also winter visitor in variable numbers

Low wintering numbers remained from previous year: max 3 Martham Broad, 2 mid-Yare valley and singles at 7 further coastal and Broadland sites. Also Felbrigg Jan 29th.

First boomer heard Feb 14th and subsequently noted at 8 further sites. An encouraging 6 Broadland sites held booming males but only 2 pairs confirmed as breeding, one of which failed due to flooding. On north coast breeding was confirmed at 2 localities; at one the young hatched but failed to fledge. A further north coast site held a booming male briefly in April and an adult and imm nearby in July, possibly evidence of successful breeding in the vicinity.

One which narrowly avoided becoming a road casualty Stiffkey/Morston Sept 9th may have been evidence of post breeding dispersal. Presumed autumn migrants Snettisham CP Oct 5th, in off sea Weybourne Oct 31st and Nov 7th, one sitting in top of pine before departing high west Wells East Hills Nov 6th, and west Holme Nov 15th, possibly that seen on seawall there the previous day.

Again low wintering numbers in second winter period: max 2 Hickling Broad and 2 mid-Yare valley plus singles at 9 coastal and Broadland sites.



Bittern (Stewart Wright)

Cattle Egret

Bubulcus ibis

Vagrant from southern Europe

A splendid summer-plumaged adult Welney July 22nd-24th (JBK DSt *et al*) proved popular if often elusive.



Cattle Egret (*Robert Gillmor*)

Little Egret

Egretta garzetta

Annual visitor; over-wintering in increasing numbers

The Titchwell roost again occupied all months, attaining a new county record total at year end. The wanderings of these birds were amply illustrated by the Feb north coast WeBS count when recorded at Thornham, Brancaster, Scolt Head (3), Burnham Overy Hbr (2) and Warham SM. Birds from the area regularly move east to Warham/Stiffkey and occasionally as far as Cley, and regularly west to Holme with odd visits to Lynn Point and Ongar Hill.

Max monthly roosting numbers at Titchwell:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
5	7	4	3	1	1	3	10	10	12	15	15

Also during first winter period single Cranwich GP Jan 2nd-23rd, Feb 13th and March 15th.

April records of singles south over A47 near Yarmouth 17th and later Berney 17th-19th, and east Catfield Fen and later Hickling Broad 29th most likely departing wintering birds, the former possibly that at R Yare (near Rockland) May 2nd, Berney May 5th-7th and Berney/Halvergate May 26th-June 21st. Further May records from Holme 5th, Welney 5th, 11th, 13th and 23rd, Holkham GM and 2 Warham SM 7th, and Cley 28th.

Noted during June at Warham SM 2nd-4th, 2 Welmore (Ouse Washes) 3rd, same 2 Welney 6th with single there 12th, Cley 8th and 23rd, Scolt Head 11th and Buckenham 12th.

Evidence of returning autumn birds from late July when north over Norwich (Northumberland St) 17th, west Holme 18th, north Yarmouth 20th, Snettisham 20th/21st

and 29th (until Sept 30th), and Welney 21st-24th. Good numbers in Aug (reflected in Titchwell roost) when in off sea then west Walcott 3rd, possibly same Cley/Salthouse 3rd-8th, Scolt Head 7th, 3 Lopham Fen 9th, Holme 10th, 13th and 18th, Breydon/Berney 12th-20th, Welney 13th/14th with 2 there 18th and singles 19th, 26th/27th and 30th, Hickling Broad 18th, and 2 Ongar Hill 20th. Single Welney Sept 8th was last inland record of year.

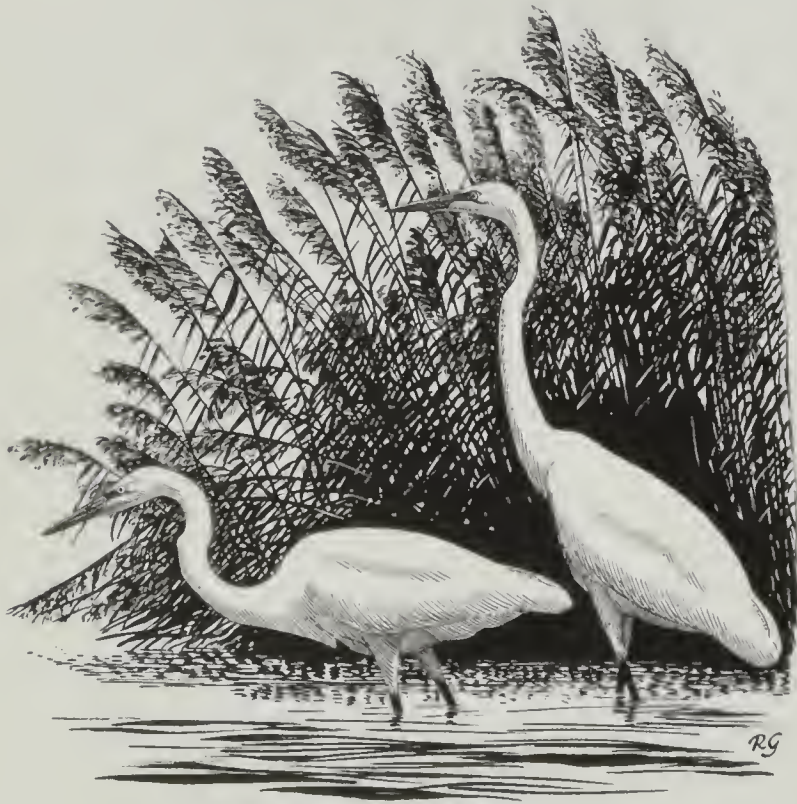
During second winter period noted away from more regular areas when 2 in off sea then west Sheringham Oct 13th, single east there Nov 7th, 3 south Hunstanton Oct 19th, Salthouse Nov 3rd, Weybourne Nov 7th, Morston Dec 22nd/23rd, Cley Dec 30th and Blakeney Point Dec 31st. Also during this period a second site (in wood with Cormorants and Grey Herons) used by 1-2 roosting birds on at least 2 occasions.

Great White Egret

Ardea alba

Increasingly regular vagrant from the Continent

One Welney July 26th-30th (JBK *et al*) completed the 'egret set' at that site within a 7-day period, whilst 2 Strumpshaw Sept 21st/22nd (MSS TS *et al*) constituted the first county multiple occurrence.



Great White Egrets (*Robert Gillmor*)

Grey Heron

Ardea cinerea

Resident and passage migrant/winter visitor

Largest groups in first winter period included 18 Hickling Broad Feb 28th, 17 Blakeney GM March 12th and 24 Welney next day. One following a mini-digger Ludham Bridge/Horning Upper St 2 dates in Feb was seen to take a Water Vole on one occasion.

Light coastal spring passage recorded late March to late May (with birds moving both east and west) when totals of 6 Holme March 9th-May 29th, 10 Scolt Head March 31st-May 22nd, one offshore Weybourne May 16th, 5 Sheringham April 24th-May 12th, 2 Beeston Bump March 16th, and 4 Paston March 25th-April 7th. A melanistic individual Lakenheath Washes May 7th.

Data available from 14 heronries indicated stability or a possibly a slight increase in the breeding population.

Impressive numbers at Welney during summer and early autumn where 41 June 3rd, 53 July 6th and 34 Aug 17th.

Again a notable summer and autumn, mainly westward, movement at coastal sites, with max 31 west (in 5 groups) Scolt Head Aug 13th. Monthly totals at regularly recorded sites as follows:

	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>
Holme	3	-	5	8	1	-
Scolt Head	7	9	38	22	11	-
Cley	-	-	7	14	-	4
Sheringham	2	-	2	7	-	6
Paston	-	3	-	15	-	-

The north coast WeBS counts produced totals of 46 July, 55 Aug, 32 Sept and 43 Oct. Additional passage (westward unless indicated) during Sept-Nov at following sites: 5 Mundesley Sept 3rd, 3 north Yarmouth Sept 8th, 5 in off sea Weybourne, 8 Blakeney Point and 19 Wells all Sept 20th, one south Yarmouth Oct 20th, 3 in off sea then north Waxham Nov 4th, 3 south-west Hunstanton Nov 6th and single Titchwell Nov 24th.

Only reported second winter period concentration 64 Lenwade Dec 8th feeding on waste from pet food processing plant.

1999 Correction: The new heronry is at The Carr, Quidenham (not Diss Carr).

Purple Heron

Ardea purpurea

Almost annual spring and autumn vagrant from the Continent

An adult Pensthorpe May 16th (ADC) was followed by an obliging and well-watched imm Cley/Salthouse Aug 8th-14th (BHi *et al*).

White Stork

Ciconia ciconia

Vagrant from the Continent, appearing most years; status clouded by free-flying collection birds

In typical spring fashion 2 drifted west over Inceborough Hill April 2nd (PE *et al*), touring along the north coast to Holme before departing north-west across the Wash. The following day presumably the same birds were relocated in Holkham Park, remaining in the area to April 5th when seen departing west over Burnham Norton. They were again at Holkham Park April 7th but failed to settle on this occasion and were not seen again. Whilst there they roosted overnight in a large tree and were observed in bill-clapping display on at least one occasion.

Individuals at Filby Broad May 10th, Fleggburgh May 19th, Burgh Common June 6th, Upton June 7th, Great Ryburgh and Titchwell June 8th, and Great and Little Walsingham June 9th are all thought to be the familiar escapee from Thrigby Wildlife Park.

Spoonbill

Platalea leucorodia

Scarce non-breeding summer visitor and passage migrant; rare in winter

First of spring over Horsey Mere and Cley March 25th, then Titchwell 26th before settling Holkham GM 26th-28th. Further March singles Salthouse 30th, Hickling Broad 31st and Berney 31st-April 1st, and during April Cley 2nd, 10th and 16th, Berney 7th-9th, over Mundesley and Titchwell 16th, Sea Palling 17th, Hickling Broad 20th, Strumpshaw 24th and Holme 26th-29th.

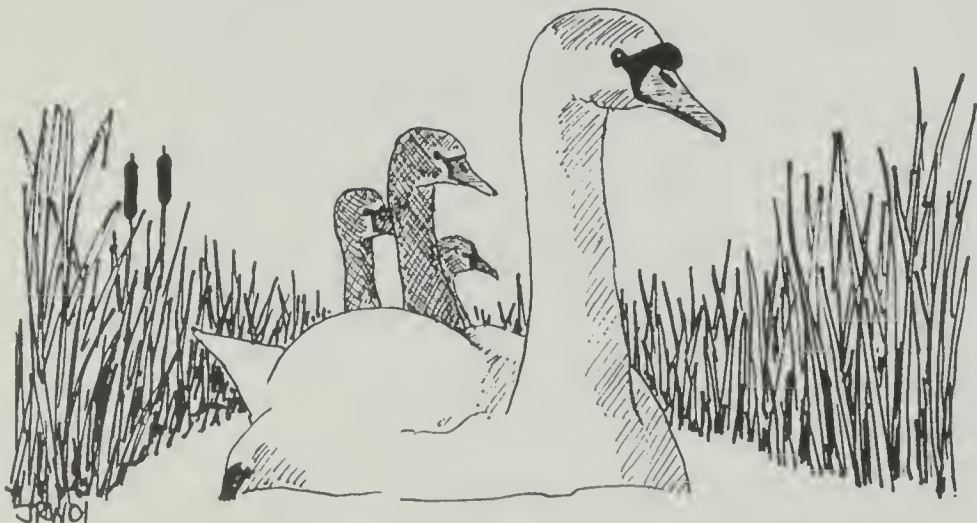
Following successful breeding in England in 1998 an adult at a Broadland locality April 18th-29th was joined by a second on 30th and subsequent stick-carrying resulted in a nest being constructed in reeds. Unfortunately the local Coot population took a liking to this supply of nesting material and dismantled the nest as fast as it was being constructed. Both adults were last seen May 5th and may have been those south Winterton same day and Horsey 6th.

Four main sites again favoured following initial spring arrival with a fifth during late summer. Max number at each site:

	May		Jun		Jul		Aug	
	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-31
Titchwell	-	4	1	1	-	1	1	1
Holkham GM	1	4	4	-	-	-	-	-
Cley	-	4	2	3	1	1	1	-
Breydon/Berney	2	2	5	5	3	3	3	4
Welney	-	-	-	-	1	3	3	-

Further May records from Winterton and Hickling Broad 7th, plus 2 in off sea Walcott 27th which may have been 2 Hickling Broad again 29th/30th.

Few records away from main localities June-Aug when noted Cantley Marshes July 10th, Holme July 11th, Buckenham July 13th and east Brancaster Aug 6th. The Breydon/Berney party departed Sept 6th with single there briefly following day.



Mute Swans (*John Williamson*)

Mute Swan

Cygnus olor

Resident; the Ouse Washes attract the most important winter concentrations

Monthly max at main sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Welney	172	138	148	221	254	296	235	-	35	131	*394	254
Breydon/Berney	144	154	116	52	124	75	75	57	53	41	21	74
Lakenheath Washes	125	162	74	101	86	112	160	124	134	140	-	-

* site record

Other notable counts: *Jan* 86 Wiggshall St Peter, 85 Wensum valley (Swanton Morley-Taverham), 70 Norton Marshes; *Feb* 118 Langley Marshes, 80 Wiggshall St Germans; *March* 152 Cantley BF, 136 Langley Marshes, 70 Watlington; *April* 105 Rockland Broad; *May* 75 Narford Lake; *Sept* 80 Rockland Broad; *Nov* 103 Nar Valley Fisheries.

Details of 52 pairs at 17 sites received (including 14 Welney, 10 Holkham GM and 8-10 Hickling Broad) but undoubtedly under-recorded.

Migrants(?) seen arriving off sea at Scolt Head Oct 1st (3) and Waxham Nov 25th; also 2 east Mundesley Oct 4th.

Bewick's Swan

Cygnus columbianus

Passage migrant and winter visitor in internationally important numbers

Large numbers in Fens early in year with a record 4704 roosting at Welney during mid-Jan. Numbers remained high until mid-Feb though evening departures to east-north-east noted from 21st. Many more birds were seen departing over Central and East Norfolk around this time and just 349 birds remained on Feb 27th. Only a few birds seen after mid-March with counts including 18 March 27th and last 5 April 10th. Three non-flying injured birds remained during the summer. The early arrival of 2 flying birds Sept 14th probably involved individuals with some form of injury which had over-summered in Britain rather than genuine migrants; these were also seen at East Harling the previous day. First 6 birds of autumn appeared Oct 8th, over a week earlier than last year. However, following arrival very slow with just 83 by Oct 22nd compared to 2219 on Oct 24th 1999. Mild weather throughout autumn and early winter, coupled with unsuitable deeply flooded conditions on the Washes, resulted in some of lowest Dec counts in past decade, though numbers did climb a little during freezing weather at very end of year. There were 12 fatalities recorded due to collisions with power lines during 1999/2000 winter.

Cygnets in Dec were just under 10% but increased to 16% (highest figure for ten years) after turn of year and arrival of more swans. One pair had 6 cygnets while average brood size was 2.47 cygnets (sample 113 broods).

Counts at Welney WWT:

Jan 16th	Feb 15th	Mar 12th	Oct 22nd	Nov 21st	Dec 31st
4704	4254	183	83	1356	1816
(5649)	(5023)	-	-	(1551)	-

International importance (winter): 170

* (Total Norfolk/Cambridgeshire figure in brackets)

Substantial gatherings at traditional sites in Broads where counts included Waxham/Horsey/West Somerton 43 Jan 6th and 24 Dec 6th; Sutton/Hickling 80 Jan 5th; Catfield/Wood Street 119 Dec 31st; St Benet's Level/Ludham 185 Jan 31st, 209 Feb 12th and 26 Dec

12th (max count of flocks in the Catfield/Potter Heigham/Ludham area was 256 Jan 7th and these were regularly roosting on Ranworth Flood); Breydon/Berney 115 Jan 20th, 132 Feb 13th, 48 March 1st with last 5 on 5th, 16 Nov 24th and 28 in Dec. Other counts included 37 Reedham Jan 5th and 20 Fritton Jan 23rd. Elsewhere in county a small wintering flock in west at Wretton Fen reached 101 Jan 16th.

Early departures to east or north-east during Feb noted widely throughout county and included 64 Alderfen Broad 25th, 90 Ashill 16th and 36 26th, 210 East Tuddenham 22nd and 40 25th, 104 Horning Hall Marsh 25th, 40 Merton 19th and 160 25th, 70 Norwich 9th, 70 16th and 36 25th, 17 Paston 14th, 60 Spixworth 19th, 52 Thorpe Marriot 25th, and 45 Yarmouth 3rd and 59 21st.

Autumn arrivals recorded widely along north coast and to a lesser extent inland with earliest records away from Fens 8 Scolt Head and 12 Titchwell Oct 18th followed by 19 Pentney GP next day.

Whooper Swan

Cygnus cygnus

Winter visitor, mainly from Iceland, in internationally important numbers

Numbers in Fens, like those of the preceding species, were very high early in year with a record 1584 present at Welney Jan 30th. The population remained high until mid-March with first obvious evening departures 19th when 215 flew north-west at 1745 hrs. Just 554 remained on 26th with further departures of 164 April 5th, 53 10th and last 5 on 25th. Up to 5 injured birds over-summered. First autumn single appeared Oct 5th with 22 next day. Numbers below average until freezing conditions at end of year. Cygnet counts in autumn and early winter were 15.5%. One pair had six young while average brood size was 2.52 cygnets (sample 41 broods). Fatal collisions with overhead power lines accounted for 11 birds in 1999/2000 winter.

Counts at Welney WWT:

<i>Jan 30th</i>	<i>Feb 27th</i>	<i>Mar 12th</i>	<i>Apr 1st</i>	<i>Oct 22nd</i>	<i>Nov 21st</i>	<i>Dec 31st</i>
1584	1281	1355	289	693	709	1499
(1731)	-	(1619)	-	-	(890)	-

International importance (winter): 160

**(Total Norfolk/Cambridgeshire figure in brackets)*

Largest numbers in Broads around Potter Heigham/Catfield area where 116 Jan 8th, with other counts from St Benet's Level 26 Jan 16th and 40 Feb 3rd; Winterton/West Somerton/Horsey 11 Jan 16th, 45 Nov 29th and 19 Dec 5th. A record number of 26 were at Breydon March 12th. A late imm at West Somerton May 1st. Numerous records of small numbers from many other localities in the county especially during migration periods, most lingering just briefly. Of interest, two remained at Lang Mere, East Wretham until March 17th, having been present since Oct 27th 1999. An early migrant, no doubt heading for the Fens, at Pentney GP Oct 6th. First autumn coastal migrants Oct 15th when single Holme/Titchwell and 8 at Waxham.

Bean Goose

Anser fabalis

Taiga Bean Goose *A (f) fabalis*

Winter visitor to the Yare valley

Peak counts of regular flock disappointing with max only 71 Jan 2nd, after 149 only 5 days previously. These soon decreased to 22 9th/10th and latest, 32 in total, seen on 16th; one of the earliest departures on record. In second winter period, first arrivals 15 Nov 9th, but no

more until 32 Dec 16th. The following day, 106 present with max 135 on 21st. Cantley Marshes were favoured resort once again with occasional visits to Buckenham and south of river at Rockland/Claxton. Apart from a feral bird Long Stratton Sept 14th unusually no other records of this race from elsewhere.

Tundra Bean Goose *A (f) rossicus*

Small numbers increasingly recorded in winter

Fewer records than in recent winters reflecting perhaps the milder weather. All records listed. In first winter period Brancaster Jan 13th, Choseley Jan 9th, Fritcham area Jan 9th and 29th with 2 10th-16th, 2 Holkham Feb 9th and 16th and one March 19th-23rd, Holme March 4th-13th, Snettisham March 25th/26th, 2 Stanhoc Jan 31st, and 2 Welney (from Dec 13th 1999) to Jan 27th, 9 Feb 2nd-March 4th, 4 11th and 6 on 12th. In second winter period, only recorded at Holkham GM Dec 17th with 2 23rd/24th, and Egmere Dec 30th.

Pink-footed Goose

Anser brachyrhynchus

Winter visitor in internationally important numbers from Iceland and East Greenland

Three important wintering populations are located in the county.

In north-west Norfolk coordinated dawn counts of geese leaving the 3 traditional roost sites gave a reasonable estimate of numbers involved.

First winter period

	<i>Jan 5th</i>	<i>Jan 18th</i>	<i>Jan 31st</i>	<i>Feb 7th</i>	<i>Feb 14th</i>
Snettisham	6215	17300	13450	19450	5030
Scolt Head	24110	8600	5750	3500	-
Holkham/Wells	20500	12600	6975	10250	16240
<i>Total</i>	50825	38500	26175	33200	21270

Second winter period

	<i>Nov 11th</i>	<i>Nov 20th</i>	<i>Nov 28th</i>	<i>Dec 4th</i>	<i>Dec 18th</i>	<i>Dec 23rd</i>
Snettisham	17050	4435	6610	16490	6490	950
Scolt Head	10300	25850	19250	11900	35300	41000
Holkham/Wells	13750	26750	31000	21550	13000	20700
<i>Total</i>	41100	57035	56860	49940	54790	62650

Again very noticeable that a considerable proportion move from one roost site to another on different nights. At Scolt Head, 55,000 were estimated Dec 21st with 53,250 on 22nd, these being the highest ever counts for a single site in the county; on 23rd these had decreased to 41,000. A new roost site at Thornham held 5180 Nov 28th, but only 50 on Dec 4th. In addition, it is interesting to note the continued decline of the Snettisham roost towards end of year with a resulting increase at Scolt Head. Considerable feeding daytime concentrations occurred. In Jan 15,000 at Brancaster/Docking, 10,000 Burnham Market, 13,000 near Heacham, 10,000 Fritcham on two dates and 8000 in Barrow Common area. Feb saw totals of 5000 at both Stanhoe and Holkham. At end of year, at least 20,000 in Egmere area, with 7000 at Holkham GM.

In March, 1000 still at Holkham GM 23rd, 800 remaining to April 24th. Also in April, 1080 Snettisham 9th, 700 Titchwell 24th and still 250 Snettisham May 4th, but these reduced to 13 on 9th and last 3 14th. Summering birds at several sites were possibly sick or injured individuals. First in autumn 15 Scolt Head Sept 18th, 36 Holme 19th and 150 Holkham GM 21st, including a silver grey leucistic bird which remained until at least 28th and was probably

the same individual seen in Horsey area from Oct 4th. Another buff white bird at Wighton Jan 7th with perhaps same or another Docking on 25th. One at Flitcham Jan 19th and Stanhoe 30th displayed orange coloured legs.

In East Norfolk, the Horsey/Heigham Holmes population again continued to increase. The roost site is adjacent to the Mere whilst main daytime feeding area is relatively undisturbed at Heigham Holmes. Monthly max:

<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
5000	8000	2500	2000	5000	5000

Feeding gaggles as expected ranged widely from main areas using Sea Palling, Lessingham, Waxham, Ludham, Winterton, West Somerton and beet fields to south at Martham, Hemsby, Runham, Filby, Ormesby and Clippesby where count of 4500 Feb. There are indications that some birds are arriving here earlier than previously, bypassing north-west Norfolk, with first arrivals 23 on Sept 20th.

The Breydon/Berney/Halvergate/Lower Bure Marshes population also continued to increase, although as in North Norfolk much interchange occurs between sites. Most roost at Berney, with monthly max:

<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
5400	6600	3760	600	1650	4550

Latest in spring 16 March 19th, on which date a freshly killed road casualty was found on Acle New Road. First back, 5 Sept 29th with 10 next day, but Oct numbers traditionally low as Horsey still favoured. More use of the extensive Haddiscoe Island Levels noted early in year with at least 5000 Jan 22nd. In Feb, the north side of Acle New Road again favoured and included birds which had earlier been seen in Horsey area.

The combined East Norfolk wintering total is often difficult to calculate, but on Feb 27th combined counts at both Horsey and Berney roosts achieved an impressive total of 12,400.

As expected, many movements noted on migration and birds moved between the main feeding sites in winter, most notable 3500 east Cley Jan 1st, 1100 east Sheringham Oct 29th and 850 west Nov 29th, and 3500 east Paston Oct 22nd. Unusual inland movements include 30 east Brundall Jan 17th and 130 north over Whitlingham Lane GP Dec 2nd.

White-fronted Goose

Anser albifrons

European White-fronted Goose *A (a) albifrons*

Winter visitor and passage migrant from Siberian tundra

Peak counts at traditional wintering localities:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Nov</i>	<i>Dec</i>
Holkham GM	600	975	460	7	150
Horsey/Heigham Holmes	460	648	300	-	320
Buckenham/Cantley	120	-	-	56	95
Breydon/Berney	51	18	23	1	1

At Welney, the only records were 12 Jan 15th/16th, and single Feb 15th-26th and March 1st-4th. Away from above localities, up to 13 Snettisham Feb 20th-March 12th, 7 Blakeney



Red-breasted Goose – this well-watched immature spent all of the first winter period in the
Wolkham / Wells area (*Iain Leach*).





Siberian Meadow Bunting – this beautiful bird proved to be a magnet for twitchers but was almost certainly an escaped cage bird (*Julian Bhalerao*).

Penduline Tit – yet another recorded at Titchwell in April - surely the first breeding attempt is not too far away? (*Iain Leach*).





Sparrowhawk – an unwelcome visitor to a Sheringham garden in May (*Julian Bhalerao*).

Golden Pheasant – an elusive resident with strongholds in West Norfolk and The Brecks (*Tony Howes*).





White-tailed Eagle – this adult at Docking was one of two this year (*Alan Tate*); Ortolan Bunting – a spring male at Waxham (*Julian Bhalerao*).

Red-backed Shrike – a spring male at Winterton - numbers returned to normal after a poor year in 1999; Woodchat Shrike - this bird at Holme was one of two recorded in spring (*Julian Bhalerao*).



GM March 11th, and at Halvergate Marshes 11 Jan 12th, 42 16th, 120 Feb 4th and 145 on 27th.

Departures a little later than last year although none were recorded at Buckenham/Cantley in Feb. Good numbers remained Holkham GM in March with 150 still 15th and last 40 on 17th. At Horsey/Heigham Holmes still 300 13th and last 7 on 21st.

As usual, 1-3 feral/escaped or injured birds in spring, summer and into autumn at various localities with breeding noted at Stiffkey Fen.

In second winter period, 2 Buckenham Oct 10th were possibly of suspect origin with first genuine arrivals Waxham 23rd, 3 Holkham 26th and 2 Cantley 31st. Very few noted in Nov and main arrival not until second half Dec. Away from main sites, only records 6 Winterton Dec 19th and single Mundesley next day.

Greenland White-fronted Goose *A (a) flavirostris*

Rare visitor from Western Greenland

More records than ever and may include birds seen in second winter period of previous year. Careful scanning of the increasing numbers of Pink-footed Geese now wintering, and more observer awareness of this distinctive race, has led to details of the following being submitted, especially in the north-west (some duplication possible).

In first winter period in Wells/Warham/Wighton/Egmere area adult Jan 3rd (JRMc), 3 adult and 2 1st-winter Jan 4th-7th (AIB JRMc), adult Jan 7th (CDo), 1st-winter Jan 21st (JDG AMs) and adult Feb 4th/5th (JRMc); in Docking/Stanhoe area 1st-winter Jan 13th (AE BJM), adult Jan 21st (JBK JLa), 1st-winter Jan 29th (JDG JEG) and 2 1st-winter Feb 3rd (DB AJLS); at Scolt Head adult Jan 21st different from any of 1999 adults (JRMc); 1st-winter Flitcham Jan 19th (CDo); adult Acle Marshes Feb 12th (PJH).

In second winter period adult Flitcham/Anmer Nov 4th with 1st-winter Nov 4th and 11th (ADC), adult Lessingham Nov 19th and 25th/26th (PJH) and adult Egmere Dec 27th-29th (AIB JRMc).

1984 Addition: 1st-winter Heacham March 20th (JBK). Record previously unpublished - the second county record.

1999 Correction: Harpley/Anmer Jan 20th observer JRMc not AIB.

Greylag Goose

Anser anser

Long-established and increasing feral population complicates identity of genuine wild arrivals

Highest counts at some of the most regularly counted important sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Snettisham	-	278	241	115	151	301	230	660	584	-	670	75
Holme	150	64	25	17	35	40	66	90	100	47	60	130
Holkham NNR	246	56	428	193	269	75	619	950	290	383	251	202
Holkham Park	550	159	147	300	240	840	-	820	255	180	650	720
Stiffkey Fen	420	348	114	107	-	-	361	851	1050	510	285	550
Cley	18	13	37	39	54	14	127	126	308	101	58	5
Breydon/Berney	69	33	15	12	17	35	64	56	193	335	265	106
Mid-Yare RSPB	150	115	-	19	17	200	370	417	442	250	200	120
Welney	16	12	19	21	17	20	22	26	305	311	7	72

Other counts of 200 or more: Jan 500 Heigham Holmes, 497 Pentney GP, 387 Potter Heigham, 350 Sennowe Park, 280 Wretton Fen, 260 Ranworth Broad, 214 Felbrigg Park

Lake; *Feb* 555 Potter Heigham, 228 Ranworth Broad; *July* 340 Raynham Lake; *Aug* 330 Titchwell, 230 Horning Upper St Marshes, 230 Wolterton Park; *Sept* 800 How Hill, 600 Blakeney Hbr, 492 Rockland Broad, 350 Titchwell, 280 Barton Broad; *Oct* 504 Ranworth Broad, 400 Heigham Holmes, 305 Pentney GP, 250 How Hill; *Nov* 520 Thetford Nunnery Lakes; *Dec* 340 Cranwich GP, 260 Heigham Holmes, 250 Wolterton Park, 246 Hardley Flood, 240 Pensthorpe.

Fewer breeding records received than in 1999, but 1-7 broods at Bayfield Lake, Breydon, Buckenham, Cranwich GP, Holme, Merton, Shadwell Lake and Whittington. In addition 19 broods at Holkham NNR and 130 juvs at Holkham Park Lake.

Birds considered to be wild individuals from the Icelandic population with Pink-feet in Wighton/Warham/Wells area Jan 4th-6th with 3 on 7th; another Fritcham Jan 15th. 20 east Sheringham Oct 22nd of unknown origin.

Canada Goose

Branta canadensis

Introduced resident

High counts as follows: *Jan* 148 Bowthorpe Marsh; *Feb* 225 Blickling Park Lake; *June* 111 Titchwell; *July* 191 Snettisham, 130 Titchwell; *Aug* 103 Thornham; *Sept* 180 Breydon/Berney (a site record), 106 Burnham Norton, 137 Horning Upper St; *Oct* 215 Burnham Norton, 300 Thetford Nunnery Lakes; *Dec* 124 Lakenheath Washes, 217 Pentney GP, 170 Harling, 100 Thorpe St Andrew.

381 east (in 4 groups) Brancaster Hbr June 8th.

1-4 broods recorded at Bayfield Lake, Blickling Park Lake, Breydon/Berney, Buckenham, Cranwich GP, Felbrigg Park, Gunton Park, Holme, Lynford, Westmere and Whittington. 8 broods recorded at Snetterton GP with 6 at Holkham NNR. Several observers have noted a decline especially on the smaller lakes in north of county and in Wensum valley, possibly being 'ousted' by the increasing number of Greylag Geese.

'Small' Canada Goose

Potential vagrants from North America

In first winter period a *parvipes* was feeding at Wighton and roosting at Wells/Warham Jan 1st-10th (AIB JRMc JBK *et al*), and an *interior* was at Fritcham on Jan 9th (CDo).

Escaped *minima* at Heigham Holmes Jan 8th/9th (with a green ring) and at Thetford Nunnery Lakes Feb 2nd and April 10th.

1999 Correction: A *parvipes* at Houghton Jan 7th (AIB), with an obvious pair Jan 8th (AIB JRMc). One also present Jan 19th/20th in the Amner/Houghton/Harpley area (JRMc). Three birds presumably involved.

Barnacle Goose

Branta leucopsis

Scarce passage migrant and winter visitor in small numbers with feral/escaped birds often in large groups causing confusion

In first winter period one or two with Pink-feet seen at a variety of localities in north-west, including Brancaster, Burnham Norton, Choseley, Docking, Fritcham, Heacham, Holkham, Holme, Snettisham, Stanhoc and Wighton. The origin of 9 at Old Hunstanton/Snettisham March 2nd/3rd and 8 April 1st was probably feral. In east of county, singles along Acle Straight and at Halvergate, Hickling, Horsey and West Somerton.

Doubtless feral birds included up to 133 in Mid-Yare valley (largely at Cantley/Buckenham), up to 60 at Heigham Holmes and 73 at Hethersett; in spring also at Barton Broad, East Ruston, Paston, Pentney GP, Snettisham, Thetford Nunnery Lakes, Welncy and Whittingham Lane GP. Three east Sheringham May 26th (of wild origin?) and 2 also

east with Canada Geese Brancaster Hbr June 8th. Such feral birds continued to be reported at a number of these sites to year end and further localities logged in the autumn included Clippesby Hill, Repps/Fleggburgh and Sea Palling.

Up to 4 Oct-Dec at Brancaster, Burnham Market, Burnham Overy, Egmere, Fring, Holkham GM, Wells and Warham SM were, however, presumably of wild origin.

Brent Goose

Branta bernicla

Dark-bellied Brent Goose *B (b) bernicla*

Abundant passage migrant and winter visitor

Monthly peak counts at selected important sites:

	Jan	Feb	Mar	Apr	May	Oct	Nov	Dec
Terrington Marsh	2211	3480	1114	1578	1286	-	3071	-
Ousemouth/Lynn Point	3971	2500	3250	1212	945	1600	551	2100
Holme/Thornham/Titchwell	1000	910	933	1000	162	536	580	350
Scolt Head/Brancaster Hbr	2316	528	1000	820	444	1500	1800	2800
Wells/Holkham	1686	758	312	331	-	1380	2439	1200
Warham SM	584	850	505	85	-	974	820	622
Stiffkey SM	428	900	-	-	95	-	-	-
Blakeney GM/Hbr/Cley	3350	4001	3836	800	800	402	3336	3010

For further counts in Wash and north coast see WeBS tables

The pale grey leucistic bird was again at Burnham Norton in Feb, had returned by Oct 24th and was still present in Dec. A bird at Cley Feb 20th with white rings was ringed at Salthouse in 1974.

Inland feeding continued to be widespread with flocks of over 1000 ranging as far as Great Walsingham and Langham. Birds further inland were at Pensthorpe May 9th with 2 at Welney June 2nd. One accompanied feral geese at Hethersett March 24th/25th.

Significant numbers remained into May and again a large number of midsummer records with ones and twos at North Wootton, Snettisham, Holme, Titchwell, Scolt Head/Brancaster Hbr, Stiffkey Fen, Blakeney Hbr, Cley, Kelling, Mundesley and Paston, with 8 in Wells Hbr.

First returning birds of autumn 8 Holme and Brancaster Hbr Sept 13th, following which passage was light but steady with a noticeable westerly movement of 1050 Scolt Head and 1100 Sheringham Sept 30th. Largest movements occurred Nov 6th with 2000 south Hunstanton, 10,000 west Sheringham, 6815 south Waxham and 2100 south Yarmouth; 1000 flew west Weybourne Nov 18th. In East Norfolk max 14 Breydon/Berney in Nov.

Hardly any young birds were noted in the autumn.

Pale-bellied Brent Goose *B (b) hrota*

Scarce winter visitor

In first winter period, singles at Lynn Point/Ongar Hill Feb 20th and 22nd, and March 11th, with 3 Feb 13th and 4 April 9th. Birds also at Snettisham Feb 12th, Heacham Jan 16th/17th, Flitcham (with Pink-feet) Jan 9th-29th, Holme Feb 17th-March 13th (with up to 3 there on several dates in March), Brancaster Hbr March 31st, Burnham Norton March 1st, and Holkham GM Feb 3rd/4th, with 2 on 5th, and another March 1st.

In second winter period single west Cley Sept 16th with 2 west Sheringham same day. Subsequently single at Wells/Holkham Nov 18th to year end, with singles also in Dec at Burnham Overy Staithe 7th, Terrington 10th, Stiffkey SM and Blakeney Hbr 19th, Egmere 26th and Warham SM 30th.

Black Brant *B (b) nigricans*

Almost annual vagrant from North America/East Asia

In first winter period 2 frequented the Cley/Salthouse/Kelling area from beginning of year until Feb 23rd, with one of these seen feeding inland at Saxlingham Jan 16th and Stiffkey Fen same date. A further bird at Holme/Titchwell Jan 2nd-April 6th, and one also in Burnham Norton/Brancaster area March 1st and 14th.

In second winter period one Lynn Point Oct 29th. One at Holme/Titchwell Oct 1st was joined by a second 2nd-4th, with one remaining to 6th; one again in same area Nov 13th to year end, with 2 on Dec 23rd. Another in Burnham Overy Staithe/Brancaster area Oct 12th-31st and then again Dec 31st. An early bird at Wells Sept 21st and one present in Wells/Holkham area Dec 9th to year end. Two also Cley/Salthouse Dec 19th to year end.

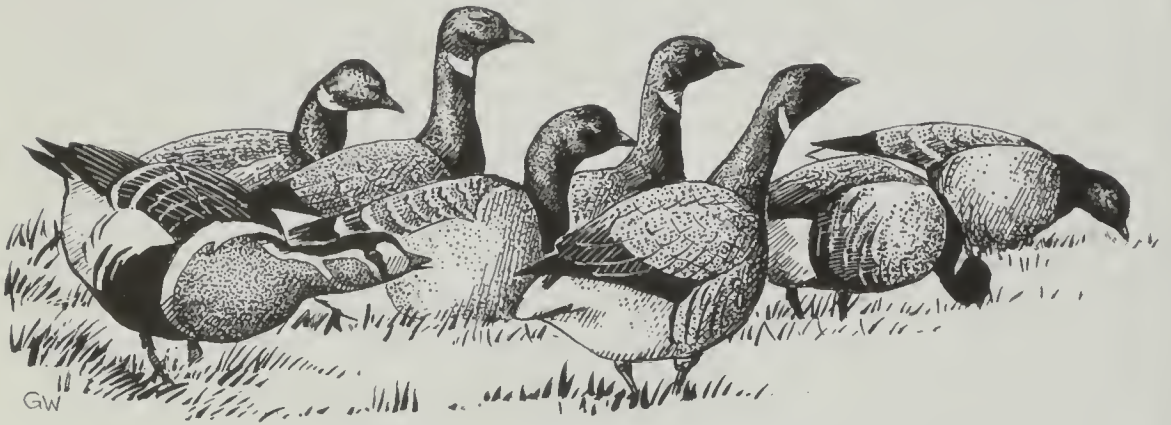
Red-breasted Goose

Branta ruficollis

Vagrant from Siberia

A 1st-winter bird at Wells/Holkham Jan 27th-March 25th (JVB AM *et al*), also seen at Burnham Overy Staithe March 7th. In second winter period one at Egmere/West Barsham Dec 27th-31st (AIB *et al*).

Two feral/escaped birds Welney Feb 9th-20th, with another Thetford Nunnery Lakes Nov 27th-30th.



Red-breasted Goose (*Gary Wright*)

Egyptian Goose

Alopochen aegyptiacus

Long-established resident feral population

Regularly counted Holkham Park where 33 March, 27 April, 40 May, 130 June, 60 July, 180 Aug, 15 Sept, 22 Oct and 34 Nov.

Peak numbers recorded elsewhere: *Jan* 49 Horning; *Feb* 38 Hanworth; *June* 65 Sennowe Park, 50 Blickling Park Lake; *July* 60 Middleton GP; *Aug* 76 Filby Broad; *Sept* 125 Middleton GP; *Oct* 82 Turf Fen (How Hill), 72 Thrigby Marshes, 63 Horning Upper St, 63 Pentney GP; *Dec* 59 Lyng-Easthaugh GP, 64 Ludham.

Breeding was confirmed at Bawsey GP, Bayfield Lake, Berney, Blickling Park Lake, Briston, Buckenham, Cranwich GP, Felbrigg Park (7 pairs), Filby Broad, Holkham Park Lake (11 broods), Ingoldisthorpe, North Creake, Pentney GP, Salthouse, Scedgeford, Sennowe

Park (9 pairs), South Creake, Stanhoe, Strumpshaw, Thetford Nunnery Lakes, UEA Broad and Whitlingham Lanc GP.

Shelduck

Tadorna tadorna

Widespread breeder, passage migrant and winter visitor

Less information than usual received this year. Monthly peak counts at selected sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Terrington	1359	1464	1623	1732	1517	-	991	365	643	-	1347	-
Ousemouth	1226	328	358	317	232	562	375	335	206	70	215	550
Snettisham	703	791	945	279	131	207	1745	5	860	-	950	1335
Holme	36	30	35	21	14	11	4	5	0	4	11	113
Titchwell	150	12	15	33	44	24	24	4	-	12	45	36
Scolt/Brancaster Hbr	442	190	62	77	93	54	26	17	5	17	129	231
Blakeney Hbr/Cley	164	125	155	35	48	50	48	18	12	10	114	439
Breydon/Berney	190	187	291	227	317	428	385	57	56	93	558	220
Buckenham/Cantley	3	18	8	52	56	23	4	23	-	26	1	4
Welney	22	59	133	96	176	106	-	-	1	2	4	12

International importance (winter): 3000; National importance (winter): 750

Only notable counts from elsewhere: *Jan* 75 Warham SM; *Feb* 68 Stiffkey SM, 67 Blakeney GM; *March* 62 Rockland Broad; *June* 104 Wissington BF; *Nov* 120 Warham SM; *Dec* 92 Hardley Flood.

Seemingly a poor breeding season. Breeding records from Baconsthorpe (pair), Bayfield Lake (brood), Bircham Newton (brood), Blakeney Point (5 pairs), Breydon (9 broods totalling 63 young), Buckenham (brood), Cantley BF (103 young June), Gooderstone/Hilborough (15-20 pairs), Holkham Park Lake (3 broods), Holkham NNR (19 broods), Holme (8 pairs hatched 3 broods), Lakenheath Washes (brood), Merton (4 pairs totalled 37 young), Mileham (Burwood Hall - pair - bred for first time), Raynham Lake (2 broods), Salthouse (2 pairs hatched 8 young), Scolt Head (30 pairs but only 8 broods), Titchwell (2 pairs), Welney (11 broods totalled 75 young), West Walton (brood), Wheatfen (pair), Wissington BF (4 broods).

Regular eastward movement of adults to moulting sites off NW Germany noted from May 7th (when 15 east Sheringham), with further peak counts all from Scolt Head of 78 June 26th, and in July 415 17th, 165 18th and 156 19th.

Returning birds noted from early Sept until year end, with peak westerly counts of 84 Scolt Head Sept 10th, 345 Scolt Head and 75 Sheringham Sept 17th, 162 Holme and 55 Beeston Bump (2 hrs 30 mins) Nov 4th, 162 (plus 10 east) Holme (0900-1040) and 170 (south) Winterton (0715-0815) Nov 6th, 147 Holme Nov 7th with 346 there (0810-0940) Dec 20th and 189 (0815-0915) 21st.

Mandarin

Aix galericulata

Small population derived from introductions and escapes

Records of 1-4 during course of year from Aylmerton, Bayfield Lake, Blickling Park Lake, Caistor St Edmund, East Ruston, Felbrigg Park, Guist Common, Gunton Park, Heacham, Ken Hill GM, Kettlestone Common, Pensthorpe, Snettisham, South Creake, Strumpshaw, Thetford Nunnery Meadows, Welney and Wootton Carr.

Sole breeding record from Guist Common where female with brood July 13th.

Wigeon*Anas penelope**Abundant passage migrant and winter visitor in internationally important numbers; a few over-summer and have bred*

Peak monthly counts at main localities:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Snettisham	-	555	372	2	550	-	178	504
Holme	1290	1320	870	265	25	480	640	1300
Titchwell	1417	43	-	-	250	318	450	52
Scolt/Brancaster Hbr	3130	334	9	9	1500	5195	6143	634
Holkham NNR	10195	7591	5690	474	975	5700	8820	10447
Blakeney Hbr/GM	1491	4276	3135	14	-	940	3118	4691
Cley/Salthouse	1887	847	588	72	253	1700	3000	1488
Breydon/Berney	14130	12800	4510	429	1100	2800	12450	*15700
Ranworth Broad	1400	800	-	-	-	121	775	632
Mid-Yare RSPB	587	3055	-	4000	2662	5000	4700	4518
Welney	3983	7448	4552	1705	1291	3606	3646	4320
Ouse Washes (Norfolk)	909	815	1343	-	-	1505	359	252

*International importance (winter): 12,500; National importance (winter): 2800*** The Dec figure at Breydon/Berney was a record count for the site.*

A continued increase in number wintering at Breydon/Berney, while deep flooding depressed numbers using Welney at end of year.

Notable counts elsewhere included: *Jan* 300 Pentney GP, 240 Sennowe Park, 530 Stiffkey Fen; *Feb* 334 Pentney GP; *March* 280 Pentney GP, 286 Stiffkey Fen; *Nov* 1000+ Burnham Overy; *Dec* 500 Burnham Overy.

Late winter movement of 500 on sea off Hunstanton March 17th and 40 east Walcott March 19th. Usual rapid departure late March/early April, with small numbers lingering into May, apart from 112 still Holkham NNR, and a few remaining to summer at wetlands around county. Max counts in June to early July: 4 Buckenham, 6 Cley, 8 Holkham NNR, one Kelling WM, 6 Lakenheath Washes, one Hickling Broad, 2 How Hill Reedham Water, 2 Sennowe Park, 4 Titchwell, 2 Welney. No indications of breeding.

First presumed returning migrants 14 Welney July 14th, followed by single west Mundesley July 16th. Coastal migration noted from then until early Nov, with peak westerly counts of: *Sept* 545 Scolt Head 15th, 150 Holme, 214 Scolt Head, 320 (and 60 east) Sheringham, 532 Mundesley and 60 (north) Waxham all 16th, 515 Scolt Head 17th and 295 there 20th, 245 Scolt Head and 150 Sheringham 30th; *Oct* 300 Sheringham 10th, 400+ (south) Hunstanton (1 hr 30 mins) 13th, 150 (north) Waxham (1 hr) 15th, 308 Scolt Head and 1200+ Sheringham (1415-1615) 16th, 1000+ (south) Hunstanton (2 hrs) and 965 Scolt Head 21st; *Nov* 350 (and 17 east) Holme 3rd, 772 (and 127 east) Holme (0900-1040), 296 Cley (3 hrs 30 mins), 170 Sheringham, 500 Mundesley and 100 (south in 30 mins) Yarmouth all 6th, 383 Holme 7th, 419 Sheringham 8th.

Further coastal movements in Dec of 150 north Waxham 3rd, 795 west Holme 20th, 414 west Holme (0815-0915) and 476 east Mundesley 21st, and 110 passed Waxham (1 hr 45 mins) 23rd.

American Wigeon*Anas americana***Vagrant from North America**

A male Berney Sept 30th (PRA JRR). A reward for patient scanning of the hoards of ducks at this site.

Gadwall*Anas strepera***Resident, passage migrant and winter visitor**

Peak monthly counts at principal localities:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Titchwell	12	22	12	6	45	150	43	18	53
Holkham NNR	64	37	49	2	54	45	13	37	110
Cley	39	37	30	20	75	79	58	43	17
Horseley Mere	300	55	-	-	-	-	-	-	94
Hickling/Heigham Sound	160	-	-	-	-	-	-	-	65
Martham Broad	58	-	-	-	-	-	-	-	85
How Hill	50	52	-	16	220	40	59	121	168
Ranworth Broad	84	36	-	4	-	-	-	41	59
Breydon/Berney	52	103	109	34	1	3	13	41	39
Mid-Yare RSPB	-	19	1	10	20	70	156	28	42
Whitlingham Lane GP	100	-	-	-	18	-	-	-	154
Welney	34	135	161	72	-	26	137	23	11

International importance (winter): 300; National importance (winter): 80

Notable counts from elsewhere: *Jan* 166 Colney GP, 42 Cranwich GP; *Feb* 65 Lakenheath Washes; *May* 72 Holkham NNR, 69 Welney; *June* 84 Cley, 111 Titchwell, 154 Welney; *July* 59 Holkham NNR, 40 How Hill Reedham Water, 40 Welney; *Aug* 49 Holme; *Sept* 80 Gunton Park Lake, 40 Holme, 110+ Strumpshaw; *Oct* 80 Kelling WM, 45 Pensthorpe, 50 Salthouse, 125 Strumpshaw, 70 Tottenhill GP; *Nov* 61 Blakeney GM, 40 Burnham Overy; *Dec* 150 Bittering GP, 75 Lang Mere, 41 Pensthorpe, 40 Tottenhill GP, 70 Wolterton Park.

Single winter and spring movements of 6 west Scolt Head Jan 4th and 2 west Sheringham April 8th.

Breeding records received from: Berney (2 broods), Cantley BF (2 broods), Cley (brood), East Wretham Heath (2 broods), Hanworth (brood), Holkham Park Lake (6 broods), Holkham NNR (50-51 pairs hatched 20+ broods), Holme (11 pairs hatched 3 broods), Horning Marsh Farm (brood), Kelling WM (brood), Lynford Lake (2 broods), Merton (brood), Pentney GP (brood), Salthouse (17 young), Scolt Head (2 nests but both failed), Stanford TA (bred at Bagmore Pit, Buckenham Tofts, Little Langford, Watton Brook and West Mere), Titchwell (pair), Welney (8 broods).

Many more noted on autumn passage than usual, with counts of: *Sept* 2 north Sea Palling 16th, 5 west Scolt Head and 5 south Horseley 30th; *Oct* 3 west Sheringham 8th, 2 west Scolt Head 10th, 4 south Hunstanton 13th, 2 west Scolt Head 16th, 2 west Holme 17th, 3 west Scolt Head 19th, 2 west Scolt Head and 2 south Waxham 21st, single west Overstrand 31st; *Nov* 3 west Holme 4th, 25 west Sheringham (4 hrs) 8th (*site record*), 6 north Waxham Nov 25th.

Eurasian Teal

Anas crecca

Passage migrant and abundant winter visitor; breeds in small numbers

Peak monthly counts at main sites:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Snettisham	-	285	219	-	-	91	-	435	900
Holme	151	113	110	40	80	289	38	254	120
Titchwell	241	37	42	6	-	400	130	530	150
Scolt/Brancaster Hbr	264	47	8	2	10	245	151	330	178
Holkham NNR	298	263	148	32	121	102	382	551	1000
Stiffkey Fen/GM	120	177	60	40	12	640	301	677	117
Blakeney Hbr/GM/Cley	748	426	509	70	853	1603	1407	994	1315
Salthouse	402	127	133	141	-	81	164	317	248
Horse Mere	-	1000	102	-	-	-	-	2400	2600
Hickling Broad	176	-	-	-	200	1400	-	-	250
Breydon/Berney	1365	2345	1436	1162	59	500	1360	3683	4237
Ranworth/Cockshoot Broads	375	140	-	62	-	233	163	407	289
Cantley BF	995	-	120	-	85	700	-	-	932
Mid-Yare RSPB	60	150	23	140	95	210	230	500	269
Welney	1081	1093	1175	692	218	492	1671	1113	612

International importance (winter): 4000; National importance (winter): 1400

Highest counts elsewhere: *Jan* 130 Cranwich GP, 600+ How Hill Reedham Water, 400 Stiffkey Fen, 250 Tallents Meadow Lake, 140 Wissington BF; *Feb* 177 Stiffkey Fen; *June* 71 Titchwell; *Sept* 550 Gunton Park Lake, 145 Pensthorpe, 200+ Tallents Meadow Lake; *Oct* 132 Barton Broad, 450 How Hill Reedham Water, 368 Ouse Washes, 350 Pensthorpe, 150 Tallents Meadow Lake; *Nov* 257 How Hill Crome's Broad, 150 How Hill Reedham Water, 200 Pensthorpe, 112 Pentney GP; *Dec* 350 Bittering GP, 250 Cranwich GP, 150 Hardley Flood, 200 How Hill Crome's Broad, 107 Lakenheath Washes, 160 Strumpshaw, 173 Whitlingham Lane GP.

As usual small numbers summered at most wetlands around county. Breeding records from Berney (brood), King's Lynn BF (3 juvs possibly bred locally), Titchwell (brood) and Welney (12 pairs produced 8 broods - a site record).

Small-scale westerly movements around coast from early June, with peak passage Sept. Highest counts: *Aug* 315 Scolt Head 27th; *Sept* 295 Scolt Head, 270 Sheringham (0545-1145) and 111 East Runton 2nd, 270 Sheringham and 165 Cromer (0645-1415) 3rd, 114 Cley (0945-1115) and 105 Mundesley 4th, 150 Holme, 280 (and 13 east) Sheringham, 218 Mundesley and 153 south (and 12 north) Eccles (0645-0930) all 16th, 235 Scolt Head, 364 Cley and 210 Sheringham 17th, 100 Holme 22nd, 405 Scolt Head, 160 Sheringham and 113 Horse Mere (1 hr 30 mins) 30th; *Oct* 105 Scolt Head 10th with 102 following day, 300+ Sheringham (1415-1615) 16th; *Nov* 181 Cley (3 hrs 30 mins) 6th, 114 (and 12 east) Holme 7th. Further winter movements in Dec of 150 west Beeston Regis (1 hr) 16th, 114 west Holme and 129 east Mundesley 20th, 600 west Titchwell 21st and 103 north Waxham (1 hr 45 mins) 23rd.

Impressive numbers built up at many sites in Broads during second winter period, including county record of 4237 Breydon/Berney in Dec. Conversely numbers low at Welney due to deep flooding.

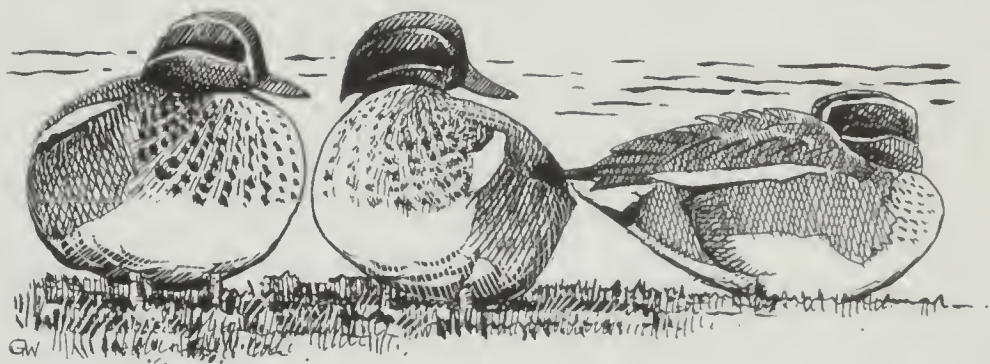
Green-winged Teal

Anas carolinensis

Vagrant from North America

Drakes recorded as follows: Welney Jan 24th (JBK) and Berney March 26th (PRA). Presumably the same individual, likely to be returning bird from 1999, appeared erratically along north coast at Holkham GM Feb 13th-15th (DB SH AJLS *et al*), Cley Feb 19th, Salthouse March 21st, Cley April 20th-May 5th, Stiffkey Fen May 23rd, again Cley May 24th/25th, then Salthouse May 26th/27th. A different drake Welney May 3rd/4th (JBK).

In autumn drake moulting out of eclipse again Welney Oct 18th (JBK).



Green-winged Teal (Gary Wright)

Mallard

Anas platyrhynchos

Widespread resident, passage migrant and winter visitor

Peak counts at selected sites:

	Jan	Feb	Mar	Apr	Aug	Sep	Oct	Nov	Dec
Snettisham	-	204	201	-	123	573	-	270	535
Holme	110	130	64	28	109	118	116	54	70
Titchwell	67	100	21	20	53	61	75	100	53
Scolt/Brancaster Hbr	273	191	29	44	150	449	412	404	289
Holkham NNR	86	96	141	43	92	-	280	87	100
Blakeney GM/Cley	134	83	102	82	165	166	212	112	168
Barton Broad	326	74	-	48	106	106	136	136	73
Ranworth/Cockshoot Broads	342	149	-	-	158	304	280	271	129
Breydon/Berney	357	154	126	48	92	186	160	219	448
Mid-Yare RSPB	68	80	-	30	28	9	123	278	97
Welney	1065	786	512	329	-	1150	1295	956	1133

International importance (winter): 5000

Notable counts elsewhere: *Jan* 160+ Bawsey Pits, 360 Heigham Sound/Duck Broad, 100 Horsey Mere; *Feb* 110 Fowlmere, 117 Holkham Park Lake; *April* 240 Shadwell Lake; *May* 217 Holkham NNR, 270 Shadwell Lake, 281 (245 drakes) Welney; *June* 120 Barton Broad, 132 Breydon/Berney, 141 Snettisham; *July* 158 Barton Broad, 237 How Hill Reedham Water, 126 Pensthorpe, 130 Stanford Water; *Aug* 900 Bittering GP, 100+ Little Cressingham, 145+ Sutton Fen; *Sept* 175 Cantley BF, 160 Dilham Broad Fen, 110 Tottenhill GP; *Oct* 250

Morning Thorpe GP, 110 Sutton Fen, 137 Wells Hbr; *Nov* 214 Pensthorpe, 139 Tottenhill GP, 125 Wells Hbr; *Dec* 248 Cantley BF, 175 Hardley Flood, 410 Heigham Sound, 345 Martham Broad, 220 Sutton Fen, 128 Tottenhill GP.

Breeding records only received from few sites, but included 102+ broods from 142-167 pairs Holkham NNR and just 7 broods from 40 pairs Holme; at Scolt Head 12 pairs but no broods seen. Late broods Ormesby Broad Oct 22nd and Wramplingham Nov 2nd.

Limited visible passage, with following westerly movements: *Aug* 13 Scolt Head 10th; *Sept* 12 Scolt Head 30th; *Oct* 15 Sheringham 15th, 12 Scolt Head 20th. Small westerly winter movement Dec when 12 Titchwell 16th, then 13 Sheringham and 15 Beeston Bump 24th.

Pintail

Anas acuta

Passage migrant and winter visitor, has bred

Peak monthly counts at main localities:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Scolt/Brancaster Hbr	183	149	8	50	65	114	246
Blakeney/Cley	449	495	104	157	341	848	450
Breydon/Berney	204	148	107	48	171	413	*446
Tottenhill GP	20	-	1	202	135	39	8
Welney	1290	874	534	511	229	152	237
Ouse Washes (Norfolk)	62	190	119	48	148	-	17

International importance (winter): 600; National importance (winter): 280

* *The Dec figure at Breydon/Berney was a record count for the site.*

Numbers using Berney continue to increase. Occasional records from scattering of other sites around county, chiefly single figures, with best counts: *Feb* 10 Titchwell; *Sept* 14 Holkham GM, 22 Snettisham, 24 Stiffkey Fen, 17 Warham SM; *Oct* 18 Holkham GM, 9 Holme; *Nov* 8 Pensthorpe, 20 Snettisham, 13 Titchwell.

As usual rapid departure late March/early April with virtually all gone by mid-April, though no observations of visible migration received. Late birds in May at Cley, Pensthorpe and Welney. Summer records from Cley, Buckenham and Welney, where 2 injured drakes.

First returning bird Cantley BF Aug 21st heralded an impressive autumn passage. Notable counts of birds moving west: *Sept* 25 Sheringham (0545-1145) 2nd, 42 Cromer (0645-1415) 3rd, 44 Scolt Head 6th and 148 15th, 77 Cley, 46 Sheringham and 20 West Runton 16th, 195 Scolt Head 17th, 19 south Lynn Point 20th, 80 Holme 22nd, 25 east Weybourne 26th; *Oct* 64 Sheringham (1415-1615) 16th, 17 south Lynn Point 22nd; *Nov* 67 Holme 4th and 41 5th, 47 Holme, 68 Sea Palling and 22 south Yarmouth all 6th. Winter movements noted in Dec when 24 west Mundesley, 16 Sea Palling and 40 Winterton all 19th, 49 west Holme and 22 Mundesley 20th, and 14 Sea Palling 23rd.

Garganey

Anas querquedula

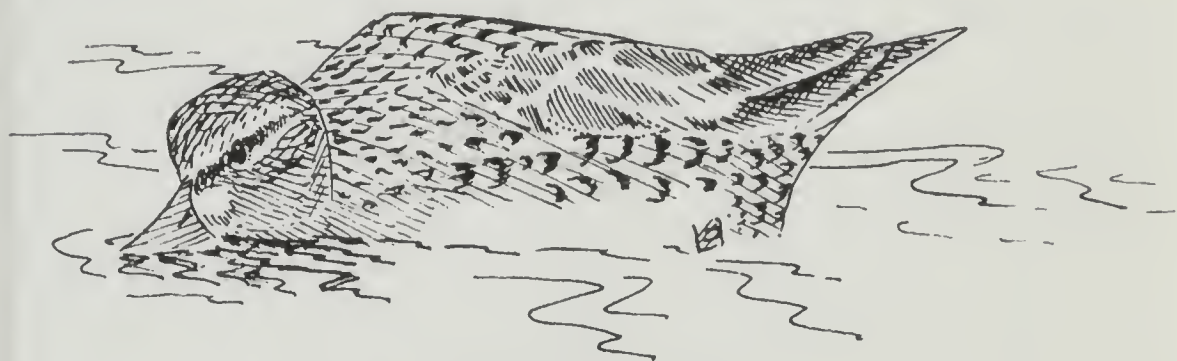
Very scarce breeding summer visitor; scarce passage migrant

First of year Holme Feb 28th, with first March records pair Heigham Holmes 13th followed by notable observation 6 west West Runton 16th. Further March records 5 Kelling WM 18th-23rd, rising to 6 24th/25th, plus 3 Berney 19th-26th. Subsequent spring records of 1-4 from Bayfield Lake, Berney, Buckenham, Burnham Overy, Catfield Fen, Chedgrave Marsh,

Cley, Haddiscoe Island, Hickling Broad, Holkham GM, Holme, Horsey, How Hill Reedham Water, Ken Hill GM, Lakenheath Washes, Ouse Washes, Salthouse, Scolt Head, Snettisham, Stiffkey Fen, Strumpshaw, Surlingham Church Marsh and Swanton Morley GP; also up to 5 Welney in April.

Summer records from 10 localities, with max 6 Berney and 5 Welney. Indications of breeding from 4 localities, with agitated female in distraction display Berney May 29th with juv there July 6th, agitated female Welney July 18th, while four juvs Lakenheath Washes presumably raised nearby as was juv Holme July 27th and 30th.

Autumn passage noted Scolt Head where singles west Aug 27th and Sept 30th. Other autumn records of 1-5 from Berney, Cley, Cantley BF (max 6 Aug), Kelling WM, King's Lynn BF, Lakenheath Washes, Pensthorpe, Salthouse, Titchwell, Welney and Wissington BF. Last of year 2 Welney Nov 1st and Cley Nov 4th.



Garganey (*Andy Benson*)

Blue-winged Teal

Anas discors

Vagrant from North America

Elusive spring drake King's Fen at East Ruston May 3rd and 15th/16th (PJH AJK). Two late summer/autumn records with eclipse drake Titchwell July 4th-10th and again Aug 9th-19th (JVB MHO *et al*), followed by a one-legged eclipse drake Cley Aug 19th-Sept 5th (VJH *et al*).

Shoveler

Anas clypeata

Passage migrant, summer and winter visitor

Peak monthly counts at selected localities:

	Jan	Feb	Mar	Apr	Aug	Sep	Oct	Nov	Dec
Titchwell	-	18	1	4	69	43	51	63	20
Blakeney/Cley	26	40	45	6	41	31	84	71	60
How Hill	62	-	-	38	-	45	68	-	76
Breydon/Berney	150	356	214	104	6	78	207	620	539
Mid-Yare RSPB	15	4	35	16	164	75	24	33	42
Welney	12	144	422	166	-	151	137	11	35

National importance (winter): 100

Low numbers Welney at start and end of year due to deep flooding. Extensive shallow floods Berney in second winter period resulted in record numbers there.

Notable counts elsewhere during year: *Jan* 35 Hickling Broad, 80 Ranworth Broad; *Feb* 65 Cantley BF, 44 Holme, 50 Lakenheath Washes; *March* 62 Cantley BF, 34 Holme; *April* 74 Lakenheath Washes; *May* 56 Holkham NNR, 103 (93 drakes) Welney; *June* 40 Ouse Washes, 31 Titchwell, 137 Welney; *July* 70 Mid-Yare RSPB, *Aug* 132 Cantley BF, 36 Strumpshaw; *Oct* 37 Holme, 89 Martham Broad South, 123 Ouse Washes; *Nov* 38 Pensthorpe; *Dec* 87 Cantley BF, 37 Holme, 50 Ranworth Broad, 35 Stiffkey Fen, 35 Surlingham Church Marsh, 58 Whitlingham Lane GP.

Only limited breeding data received, with records from following localities: Berney (15 broods), Cantley BF (brood), Holkham NNR (23 broods from 52-55 pairs), Holme (only single brood from 25 pairs), Horsey (brood), Lakenheath Washes (3 pairs), Welney (8 broods from 12 pairs).

Small winter and spring movements: Scolt Head 2 west *Jan* 14th, singles east Sheringham *April* 18th and Scolt Head *April* 23rd. Light autumn westerly passage chiefly of 1-4, with best counts: *Aug* 18 east Scolt Head 23rd; *Sept* 11 Scolt Head 11th; *Oct* 13 Scolt Head 10th; *Nov* 15 Holme 4th and 8 Mundesley 6th.

Red-crested Pochard

Netta rufina

An escapee, but with possibility of genuine vagrants from the Continent

Irregularly recorded in Hickling Broad area where bred 1999: male Martham South Broad *Jan* 15th; female Hickling Broad *April* 23rd and *May* 17th with 2 females there *April* 9th, *May* 7th and 12th; male Wroxham Broad *April* 17th; male Horning *May* 24th/25th and *June* 14th; female Hickling Broad *Aug* 20th.

Also irregular in Pensthorpe area: single Lyng-Easthaugh GP *Jan* 8th; 2 males one female Great Ryburgh *May* 4th and 10 same site on R Wensum *May* 14th; single Sparham GP *May* 28th.

Elsewhere: 2 males Holkham Park Lake *March* 18th; female Welmore, Ouse Washes *June* 3rd and *Wissington* BF *June* 5th-8th where 2 *Sept* 10th; female Titchwell *June* 12th-*July* 22nd; female Pentney GP *Sept* 23rd and *Tottenham* GP *Dec* 14th.

Pochard

Aythya ferina

Summer breeder in small numbers, common passage migrant and winter visitor

Peak counts at selected sites:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Snettisham	38	20	10	-	-	-	25	30
Holme	18	27	24	8	14	17	23	90
Ranworth Broad	185	115	-	53	45	30	28	19
Breydon/Berney	25	5	27	16	1	13	18	28
Pensthorpe	110	140	-	-	-	-	115	123
Pentney GP	54	84	-	-	103	170	80	-
Welney	3134	4062	780	43	23	436	1016	2007

National importance (winter): 440

Notable counts elsewhere: *Jan* 400 Hickling Broad, 155 Martham Broad, 37 Swanton Morley GP, 30 Titchwell; *Feb* 85 Rockland Broad, 50 Strumpshaw, 59 Thompson Water; *March* 31 Barton Broad, 55 Cantley BF, 35 Stanford Water; *June* 128 Welney; *Nov* 44 Middleton GP, 52 Swanton Morley GP, 67 Tottenham GP; *Dec* 40 Creaking Gate Lake (Bittering), 33 Colney GP, 30 Snettisham, 65 Whitlingham Lane GP.

Small numbers summered at various localities, with breeding records (broods in brackets where known) from: Berney (2), Breydon (2), Holkham NNR (13), Holme (2), How Hill (1), Raynham Lake (1), Stanford Water, Titchwell (1), Welney (1, the first for 25 years), Westmere, West Tofts Mere, Whitlingham Lane GP (1). Pairs also present (no proof of breeding) at Hickling Broad, Lakenheath Washes and Swanton Morley GP.

Post breeding flocks : 128 Welney June 15th (prolonged flooding) and 30 July 1st; 32 Cantley BF June 25th, 21 July 26th and 26 Aug 5th; 32 Tottenhill GP July 23rd.

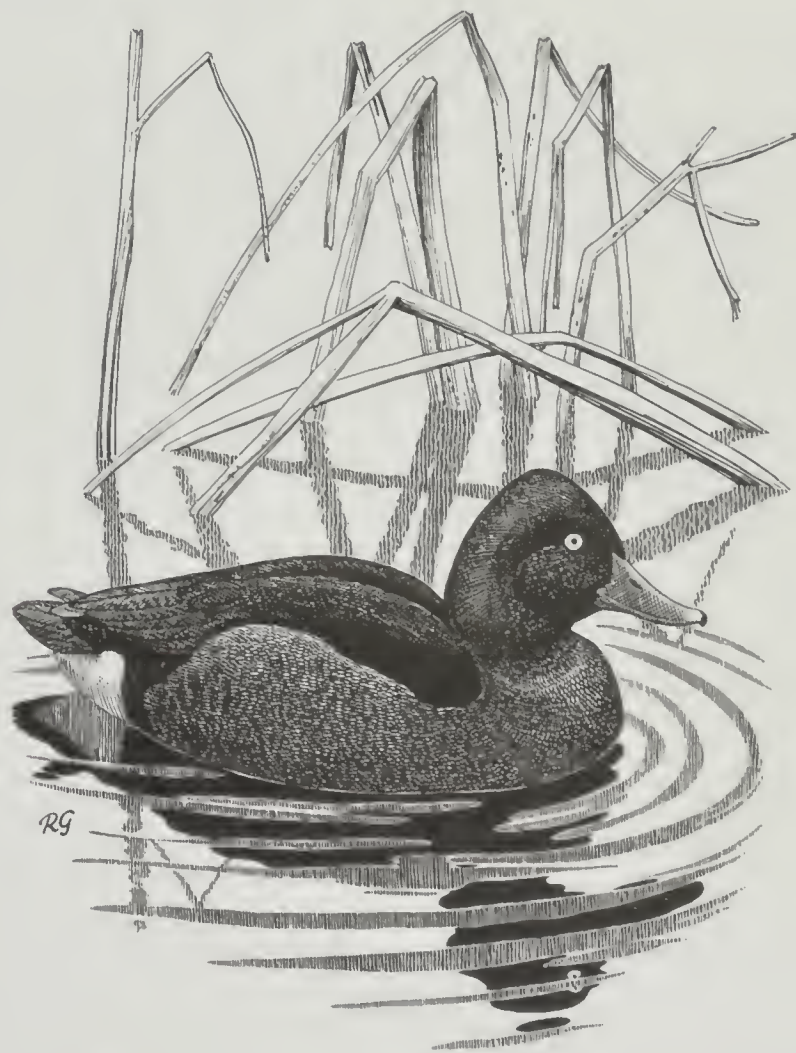
Autumn/winter coastal movements: 6 west Sheringham Sept 24th and one west Oct 8th, 5 east Oct 10th, 13 west Nov 8th; 22 west Cley Oct 8th; 3 west Scolt Head Oct 10th and 5 west Oct 16th; 13 west Weybourne Oct 16th; one west Holme Nov 3rd and one west one east Nov 6th, 20 west Nov 8th, 4 west Dec 21st, one east 28th, 7 west one east 29th, 13 east 31st; 6 west Cromer Nov 6th; 26 north Waxham Dec 23rd.

Ferruginous Duck

Aythya nyroca

Rare visitor from the Continent, or escape from captivity

Two records this year, males Hickling Broad April 23rd (PJH AJK) and irregularly Welney Sept 18th-Oct 19th (PJC JBK *et al*).



Ferruginous Duck (*Robert Gillmor*)

Tufted Duck*Aythya fuligula**Summer breeder, common passage migrant and winter visitor*

Peak counts at selected sites:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Snettisham	49	35	26	27	10	16	18	52
Holme	19	25	22	17	4	8	21	45
Holkham Park Lake	22	21	22	12	12	28	12	40
Ranworth/Cockshoot	265	87	62	72	-	57	68	155
Rockland Broad	24	100	66	26	10	21	12	14
Trinity Broads	-	-	-	294	401	453	-	-
Breydon/Berney	22	17	13	16	5	2	6	19
Whitlingham Lane GP	180	-	-	-	-	-	23	87
Tottenham GP	-	-	-	-	81	-	72	32
Pensthorpe	305	248	214	-	205	236	392	365
Cranwich GP	80	43	42	46	-	-	-	-
Welney	156	169	275	169	6	26	96	104

National importance (winter): 600

Notable counts elsewhere: *Jan* 55 Colney GP, 50 Earsham, 260 Hickling Broad, 44 Hockwold, 44 Lynford GP, 55 Middleton GP, 96 Mid-Yare RSPB Reserves, 143 Pentney GP, 60 Stowbridge, 110 Wroxham Broad; *Feb* 87 R Ouse Relief Channel, 80 Mid-Yare RSPB Reserves, 118 Sennowe Park Lake, 88 Wroxham Broad; *April* 57 Lakenheath Washes; *June* 418 Welney (exceptional numbers in prolonged flooding); *Oct* 55 Middleton GP, 54 Thetford Nunnery Lakes, 65 Swanton Morley GP, 91 Thompson Water; *Nov* 67 Creaking Gate Lake (Bittering), 61 Swanton Morley GP, 48 Thompson Water; *Dec* 42 Colney GP, 82 Creaking Gate Lake, 70 Thetford Nunnery Lakes, 179 R Ouse Relief Channel, 65 Pentney GP.

Breeding records (broods in brackets where known): Baconsthorpe (2), Bayfield Lake (5), Berney (1), Blakeney GM (1), Burnham Norton (1), Cantley BF (1), Cley (1), East Wretham (1), Hanworth (1), Holkham NNR (19 from 27 pairs), Holme (1 from 12 pairs), Horning Marsh Farm (1), How Hill (3), Lang Mere (1), Merton (2), Pentney GP (2), Ranworth (1), St Benet's Level (R Bure) (1), Salthouse (1), Sennowe Park Lake (5), Sparham GP (6), Stanford TA (2-3), Stiffkey Fen (1), Welney (21), Westmere (3), West Tofts Mere.

Pairs also present (no proof of breeding) at Barton Broad, Colney GP, Cranwich GP, Garboldisham, Gooderstone, Hickling Broad, Kettlestone Common, Lakenheath Washes, Lopham Fen, Merton, Snettisham, Swanton Morley GP and Titchwell.

Coastal movements: Holme east Oct 18th and 22nd, 3 west Nov 3rd, 2 east 15th, 2 west Nov 22nd, west Dec 17th, 4 west Dec 21st; Scolt Head (all west) 2 June 16th and July 1st, 11 July 19th, 9 Sept 16th, 3 17th, 4 30th, Oct 17th; Sheringham (all west) 2 June 16th and July 1st, 11 July 19th, 9 Sept 16th, 3 17th, 4 30th, one Oct 17th; 4 east Cromer Nov 6th; Mundesley 2 west July 16th and 23rd; one north Horsey July 16th.

Scaup*Aythya marila**Winter visitor in varying numbers; scarce inland; occasional in summer*

Widespread in first winter period, but two main localities. At Snettisham 18 Jan 9th increasing to max 22 Feb 13th, then 18 last date Feb 24th. At Titchwell 2 Jan 10th with 15 from Feb

23rd increasing to 20 March 1st-3rd, then 15 March 5th until last March 25th. Unusual record of 22 in Blakeney Hbr then Cley Jan 18th, when 18 same day at Snettisham

Smaller numbers elsewhere: 4 Cley Jan 1st; 2 Blakeney Hbr Jan 2nd; Pentney GP Jan 3rd/4th; Breydon Jan 4th and Feb 27th; west Mundesley Jan 19th; Tottenhill GP Jan 19th, 3 Jan 20th and one Feb 27th; 2 Felbrigg Park Lake Jan 20th-March 11th; Swanton Morley GP Jan 26th; 3 Hunstanton Feb 5th; Ranworth Broad Feb 9th-14th; Lynford GP Feb 14th-April 14th; 3 east Holme Feb 24th, one east March 5th, and 7th, 2 west March 8th; 2 Horsey March 4th; Cantley BF March 11th; 3 Wroxham Broad April 6th; north Hunstanton April 9th.

Few summer records: singles east Walcott June 22nd, west Mundesley July 11th, west Sheringham July 16th and Breydon Aug 28th.

Also widespread in second winter period: Cley Sept 3rd; Holme Sept 5th, 3 west Oct 8th; Horsey Sept 9th; 2 Titchwell Sept 9th, one Sept 28th and Oct 3rd, 2 Oct 28th; 6 west Scolt Head Sept 16th, one west Oct 10th; 4 and 7 west Sheringham Oct 16th, 7 west Oct 29th; Pentney GP Oct 17th-19th; R Ouse Relief Channel Oct 31st. 1-3 in Nov/Dec at Breydon, Blakeney Hbr, Cley, Holme (6 west Nov 3rd), Hunstanton, Mundesley (4 Dec 20th), Sheringham, Titchwell (4 west Nov 19th), and Welney; also 24 at Hunstanton Dec 21st. Two at Snettisham Nov 5th increased to 12 Dec 31st.

Eider *Somateria mollissima*
Non-breeders throughout year, highest totals usually in winter and early spring

Max monthly counts at regularly monitored sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hunstanton	138	170	12	20	7	1	30	-	12	20	-	120
Holme	2	9	24	52	30	1	1	1	15	25	6	2
Titchwell	60	40	40	80	26	40	32	22	12	10	12	19
Scolt/Brancaster Hbr	22	8	19	14	28	23	38	32	55	40	-	8

National importance (winter): 750

Also large number off Terrington Marsh where 95 Jan and 246 Oct. Other regular sites in both winter and summer with usually fewer than 10 birds included: Blakeney Hbr, Eccles, Sea Palling, Waxham, Horsey, Winterton and Yarmouth, with movement between eastern sites.

Significant movements included: *April* 65 east Holme 6th; *July* 30 north Hunstanton 10th; *Sept* 24 east Sheringham 17th, 16 south Mundesley 23rd, 40 east Sheringham 25th, 52 south Horsey 30th; *Oct* 34 Happisburgh and 35 east 6 west Sheringham both 9th; Nov 38 west Cley, 240 west Sheringham, 70 Mundesley and 46 Sea Palling all 7th, 57 west Cley and 79 west Sheringham both 8th, 69 north Waxham 25th; *Dec* 57 west Cromer 16th, 30 west Beeston Bump 18th, 57 west Holme 20th, 34 east Sheringham 25th.

Long-tailed Duck *Clangula hyemalis*
Winter visitor chiefly to north-west Norfolk coastal waters; occasional inland

In first winter period mainly recorded between Hunstanton and Scolt Head with peak counts at Gore Point, Holme of 62 Feb and 88 March; latest, single Titchwell May 22nd. Also regular off Winterton with peak counts of 14 Jan 11th, 15 Feb 2nd and March 12th; latest May 20th. Elsewhere: female Welney March 23rd-April 7th (third site record), 3 Ormesby Broad Jan 16th/17th and one Jan 30th, female off Yarmouth April 13th-June 5th.

In second winter period first record freshly dead Scolt Head Oct 16th; then 2 Titchwell 19th/20th. Subsequent peak count 35 in Dec Gore Point, Holme; also 6 Winterton Nov 5th. Movements elsewhere in Nov: west Cley 7th and west 13th, 2 west Sheringham 9th and one west 18th, 2 Blakeney Point 17th, west Sheringham, Paston and Mundesley 18th, east Salthouse and 2 west Scolt Head 24th.



Long-tailed Duck (*John Geeson*)

Common Scoter

Melanitta nigra

Winter visitor in varying numbers, passage migrant, non-breeders over-summer

Max monthly counts at principal Wash/north coast sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Heacham/Hunstanton	500	1500	4000	4000	-	12	-	140	80	21	3000	2000
Holme	40	450	2000	3200	2500	3000	1500	1500	1500	300	250	600
Titchwell/Brancaster	70	1000	35	3000	3000	250	500	50	370	650	700	40

National importance (winter): 350

At Holkham Bay 350 April, 55 May and 100 Nov.

Away from principal sites numbers low during first winter period with 40 off Winterton Jan max count. Coastal movements at this time Holme 410 east March 5th and 105 west 7th, 70 east Sheringham 31st and at Scolt Head 55 west April 23rd with 95 east May 1st, 40 east 24th and 350 on sea 29th. From July further movements included 200 west Cley and 300 west Sheringham 15th, 364 west Cley 16th, 88 north Horsey 22nd, and at Mundesley 342 west 16th and 210 west 23rd. Autumn notable for lack of numbers moving with 255 west 11 east Holme and 244 west Sheringham Nov 8th being highest.

Surf Scoter

Melanitta perspicillata

Rare vagrant from North America

A drake off Titchwell Sept 26th was subsequently seen on and off until Oct 12th (JRW *et al*). In Nov presumably same bird east with Common Scoter Holme 4th (JBi).

Velvet Scoter

Melanitta fusca

Winter visitor, but numbers and localities fluctuate; occasional in summer

Max counts from principal sites:

	Jan	Feb	Mar	Apr	Oct	Nov	Dec
Hunstanton	4	5	4	2	-	-	7
Holme	-	1	4	12	1	2	-
Titchwell	2	2	-	2	4	30	2

During first winter period also reported in Jan at Blakeney Hbr 2nd, 2 west Cley and 4 Winterton 9th, 4 west Mundesley 19th, west Sheringham 22nd and 12 Holkham Bay 24th; in Feb 3 Scolt Head 21st. May records from Titchwell 9th and 15 Holme 11th.

Midsummer sightings of 4 Holme July 11th and one Hunstanton 16th.

First returning birds: Holme 4 Aug 6th and one 24th, and 15 south Hunstanton 26th. Ones and twos regularly reported from north coast sites from early Sept onwards with larger counts of 11 west Titchwell 4th, 3 east Sheringham 9th and 5 west Nov 11th, 4 west Cley Nov 8th and 6 Brancaster Nov 16th.

Inland: in Nov 2 Horsey Mere 5th and one Filby Broad 11th.

Goldeneye

Bucephala clangula

Passage migrant and winter visitor

Max monthly counts at selected localities:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Snettisham	35	32	19	1	29	34
Titchwell	40	100	49	5	8	40
Scolt Head/Brancaster Hbr	54	36	16	4	42	46
Holkham Park Lake	15	23	10	3	6	-
Blakeney Hbr	66	69	25	-	16	63
Hickling Broad	17	2	3	2	-	23

Other sites with 10 or more during first winter period: *Jan* 15 Holkham Bay, 14 Hunstanton, 19 R Ouse Relief Channel, 16 Pensthorpe, 17 Wells Hbr; *Feb* 10 Holkham Bay, 12 Holme, 19 Pensthorpe, 23 Scnnowe Park Lake, 10 Tottenhill GP; *March* 16 Thornham Hbr; *April* 22 Holkham Park Lake. Several birds lingered until mid-May with 1-3 at Cley, Rockland Broad, Sheringham, Snettisham, Titchwell and Welney, with last on a small farm reservoir Roydon June 2nd. An unseasonal record 4 west Mundesley July 12th.

First returning birds Titchwell in Sept with one 29th and 3 30th, when also one west Scolt Head. An increase in numbers in Dec with cold weather coastal movements (all west) 40 Holme and 12 Cromer 16th, 13 Sheringham 17th and 15 Mundesley 20th; also 26 R Ouse Relief Channel 24th.

Smew

Mergellus albellus

Winter visitor in small numbers, increasing during severe weather

Monthly totals of male/redhead ratio:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Nov</i>	<i>Dec</i>
Males	8	5	2	2	1
Redheads	17	8	7	-	5

Max calculated totals of individuals at all sites during first winter period: Hickling Broad Jan 5 (1 male), Feb 3 (1 male); Horsey Mere Jan 6 (2 males); Ranworth Broad Feb 4 (2 males); Tottenhill GP Jan 5 (2 males), Feb 6 (2 males), March 5 (1 male). Singles also noted

at Breydon, Cley, Lyng (male), Snettisham (male), Stiffkey Fen and Welney. Last record, a male, Tottenhill GP April 2nd.

First returning bird, a redhead, Cley Oct 28th. In Nov males seen at Tottenhill GP and Snettisham. During Dec up to 4 Tottenhill GP with further singles Blakeney Hbr, Holkham, Stiffkey Fen, Welney and Whitlingham Lane GP.

Red-breasted Merganser

Mergus serrator

Passage migrant and winter visitor; occasional in summer

Max monthly counts at principal coastal localities:

	Jan	Feb	Mar	Apr	Oct	Nov	Dec
Titchwell	23	15	12	29	5	10	40
Scolt Head/Brancaster Hbr	27	33	30	33	32	35	39
Holkham Bay	11	16	-	-	-	15	30
Blakeney Hbr	50	53	59	-	-	38	52

National importance (winter): 100

Elsewhere reported around coast in single figures apart from 21 Holme Feb and 15 March, and 50 Hunstanton March. Recorded into May with ones and twos, apart from Scolt Head where still 21 3rd, 16 until 8th, 1-2 rest of month and 3 June 1st-4th. In July east Cley 3rd, Holme 9th, Scolt Head 11th-17th, Sheringham 15th, Horsey 15th and 2 north 22nd, Titchwell 17th-26th and Hunstanton 23rd. A male summered Breydon April 29th-Aug 8th.

Returning birds first noted in Sept with 4 west Holme 1st and 4 west Sheringham 2nd. Very few notable movements apart from in Nov when 21 west Cley and 14 west Beeston Bump 6th (75 mins), and 12 west Sheringham 7th. Also series of movements Holme where 11 east 8 west Nov 3rd, 13 east 4 west 11th, and in Dec 9 west 3 east 3rd, 6 west 5 east 12th, 11 west 2 east 13th and 7 west 7 east 16th. During Dec numbers in Wash gradually increased with max 150 Hunstanton 23rd.

Inland: singles UEA Broad Feb 2nd-5th and R Ouse Relief Channel 8 Jan 14th, with occasional singles there Jan, Feb and Dec.

Goosander

Mergus merganser

Winter visitor and passage migrant, most abundant in severe winters

Max counts from favoured sites:

	Jan	Feb	Mar	Dec
UEA Broad	12	15	8	17
Thetford Nunnery Lakes	6	7	6	12
R Ouse Relief Channel	8	15	4	2

During first winter period (Jan-April) inland records also from (max counts): Blickling Park Lake, 3 Buckenham, 2 Bridgham, Cantley, 10 Cranwich GP, East Ruston, 2 Horsey

Mere, 5 Hethersett Park Lake, 8 Lyng-Eastaugh GP, 6 Lynford GP, 3 Lenwade, 2 Rockland Broad, Ongar Hill, 5 Sparham Pools, 10 Stourbridge, 3 Welney and 4 Whitlingham Lane GP.

Coastal movements and occurrences: in Jan Salthouse 1st, 3 west Holkham Bay 2nd and one Breydon 8th, north Waxham Feb 19th, and in March west Sheringham 1st, and on 31st 3 east Scolt Head, 2 east Salthouse and 2 south-east out to sea Winterton. In April 2 south-east Winterton 7th, on the sea Titchwell 14th, 2 east Cley 15th and Holme 20th. Very late/over-summering redheads occurred Burnham Overy Staithe June 3rd and in July 2 frequented the R Ouse Relief Channel and again in mid-Sept.

An early returning male west Titchwell Sept 30th. In Oct 2 Snettisham 23rd, south Holme 27th and Saddlebow 28th. Coastal movements in Nov became more evident with 3 west Cromer 6th, one Sheringham west 8th and 2 west 11th, Blakeney Quay 10th, Wells 14th, Titchwell and 3 west Mundesley 15th, Holme 23rd, south Waxham 25th and west Cley 26th. In Dec (all to west) 2 Titchwell, 3 Blakeney Point and 2 Mundesley all 16th, Sheringham 17th and 3 Mundesley 20th. Further records in Dec from Blakeney Hbr, Brancaster Hbr, Cantley, Felbrigg Park Lake, Hickling Broad, Holkham Park Lake, Horsey Mere, How Hill, Hunstanton, Ormsby Broad, 3 Pentney GP, Sea Palling, Snettisham, 5 Sparham GP, Stiffkey Fen, 2 Titchwell FM, Wells, Welney and 4 Whitlingham Lane GP.

Ruddy Duck

Oxyura jamaicensis

An increasing but scarce introduced resident, first recorded in 1977

Records continue to increase throughout the county. Max counts: Tottenhill GP 14 Jan and 35 Dec (a county record), 12 Pensthorpe, 12 Fowlmere and 8 Holme. Elsewhere 1-6 reported from Bittering GP, Cantley BF, Cley, Cockley Cley, Cockshoot Broad, Colney GP. East Harling, Filby Broad, Gooderstone, Gunton Park, Hickling Broad, Holkham GM, Horsey Mere, How Hill, Lakenheath Washes, Longham GP, Lynford GP, Lyng-Eastaugh GP, Mautby, Merton, Morning Thorpe GP, Narford GP, Pentney GP, Swanton Morley GP, Sennowe Park, Strumpshaw, Stanford Water, Thetford Nunnery Lakes, Thompson Water, Wolterton Park and Welney. Additionally breeding confirmed at Fowlmere (3 broods), Holme, Lopham Fen, Pensthorpe, Raynham Lake, Stiffkey Fen (2 broods), Snettisham (Ken Hill) and Titchwell.

Honey Buzzard

Pernis apivorus

Rare migrant breeder and scarce passage migrant

An early passage bird west Sheringham Park April 30th followed by just 2 May migrants Stiffkey 10th and Reepham 14th, and one east Cley June 11th.

The usual breeding territory occupied from May 16th, resulting in successful fledging of 2 young. The breeding pair departed Aug 28th, indulging in wing-clapping display before heading east, and 2 east Sheringham same date could have been these departing adults. Two over Pensthorpe also same day are believed to be the juvs which followed the adults a few days later. At least 3 and possibly 4 additional adults visited the area during the breeding season, including 2 brown-phase birds seen in display on the edge of the territory; unfortunately they did not remain to breed. The number of young fledged from this territory has now reached double figures and it is highly likely that the incidence of additional birds each year is a direct result of this success.



Honey Buzzard (*Phil Jones*)

A county survey of most suitable habitat revealed possible breeding at a further 2 sites, one of which held a wing-clapping bird May 30th and 2 soaring adults June 6th, the other a single bird on 3 dates June/July. These areas are sufficiently close in proximity to form part of a breeding territory and it is possible breeding occurred in this area.

Further midsummer records from Titchwell and Roman Camp (Runton) July 7th, south Cley July 20th and Lakenheath Aug 12th.

Autumn passage is often inconspicuous and Sept records west Cley 11th, 2 Narborough 13th, singles Welney 17th and Burnham Market 18th, and on 19th 2 in off sea Scolt Head, 2 Hoveton Great Broad and one Northrepps added to an already reasonable passage, but the events which unfolded over the following days revealed a massive and unprecedented passage. Estimates of up to 500 birds arrived along the eastern seaboard of Britain and began filtering southwards through the next week or two. The reasons for this arrival are unclear but the vast majority were juvs making their first journey south and the record of one feeding on a freshly killed Common Pheasant in a cliff-top stubble field at Happisburgh is presumably an indication of a tired and hungry bird. The number of birds passing through Norfolk is

impossible to calculate accurately, but well over 60 may have been involved. All records from Sept 20th are listed below but there is inevitably some duplication involved. Most arrivals off the sea were between Sept 19th and 22nd and many inland records will involve these birds moving south on subsequent dates; all singles unless otherwise stated: *Sept 20th* Alby, Blakency GM, 4 Bodham, Choseley, Cley (in off sea), 4 Cley Hangs, Gorleston, Haddiscoe, Morston Quay, 11 Northrepps (all singly 0835-1100 then south or south-west), Quarles (on roadside verge), 5 Scolt Head (in off sea then west), Sheringham (in off sea), 9 Thetford area, 2 Wells, 2 West Runton (in off sea), 2 Winterton (in off sea); *21st* Holkham Meals, Shotesham, 3 Thetford, 3 Warham Greens, Welney, Westmere, West Runton; *22nd* Binham/Egmere, Brancaster GC, Burnham Deepdale, Snettisham, Sparham (at wasp nest), Strumpshaw, Titchwell; *23rd* New Holkham, Salhouse, Sheringham, 2 Strumpshaw, Swanton Novers, 2 Thornham; *24th* Belton, Cley, Holme, Lynford Stag, Norwich, Pensthopre, Sculthorpe, Sheringham, Trimmingham, 2 Welney; *25th* Hilborough (at wasp nest), Sheringham (to 26th), Witton; *26th* Hickling Broad, near Thetford, Welney; *27th* Cley, East Ruston, Holkham Bay/Wells; *28th* Lenwade, 3 Walsingham; *29th* Brundall, Thorpe St Andrew; *30th* North/South Creake, Strumpshaw; *Oct 1st* Great Snoring, Martham, Wimbotsham.

Red Kite

Milvus milvus

Increasing visitor; birds from the Continent and British reintroduction projects occur

No wintering birds in the county; first of spring Grimston March 6th followed by further March records at Thurlton Marsh 9th, north Norwich 11th, Cockley Cley 12th (mobbing wintering White-tailed Eagle), Haddiscoe/Reedham 19th, Weybourne and east Beeston Bump 21st, and Horsey Mere 25th.

The Horsey bird late March may account for numerous records Waxham/Horsey/Winterton area April 3rd-21st. Also in April noted Dersingham 4th, Beeston Regis and



Red Kite (*Peter Wilson*)

2 Sheringham 13th, coasting west Inceborough Hill to Cley 16th, Cley/Salthouse 22nd and Bodney Warren 23rd.

A distinctive and well-observed bird in heavy wing-moult tracked from Overstrand May 14th along coast and inland to Halvergate 18th, with numerous sightings 15th/16th before being seen over Swanton Novers 20th. At least 2 other individuals in county in May when noted Cley 15th, Barrow Common, Brancaster and Sidestrans 16th, near Rougham 18th and Lakenheath Washes 29th.

June singles Swanton Novers 8th, Strumpshaw and West Runton 11th, near Wells 12th and King's Lynn 28th. Possibly just one wandering bird accounted for further June records Dersingham and Gayton 12th, and Fakenham and Elsing 13th.

Predictably fewer recorded from July when noted Roman Camp (Runton) and Horsey 3rd, and Fulmodeston Severals 15th. One over Anmer/Harpley Aug 2nd had virtually no tail and a series of records of 1-2 from Anmer/Harpley/Flitcham area Aug 13th-Oct 15th possibly indicated a prolonged stay in area but noted on just 5 dates in period. One South Wootton Oct 15th may relate to one or other of the above.

White-tailed Eagle

Haliaeetus albicilla

Rare vagrant, mainly in winter

The imm Nov/Dec 1999 remained mostly at Cockley Cley to Jan 16th when seen heading north over Docking. Remarkably, the first adult in the county since 1945 was near Fring Jan 5th. The imm was then relocated in Brancaster/Barrow Common area Jan 8th-13th, briefly revisiting Cockley Cley Jan 9th, and was in the air with the adult near Barrow Common Jan 11th, providing a spectacular sight. The adult then wandered widely Jan 12th-26th as far east as Holkham and inland to Summerfield/Docking before heading east over Overstrand Jan 27th, and finally out to sea West Runton Feb 1st.

Meanwhile, the imm had apparently returned to familiar territory and was again present Cockley Cley area at least Feb 15th-March 19th.

Marsh Harrier

Circus aeruginosus

Increasing migrant breeder; also passage migrant; small numbers winter

Roosting numbers remained high in first winter period: max 24 Jan, 25 Feb and 13 March. At least 13 still using main Broadland roost and 4 other roosts in use at this time. Also during this period noted away from regular roosts Cley/Salthouse Jan 1st-3rd, Scolt Head Jan 15th, Burnham Norton Feb 1st and Titchwell Feb 10th.

Spring passage noted as early as last week in Feb when Titchwell 20th, 2 there 22nd with one remaining from 23rd, Scolt Head and 2 west Holkham GM 24th, and Holme 25th/26th. Few others until mid-March when Holme and Scolt Head 9th, west Burnham Deepdale and Beeston Bump 13th, and Cley 19th with 3 there 26th. The first reached Welney March 24th. Further westward movement at well-watched sites: 10 Holme April 1st-May 10th, 18 Scolt Head April 2nd-May 16th plus one out to sea April 29th, 3 in off sea then south-east Sheringham May 16th, plus at least 10 along the now familiar Cromer ridge route over Northrepps and Inceborough Hill April 1st-May 15th.

An exceptional breeding season produced a min 122 young from 58-59 nests, equalling the record number of fledged young in 1998: *Wash* 17 nests produced 54 young; *North coast* 15 nests produced 27 young; *Broads* 21 nests produced at least 32 young. Additionally 5-6 nests elsewhere produced 9 young including 1-2 nests in the Wensum valley. None nested at Welney where spring flooding deterred several prospecting birds.

Numbers of young fledged in recent years:

	89	90	91	92	93	94	95	96	97	98	99	00
Fledged young	88	90	75	114	105	71	112	87	88	117	90+	122+

Rapid autumn dispersal noted from Broadland breeding sites in mid-Aug, apparently mirrored at other sites as indicated at this time by singles at 18 inland sites plus 2 Lakenheath Washes Sept 9th and 2 Winterton Sept 12th. At Scolt Head singles out to sea Aug 22nd and Sept 17th, plus 16 other migrants Aug 7th-Sept 21st, max 7 on latter date.

Most birds had departed by first week Oct but the spectacular increase in wintering birds continued with max 27 Oct, 31 Nov and 15 Dec (incomplete data). At least 8 roosts in use in second winter period with first recorded roost away from Broads holding 2 Oct, sharing a Hen Harrier roost site. Only record away from known roosts at this time Holme Dec 24th.

Hen Harrier

Circus cyaneus

Passage migrant and winter visitor; former breeder, now exceptional in summer

Normal numbers roosting at start of year with slight increase Feb and unusually rapid decline March. Remained scarce on borders of Wash at this time when noted away from other usual localities at Edgefield Street Jan 10th and Bodham Feb 19th.

Details from 8 roost sites (7 in regular use) in first winter period, max monthly counts as follows:

	Roost							Occasional roosts	Max total
	A	B	D	F	G	M	Q		
Jan	5	6	1	3	6	1	1	2	25
Feb	6	9*	4	2	7	1	1	-	30
Mar	-	3	-	1	-	2	1	-	7

* Including a very dark, almost melanistic ringtail

Following rapid March/April departure very few lingered into May when noted Waxham 5th-7th, Holme and 2 Horsey 6th, Breydon and Burnham Market 7th, and a 3rd-year male circling and calling over a conifer plantation at Gimingham 16th for about an hour before departing east.

An unusual June record of a ringtail predated Oystercatcher chicks Blakeney Point 18th.

First returning autumn migrants Warham Greens Sept 24th and Scolt Head 28th and 30th, but very few in Oct when noted Scolt Head 1st, 10th and 15th, Titchwell 9th and 14th, Horsey 10th, Holme 14th and in off sea there 17th, Hickling Broad 21st, 2 Burnham Norton 27th and 2 Titchwell 28th.

Only a gradual build-up in numbers Nov and remained scarce throughout Nov/Dec (reflected in roost counts) when noted away from usual areas in Nov at Shotesham 3rd, in off sea then west Sheringham 7th, Lopham Fen 9th and Paston 10th, and in Dec at Walsingham 15th, South Creak 18th and Langham 23rd. Again scarce along Wash limits during this period.

Just 5 roosts recorded during second winter period, monthly max:

	<i>Roosts</i>					<i>Max total</i>
	<i>A</i>	<i>B</i>	<i>F</i>	<i>G</i>	<i>Q</i>	
Oct	-	1	-	1	-	2
Nov	3	5	2	1	1	12
Dec	5	5	2	3	1	16

A wing-tagged male Thornham/Titchwell Nov 14th, also recorded as a 1st-winter in Norfolk during 1999-2000 winter, was ringed as a pullus in Lancs in 1999. Also 1st-winter females Salthouse Feb 1st (ringed as pullus Forest of Bowland, Lancs June 1999) and Blakeney Point March 24th (ringed Lancs 1999). Unfortunately submitted details did not clarify how many birds involved but, nevertheless, interesting developments considering the comment in the 1998 report regarding the Forest of Bowland population.

Montagu's Harrier

Circus pygargus

Rare migrant breeder and scarce passage migrant

First spring migrant Cley April 17th followed by another Brancaster Hbr next day and further April records Horsey 21st, Holme and Waxham 22nd, Choseley 27th, and Lynn Point and Cley 29th.

Reasonable numbers in May when noted Titchwell 1st and 24th, Cley 6th and 20th, Ongar Hill (melanistic male) 7th, Burnham Norton 10th, Holkham GM/Burnham Overy 13th, RAF Sculthorpe 25th (to June 12th), Fring 26th and Holme 29th. As expected, fewer noted in June when Horsey/West Somerton and Holkham Park 3rd, Harpley 7th, Docking 9th, and in Brecks at Frog Hill 23rd and Buckenham Tofts 24th.

For first time since 1982 none bred in the county (following last year's single failure) despite the presence of at least 3 adults in the usual breeding area. The alarming decline of this species in its formerly favoured area is both rapid (9 nests in 1994 and 7 in 1997) and confusing. The over-summering of a ringtail at a north coast locality and that of an imm male and possibly a female at a second north coast site are probably an indication of desertion of former haunts than of prospecting new territory.

The unusually large number of late summer and autumn records is presumably also indicative of mainly non-breeders on return passage. Noted in July at Fring 3rd, Cley 7th and 27th, and Titchwell 19th and 21st; Aug records from Roydon Common 3rd, near Great Bircham 5th, Cley 6th, juv Swanton Novers 16th, juv Wells 20th, Holme 25th, Fring 26th, Beechamwell and Burnham Market 27th, Hilborough 28th and Stanhoe 31st. Finally just 2 Sept records from Lang Mere 7th and Cley 22nd.

Harrier sp

Circus sp

Unidentified ringtail Cley May 6th and male south-west over Poringland June 11th.

Goshawk

Accipiter gentilis

Rare breeder; also scarce passage migrant and winter visitor

Exceptional record of male chasing waders Admiralty Point, Terrington St Clement Feb 20th was unusual in both behaviour and location.

Suspected spring migrants over Inceborough Hill April 1st and 16th, Blakeney GM April 12th and Stiffkey May 12th.

Displaying males noted in spring at 7 localities (8 birds), only 3 of which in Brecks. Females also noted at 4 of these sites and breeding presumably occurred at some or all.

Also, at least one bird present at 4 further localities (2 in Brecks) during breeding season. This remains the most difficult raptor to assess in terms of breeding numbers and it seems likely that the county population is considerably higher than is reported each year.

The usual series of late autumn records (with no apparent pattern of distribution) in Oct at Fritcham 1st, Sparham 5th, Braneaster 10th, juv Thursford 11th, and at Titchwell Nov 18th.

Sparrowhawk

Accipiter nisus

Common resident, passage migrant and winter visitor

Again regularly recorded throughout year in all habitat types with an apparent increase in sightings in urban areas where winter bird feeders routinely attract this opportunistic hunter.

Spring passage noted at coastal sites March 21st-May 15th with some impressive movements: *March* Holme 5 west 21st and 7 west 25th; Holkham 5 west 24th; Northrepps 2 west 21st, 2 west 26th, single west 31st; *April* Seolt Head 2 west 2nd, single west 19th; Inceborough Hill 8 on 9th and 10 on 23rd (probably including some migrants); Northrepps 2 west one east 2nd, 4 west one east 8th, 3 west 16th and 7 east 5 west 19th; Paston 3 east 8th, 8 east 16th and 9 east 18th; Horsey 6 south 8th, 11 south 16th; Winterton 12 on 12th and 10+ on 16th (mainly migrants); *May* Seolt Head west 15th, Trimmingham east 15th, Horsey 7 north 6th and Winterton 9 north 9th.

NBA results showed the species was present in 63% of tetrads covered in breeding season with an average of 1.2 pairs per occupied tetrad.

As usual, less evident on autumn passage when noted Sept 11th-Nov 17th. In Sept in off sea Titchwell 11th, 2 west Northrepps 20th and 7 Sheringham 21st. In Oct in off sea Holme 6th and 7th, 2 in off sea Sheringham 14th and male out to sea Overstrand 31st. before circling offshore and returning inland. The only Nov record relates to 2 in off sea Holme 17th.

A number of interesting hunting observations this year including: one taking Swifts on 2 occasions Rockland Broad; a female and female/imm hunting in tandem in a Hellesdon garden Oct 30th; one struggling with a Red-legged Partridge in an East Tuddenham garden Nov 2nd; a male shadowing a hunting Barn Owl Holme Nov 14th.

Common Buzzard

Buteo buteo

Passage migrant and winter visitor; small but increasing breeding population

Increasingly recorded during winter months when widespread records from all habitat types including Broads. Unusually one was feeding behind a plough Brograve Levels Jan 26th. Many known and potential breeding areas occupied from late Feb and now virtually impossible to separate wandering birds from those on territory. One south Titchwell Feb 26th was possibly a new arrival.

Spring passage, relatively unimpressive by recent standards, commenced early March when singles Holme 8th, west Titchwell 12th and Winterton 13th. Passage not fully underway until April when 2 Inceborough Hill 1st and 3 west there next day. Further April records Holme, Thornham, 2 Cley and Winterton 7th, Sheringham and Northrepps 8th, 2 Sheringham and 2 Beeston Regis 9th, Winterton 10th with 5 there 12th. Light passage continued mid-April to mid-May when about 15 recorded singly at coastal sites with 3 Aylmerton April 29th and 2 Yarmouth May 9th the only multiple records. Last of spring noted Cley May 25th.

The expansion of the breeding range within the county, and indeed the country, continues. Breeding was confirmed at 9 sites, 6 of which successfully fledged a min 8 young. Two nests are known to have failed in wet weather in June and another was thought deserted

when roadworks took place within 100 m of the nest. Difficult weather conditions in early summer are probably responsible for the disappointingly low number of fledged young. In addition, 6 further sites held displaying pairs and breeding may well have taken place at any or all of them. A further 4 sites were occupied by at least 2 birds during spring/summer and another held at least one bird in an area where over-summering has occurred in previous 2 years. Again, a number of spring/summer sightings over the eastern and northern limits of Norwich indicate continued presence there. At an additional site 10 were soaring together Feb 20th but no further evidence of breeding in area.

Data since breeding recommenced in the county tabulated below:

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Confirmed breeding pairs	1	3	2	1	2	4	5	5	9
Probable breeding pairs	-	1	1	-	5	4	5	5	6
Possible breeding pairs	1	1	1	1	1	1	2	2	5
Max breeding pairs	2	5	5	2	8	9	12	12	20
Min fledged young	2	6	2	1	2	7	7	9	8

Midsummer records Cley June 15th, Sheringham Park June 28th and Titchwell July 21st may relate to wandering non-breeders.

Light autumn passage from Aug 8th when 3 south-east Cley, with 2 west Northrepps Aug 25th. Sept singles King's Lynn 17th and in off sea Salthouse 19th, and Titchwell and Winterton 20th. Last obvious migrant noted south Lynn Point Oct 12th.

Widely recorded during second winter period including many presumed family parties. It is not unreasonable to suggest the county wintering population to now be in the order of about 40 birds.

Rough-legged Buzzard

Buteo lagopus

Passage migrant and winter visitor; periodic large-scale influxes

One remained from previous year in Haddiscoe/Thurlton/Fritton area to March 25th. Another intermittently Holme Jan 5th-15th and Feb 26th/27th probably accounts for records from Grimston Heath Jan 22nd-29th, Massingham Heath Feb 5th, Hunstanton GC Feb 10th and West Acre March 17th. Further records at this time from Stanley Carrs, Aldeby Jan 27th, Blakeney GM Feb 21st and Bradwell/Belton Feb 25th may also relate to the wanderings of the two wintering individuals.

An early autumn juv in off sea Burnham Overy Sept 20th, arriving in the midst of the Honey Buzzard passage, hunted the dunes for an hour before departing south-east. Oct records Berney 19th and Massingham Heath 21st/22nd were followed by Nov singles Caister 7th and Halvergate 21st. A well-watched bird Massingham Heath Dec 1st-3rd was probably that noted south over Gateley on latter date and possibly that which settled to over-winter at Haddiscoe Dec 28th into 2001, completing an unexceptional year for this species.

Osprey

Pandion haliaetus

Regular passage migrant in increasing numbers; over-summering has occurred

Similar numbers to previous year recorded with about 40 (where possible allowing for duplication) in each passage period.

First of spring Hunworth March 27th followed by April singles Kelling 1st, Blakeney Point 2nd, Snetterton GP 12th and Salhouse 17th. Passage steady throughout May (peaking mid-month) when 25+ recorded from widespread coastal and inland sites, most merely

passing through but one Ranworth/Cockshoot Broads 11th was joined by a second 13th, both remaining to 19th with one 20th. Predictably fewer noted in June when Swanton Novers area 1st-4th, Titchwell 2nd, Hunstanton 3rd, Blickling 4th, Cley 5th and Hickling/Marham Broads 9th/10th. Last of spring Lakenheath Washes June 25th.

Single midsummer record Titchwell July 9th, perhaps an early returning failed or non-breeder.

Autumn passage underway July 31st (Swanton Novers) but just 9 Aug records including Rockland Aug 30th-Sept 7th. Numbers steady late Sept including one Old Costessey 8th-11th but a notable increase from 20th when 3 in off sea then south Scolt Head, and singles Blakeney Point and Gallows Hill, Thetford, producing a monthly total of about 25 with one lingering Crome's Broad/East Ruston area 26th-28th. Just 2 Oct records of singles west Blakeney Hbr then Stiffkey 1st and Lynford GP 4th, but also 2 in Nov at Pott Row, Grimston 4th and an unusually late bird Fritcham 24th.

Kestrel

Falco tinnunculus

Resident and passage migrant

Usual light spring passage when west Holme March 21st and 12 (some presumed migrants) Horsey March 25th. Further westerly passage noted Scolt Head where 5 April 19th, singles 21st and 24th and 2 on 25th, plus 2 May 22nd. Also 3 east Holme April 24th.

NBA results showed the species was present in 79% of tetrads covered in breeding season with an average of 1.7 pairs per occupied tetrad. In Stanford TA poor breeding success reported for third consecutive year.

One Beeston Common May 15th was seen to catch an Adder or Slow-Worm.

Autumn concentrations on borders of Wash: 11 Lynn Point Aug 31st and 13 Snettisham Sept 22nd, the latter coinciding with influxes of 5-6 Scolt Head Sept 20th/21st and 4 Sheringham Sept 21st with another in off sea there next day. Only other autumn movements involved singles west Scolt Head Sept 4th and 10th, and in off sea there Sept 18th.

Red-footed Falcon

Falco vespertinus

Vagrant, most often in spring; large influx in 1992

A female Lakenheath Washes May 14th (PD), followed by two records of possibly the same individual, adult males Winterton May 31st (INS) and Hickling Broad later same day (TB).

Merlin

Falco columbarius

Passage migrant and winter visitor; exceptional in summer

Details received from 2 regular roosts in first winter period: monthly max 5 Jan, 4 Feb and one March. A further roost held a single bird on at least one occasion at this time.

Again 1-2 regularly recorded from coastal sites Holme-Sheringham during first winter period and it appears at least 4-5 birds wintering here to mid-March. Also regular Breydon/Berney to March 21st. Scarce on Wash coast at this time when 2 Snettisham Feb 20th and singles Ongar Hill and Lynn Point March 11th the only records. Singles Walcott Feb 28th and Paston March 31st the only coastal records Sheringham-Sea Palling during period. Regular around main Broadland roost but also recorded at 22 widespread inland localities including 6 in Brecks.

Coastal passage prominent in April when noted Waxham 2nd, 8th, 21st and 30th, Scolt Head 3rd, 16th and 24th, Wells 4th, Weybourne 7th, Cromer GC 8th, Winterton 19th and 22nd, and Cley 21st and 24th. Also noted inland in April at Welney and Narborough 1st.

Scarning Fen 5th, Holme Hale 22nd and East Ruston 24th Only two May records, Scarning 5th and Cley 6th.

First returning autumn migrant Scolt Head July 31st-Aug 3rd with further Aug records there 6th, 22nd-24th and 28th, Breydon/Berney 21st and Holme 28th. Sept singles Holme 3rd, Yarmouth South Denes 14th, in off sea Holkham 20th, and Sheringham 25th and 30th. Passage continued Oct when Winterton 1st and 5th, Sea Palling 3rd and Happisburgh 11th, and into Nov when Happisburgh 9th, Hunstanton and in off sea Mundesley 15th.

Wintering territories occupied from Sept when again 5-6 present along north coast Holme-Cley (where one dead on beach Dec 27th) and occasionally east to Sheringham, and single Breydon/Berney. Main Broadland roost also occupied from late Sept and Wash coast Nov when 1-2 Snettisham Nov 5th-year end, possibly accounting for singles North Lynn Dec 17th and Hunstanton Dec 23rd. Recorded inland Oct-Dec at 13 localities including Welney 4 dates Nov and 2 Massingham Heath Nov 25th.

Roosting data from 2 regular and one occasional roost in second winter period, monthly max: 3 Oct, 4 Nov and 5 Dec.

Interesting observations included one hawking dragonflies from a post at Holme Sept 30th and one chasing a Skylark at Titchwell Nov 19th, the unsuccessful pursuit lasting about 4 mins with the lark in song for much of the chase.



Merlin (*Chris Lansdell*)

Hobby

Falco subbuteo

Scarce but increasing migratory breeder and passage migrant

Fairly early spring arrival in April when Yarmouth 12th and 3 Whitlingham Lane GP 14th. Further April singles Watton 17th, in off sea Sheringham 18th with another west there next day, west Scolt Head and Hunworth 21st, Strumpshaw and East Wretham 22nd, and Colney GP 23rd. Widespread arrival last week April when singly at 19 coastal and inland sites plus 2 Cranwich GP 24th, 3 Snettisham 29th and 2 Colney GP 30th-May 5th.

May singles noted at about 45 widespread sites plus 2-3 Strumpshaw 1st, Stalham Green 3rd, Holme 6th, Lakenheath Washes 12th and 16th, Barton Broad, Burnham Norton and East Ruston 16th, Sparham 18th-31st, Scarning Fen 21st, Titchwell 22nd, Scolt Head 23rd and Copham Common 24th; 4 Rockland Broad 14th and 5 Cranwich GP 16th. Many known or suspected breeding sites also occupied at this time.

Coastal records much reduced June when Scolt Head 1st, in off sea 17th and 26th, Burnham Norton 6th, Holme 6th, 8th and 21st, Titchwell on 6 dates from 8th, Horsey/West Somerton 10th, Blakeney Point 18th and Winterton 21st. Also noted singly at about 30 inland sites (away from known breeding areas) during June plus 3 Cranwich GP 4th and 2 Lyng 9th.

Breeding confirmed at 10 sites, min 16 young safely fledged, both figures increases on 1999. Breeding also possible at further 6 sites where birds in display, prospecting nest sites or in agitated vocal action over suitable nesting areas. A number of other sites held up to 5

during spring but not considered likely breeding localities. The county breeding population is almost certainly higher than that indicated especially as considered very under-recorded as a breeding species in Brecks, where sightings in summer as regular as Sparrowhawk and Kestrel.

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Confirmed pairs	4	7	6	7	8	4	5	7	9	10
Possible pairs	4	-	4	1	1	5	5	5	8	6
Max pairs	8	7	10	8	9	9	10	12	17	16
Min fledged young	-	-	10	6	8	10	6	8	14	16

Note: additional information has added one confirmed breeding pair (success unknown) to 1999 data

Regularly recorded throughout county July-Sept with many family parties noted. Coastal records light in July when Breydon 1st, Stiffkey Fen 9th, Scolt Head 18th and 31st, and Mundesley 19th, increasing steadily mid-Aug through Sept when about 40 recorded singly at 15 sites plus 2-3 in Aug at Breydon 7th, Snettisham 14th, Walcott 15th and Sheringham 26th, and in Sept at Holme 20th/21st and Scolt Head 20th. Unusually, one on beach Blakeney Point Sept 26th.

Few lingered into Oct when 7 singles noted at 6 sites to 5th plus further singles East Tuddenham 14th and Holme 16th, and at latter site 28th (JB GFH), the latest county record.

Eleonora's Falcon

Falco eleonorae

Vagrant from southern Europe

1987 Addition: A 1st-summer example of this spectacular falcon at Hickling Broad July 6th (BMo PAJM RDT *et al*) becomes a belated addition to the county list (see article on page 282).

Peregrine

Falco peregrinus

Passage migrant and increasing winter visitor

Wintering numbers stable from previous year, 5-7 occupying coastal sites Holme-Stiffkey and 2 Breydon, again wandering to Waveney and mid-Yare valleys and apparently to How Hill and Heigham Holmes on odd occasions. Also at least one present along Wash border Ongar Hill-Snettisham. At this time also noted Welney 9 dates Jan 15th-April 1st, at 10 additional inland sites Jan-March plus unusually UEA Feb 3rd.

Spring passage noted Blakeney March 9th and Winterton March 13th, and in April when west Inceborough Hill and east Walsey Hills 1st, Waxham 2nd, Salthouse 9th and Cley 26th. May records from Paston 6th, Ongar Hill 7th, imm Scolt Head 8th/9th, Holme 9th, adults Scolt Head 11th and 16th, and Weybourne 14th. One lingered Titchwell May 7th-15th; also single with jessies Sheringham 1st.

Unusual numbers during summer months when noted in June at Scolt Head 2nd, Welney 6th, Repps-with-Bastwick 14th, North Wootton 15th and Holkham Park 28th, and in July imm Scolt Head 12th, Lynn Point 17th and adult Scolt Head 30th.

Autumn movement suddenly underway mid-Aug when inland Wacton Common 12th, Swanton Novers 14th, Cantley BF 18th and Welney 19th, plus 8 records from coastal sites. Wintering territories occupied from late Aug but passage continued Sept when 12 coastal records including birds in off sea Horsey 9th and 3 Holkham 20th. Movement reduced in Oct when further birds in off sea Blakeney Point 2nd, Scolt Head 4th.

Weybourne 14th and Sheringham 18th, plus single west there 15th. Few new arrivals Nov/Dec when in off sea Sheringham Nov 8th, west Overstrand Nov 19th and Mundesley Dec 20th. Welney visited on 6 dates Aug 19th-Oct 22nd plus further inland records Saddlebow Oct 6th, West Acre Dec 2nd, Massingham Heath Dec 2nd and 5th, and Wiggenhall St Germans Dec 26th.

About 15 birds in county Sept/Oct but reduced to around 10 by year end. Now familiar territories occupied along Wash coast, north coast Holme-Cley/Salthouse and wandering birds from Breydon (3 Oct). Unusually none recorded Welney Nov/Dec.

Red-legged Partridge

Alectoris rufa

Common introduced resident

In first winter period only sizeable coveys reported Jan when 28 Hindolveston and 19 Spixworth.

Breeding records included (pairs): Scolt Head 7 (only one brood due to adverse weather), Blakeney Point 4, North Barningham 4 and Welney 3 (no broods). NBA results showed the species was present in 84% of tetrads covered in breeding season with an average of 6.1 pairs per occupied tetrad. Unusually one crossing road early morning Carrow Road, Norwich June 19th.

In second winter period more coveys reported: *Sept* 18 Crostwick Common; *Oct* 30 Choseley, 28 Narford, 20 Themelthorpe; *Nov* 44 East Somerton, 36 Cockley Cley, 34 Easton; *Nov/Dec* 30 East Tuddenham. Also counts of 220 Shadwell Estate Sept and 125 Itteringham Oct.

Grey Partridge

Perdix perdix

Resident

The following double-figure coveys reported: *Jan* 20 Corpusty, 19 Barrow Common; *Feb* 21 Wootton Carr; *Oct* 12 Flitcham, 11 Marham; *Nov* 13 Yarmouth (Bure Park); *Dec* 11 Castle Rising.

Breeding reported as still declining in Brecks, though up to 200 pairs on one farm of 250 acres. At Warham 91 pairs compared with 500 in 1994. In contrast at Pudding Norton 'large increase in breeding birds where lack of hedgerows compensated by leaving beetle-belts of set-aside in fields'. Also good population Gateley/Sennowe Park with several family parties observed; at Bayfield Estate 5 pairs, where none 1999. Elsewhere counts (pairs) of 11 Wootton Carr, 6 Scolt Head (only one brood), 5 Sparham (870 mixed acres), 4 North Wootton and 3 North Barningham. NBA results showed the species was present in 41% of tetrads covered in breeding season with an average of 2 pairs per occupied tetrad.

Quail

Coturnix coturnix

Summer visitor in erratic numbers; sporadic breeder

One winter record, flushed near clifftop Sheringham Jan 30th (MPT).

Subsequently calling male Scolt Head April 22nd, one flushed there April 29th, and calling male Winterton May 1st. More widespread from mid-May with calling males at Burnham Norton, Claxton, Lessingham (2 until mid-Aug), Little Barningham, Scolt Head, Sheringham (2), Sncttisham, Southery Fen and Thurne.

During rest of summer calling males as follows: *June* Brancaster Staithe, Chedgrave, Felthwell (2), Fring (2), Holme/Thornham (2), Hopton Point, Lower Saxthorpe (2), Ringstead

(2), Stanford TA, Weston Longville (2); *July* Docketing, Feltwell Anchor (4); *Aug* Brancaster (2), Choseley, Great Cressingham, Salthouse Heath (2). Only definite record of breeding at Brancaster where brood of 6 July/Aug.

Sept migrants at Waxham/Horsey 20th, Ten Mile Bank 21st and Scolt Head 22nd.

Common Pheasant

Phasianus colchicus

Common introduced resident

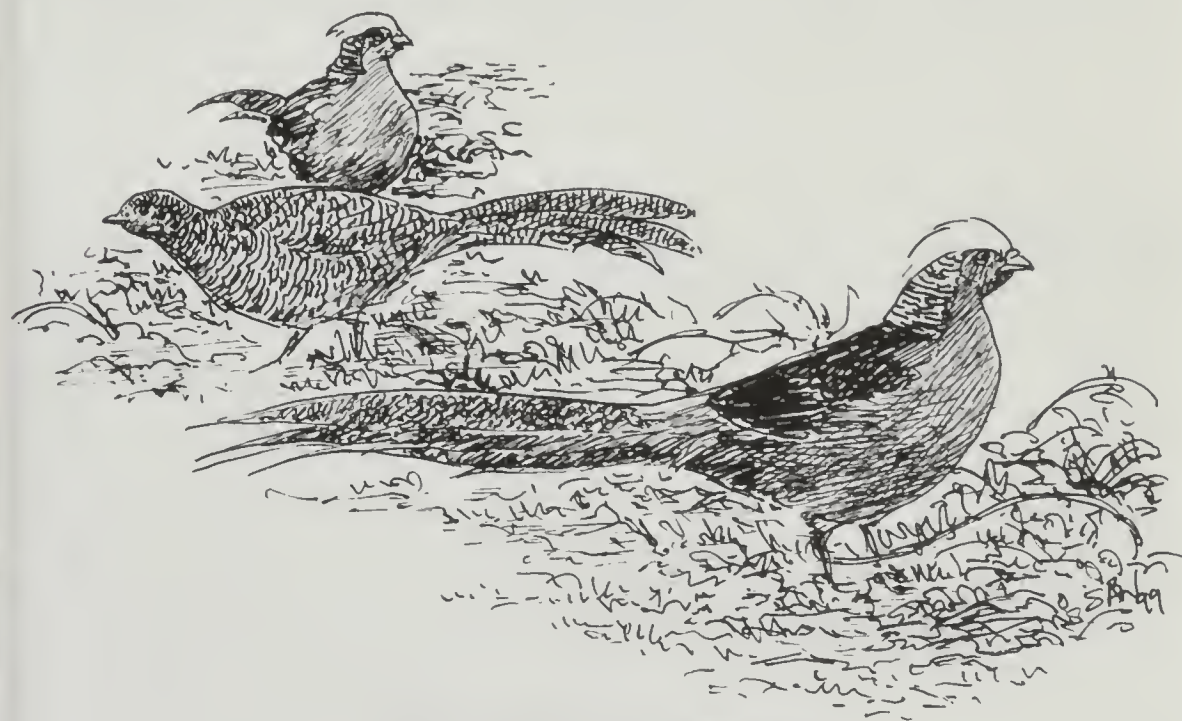
A spring count of 3000 at Thompson and Brancaster Farms. Breeding: Welney 15 broods, Scolt Head 11 males but only 3 broods, Wheatfen 10 pairs. NBA results showed the species was present in 91% of tetrads covered in breeding season with an average of 13.4 pairs per occupied tetrad.

Golden Pheasant

Chrysolophus pictus

Scarce and local introduced resident

Only regularly recorded at Wayland Wood (max 12), Wolferton (max 5) and Great Hockham (max 5 - female with 4 young also seen in June). Also irregular records from Merton (males calling at 5 different sites in May), East Wretham (6), West Harling (5) and Thompson (2). In addition isolated sightings from Bridgham Heath (3), Kilverstone (2), Lynford (2) and Swaffham Heath (1).



Golden Pheasant (*Stewart Wright*)

Water Rail

Rallus aquaticus

Resident, passage migrant and winter visitor

Winter records from 70 widespread localities. Peak counts from most regularly monitored

sites:

	Jan	Feb	Mar	Apr	Sep	Oct	Nov	Dec
Holme	3	2	3	1	3	7	2	6
Titchwell	3	3	2	2	2	3	4	3
Brancaster Hbr	1	2	2	-	-	-	1	1
Cley	2	-	-	1	1	1	4	-
Hickling Broad	20	-	-	3	-	-	6	3
Horning Waterworks	3	4	-	-	-	-	5	4
Strumpshaw	2	1	-	5	3	4	3	2
Tallents Meadow Lake	2	3	-	-	2	2	-	-
Welney	2	1	1	5	2	2	1	1

Due to the habitat of this species undoubtedly larger numbers occur but the following counts of 3 or more also give an indication of other suitable localities: Barton Turf (Drakes Marsh) 5 April; Brundall (Breydeston Marsh) 3 Sept; Catfield Fen 7 Nov; Dilham (Broad Fen) 5 Sept 4 Oct; East Ruston 5 Oct, 4 Dec; Horning Hall Marshes 10 Nov, 4 Dec; How Hill 5 Dec; Lopham Fen 8 March; Pensthorpe 3 Dec; Ranworth Broad 3 Jan; Thompson Water 3 Nov.

Breeding confirmed at Cley (juv Aug), Hickling Broad (17 calling May in response to taped calls - adult with 5 chicks July), Holkham NNR (4 pairs), Strumpshaw (5 calling April - at least 2 broods), Surlingham Church Marsh (juv Aug), Titchwell (10 pairs) and Welney (4 pairs - chick July). Breeding presumably also took place at Lopham Fen, where singing April, and Salthouse, where calling May.

Nov coastal migrants Winterton 21st and Scolt Head 24th.

Spotted Crake

Porzana porzana

Scarce passage migrant, rare in winter

One calling Welney July 11th-17th (JBK). One also calling Titchwell July 30th and Aug 3rd and then same, or another, present Aug 15th-Oct 17th (AN *et al*). The fifth year in succession that this species has occurred in autumn at Titchwell.



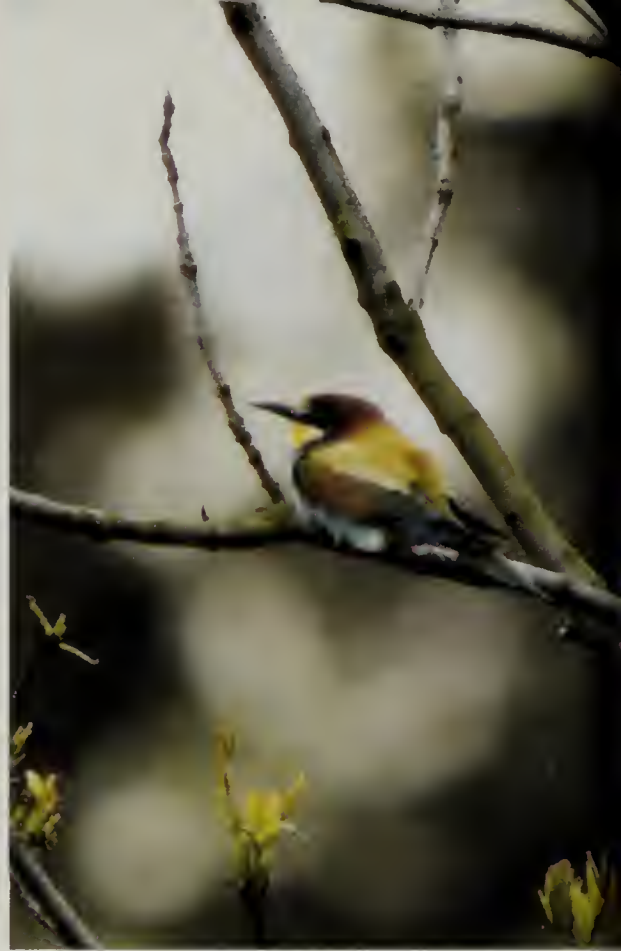
Corncrake (Richard Millington)



Mediterranean Gull – this species maintains its stronghold at Yarmouth (*Alan Tate*).

Great Crested Grebe – a common resident in the Broads (*David Macfarlane*).





Bee-eaters – an over-nighting party of 4 birds was gratefully received by county listers (*left Robin Chittenden, right Julian Bhalerao*).

Slender-billed Gulls – a remarkable repeat of events at Cley in 1987 (*Robin Chittenden*).





Wood Warbler – this welcome migrant has failed to breed since 1955; Black Redstart – adult males in spring are a scarce sight (*Julian Bhalerao*).

Lawny Pipit – present for one day at Winterton in May (*Iain Leach*).





Great White Egret – a fine portrait taken at Welney (*Bill Baston*).

Corncrake*Crex crex***Rare passage migrant**

In spring one calling Reepham May 1st (DIR RMR). In autumn a well-watched individual in a harvested linseed field at Cley Sept 24th (GWo *et al*) and further singles flushed at Sheringham Sept 25th (SCV *et al*) and Sea Palling Oct 1st (AJK). An astonishing series of records, following the blank years 1993-98 and two in 1999; the last year four were recorded in one year was 1972.

Moorhen*Gallinula chloropus***Abundant resident; immigrants in autumn**

Peak monthly counts at the most regularly monitored sites:

	Jan	Feb	Mar	Apr	Aug	Sep	Oct	Nov	Dec
Holme	39	57	28	5	35	20	21	40	25
Holkham NNR	54	102	66	4	8	-	-	47	52
Holkham Park Lake	64	47	48	32	32	38	25	60	43
Stiffkey Fen	38	26	26	21	54	30	39	33	30
Blakeney GM	18	11	18	18	4	14	18	18	16
Cley	98	93	33	68	44	24	31	61	109
Salthouse	63	40	33	27	54	37	48	30	44

Other notable counts: *Jan* 53 Felbrigg Park Lake, 40 Thurning Hall; *Feb* 41 Brancaster; *March* 27 East Wretham; *May* 156 Holkham NNR; *July* 46 Stiffkey Fen; *Sept* 27 Kelling WM, 26 Strumpshaw; *Dec* 26 Hardley Flood, 27 Kelling WM.

Records of breeding pairs include: East Wretham 3, Holkham NNR 93, Holme 20, Lakenheath Washes 3, Sheringham 3, Welney no data but common, Wheatfen 8, Wootton Carr 5. NBA results showed the species was present in 87% of tetrads covered in breeding season with an average of 5.2 pairs per occupied tetrad. In Diss area recorded in 19 out of 20 tetrads with total of 212 pairs.

One dead on tide line Caister Dec 29th.

Coot*Fulica atra***Common resident and winter visitor**

Monthly max at all regularly counted sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Holme	54	201	140	38	29	10	87	119	149	39	26	72
Holkham NNR	172	136	195	72	375	-	51	70	32	34	147	223
Holkham Park Lake	455	425	164	150	45	23	-	150	180	128	250	220
Breydon/Berney	1192	860	537	-	-	-	-	-	-	-	493	1476
Mid-Yare RSPB	5	117	29	23	2	-	10	100	44	80	155	202
Rockland Broad	14	21	14	16	14	17	160	185	110	53	32	30
Welney	508	730	749	872	413	681	395	-	41	228	281	376

National importance (winter): 1100

Other counts exceeding 100: Colney GP 605 Jan; Filby Broad 121 Aug; Hickling Broad 800 Oct, 500 Dec; How Hill Reedham Water 101 July, 230 Aug, 155 Sept; Lakenheath Washes 113 Feb, 140 July, 201 Aug; Ormesby Broad 129 July, 236 Aug, 134 Sept; 85 Pentney GP 249 Sept, 265 Oct, 227 Nov; Rollesby Broad 200 Dec; Sennowe Park Lake 302 Jan; Strumpshaw 158 Dec; Titchwell 125 Aug, 137 Sept; Tottenhill GP 118 July, 148 Aug, 112 Nov; Whitlingham Lane GP 207 Aug, 252 Dec.

Breeding records (pairs/broods) from: Blickling Lake, Buckenham Fen, East Wretham (Lang Mere) 7, Holkham NNR 154, Holme 20, How Hill sev, Kettlestone Common, Lynford Lake 2, Lakenheath Washes 13, Norwich Waterworks, Salthouse 3, Welney 205 (many nests failing as floods receded May onwards), Wheatfen 6.

Coastal migrants/wanderers Sheringham March 31st and Blakeney Point Dec 29th.

1999 Amendment: Count of 1650 Holkham Park Lake Jan in fact referred to Hickling Broad.

Common Crane

Grus grus

Resident colony in Broads since 1979; some records may relate to continental migrants

The Broadland 'flock' remained throughout the year, subject to minor wanderings (see below), with max counts of 11 in both winter periods although they were rarely seen together. Two juvs from the previous year were regularly seen Jan/Feb.

Elsewhere wanderers from the above group, or possibly migrants, as follows: *March* south-east Carlton Rode (nr Attleborough) 5th, Blakeney GM/Cley 6th-11th, 4 high north-east Breydon 21st; *April* west along north coast (East Runton, West Runton, Brancaster Hbr, Holme) and then south Snettisham 1st, 2 east then south-west Holme/Hunstanton 9th, over Stanford TA 22nd/23rd, 2 in off sea Scolt Head and then west Titchwell/Holme 25th, south-west Cranwich GP 29th; *May* over Trunch 14th, Berney 25th-29th, east Fulmodeston/Sennowe Park 27th; *June* north-west Belton 2nd; *July* with captive birds Pensthorpe 20th/21st; *Sept* south Holme 17th, north-west North Wootton 20th, east Scolt Head 25th. Also one Berney Sept 2nd-Oct 15th.

Oystercatcher

Haematopus ostralegus

Common winter visitor, passage migrant and breeder

Table includes all sites holding 500 or more:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Terrington	58	37	1569	186	300	-	630	457	309	-	41	-
Snettisham	3504	5188	2818	1270	1292	500	1982	5500	901	4500	2550	2330
Holme	772	679	418	463	423	269	232	760	660	663	739	870
Titchwell	527	230	300	492	200	146	99	170	300+	179	117	358
Scolt/Brancaster Hbr	803	668	659	459	484	367	536	750	815	990	864	712
Wells Hbr	530	358	515	60	-	60	-	195	282	351	364	317
Warham SM	560	597	3	26	-	34	510	804	4	855	852	406
Blakeney Hbr	413	473	396	-	-	-	-	220	650	-	342	327

National importance (winter): 3600

The only other noteworthy count was 1031 Ousemouth March.

Snettisham showed a change in fortune with a monthly mean of 2694 compared with 1904 in 1999, counts otherwise similar to last year.

A total of 317 breeding pairs reported: coastal sites (beaches and grazing marshes) Holme Beach 18, Holme GM 13, Scolt Head 108 (40-50 young fledged), Holkham Beach (Burnham Overy-Stiffkey) 67 (14+ young fledged), Holkham GM 47, Blakeney Point 59, Cley 1, Kelling WM 2, Yarmouth 2 (one at north quay on roof and other on North Beach).

Inland a total of 47 pairs noted at 25 sites: Brecks (6 - incomplete data), Buckenham (2), Cantley (3), Cranwich GP, Earsham (1-2), Flitcham, Foulden (2), Gillingham Estate, Gooderstone (7), Lang Mere, Middleton GP, Northwold, Pentney GP, Saxthorpe/Briston/Thurning (3), Sculthorpe (6+), Shernbourne, Sennowe Park, Sparham GP, Sparham NWT, Welney (3), Wereham, Whitlingham Lane GP (2), Wissington BF.

Most visible migration noted Scolt Head where 60 north-east April 13th, and in autumn to west 44 July 30th, 83 Aug 12th and 64 next day.

The largest inland group 13 at Welney March 27th.

An albino again at Scolt Head/Brancaster Hbr during both winter periods.

Black-winged Stilt

Himantopus himantopus

Vagrant, mostly in late spring/summer, has bred

The familiar long-staying Titchwell bird remained into its eighth year, with visits to nearby Brancaster GM in May and Holme in June.

Avocet

Recurvirostra avosetta

Breeding summer visitor, increasing in winter

Monthly max at main sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Terrington		28	149	72	-	-	409	-	1	-	-	-
Ongar Hill/Ousemouth		11	60	-	-	67	500	450	-	-	-	-
Titchwell	1	87	109	31	81	81	12	40	11	4	1	1
Holkham	4	12	33	73	105	23	43	7	16	-	-	-
Cley	10	71	151	149	123	119	8	9	1	2	10	18
Breydon/Berney	64	177	205	114	82	198	*362	*519	*490	*320	61	134
Welney	-	2	36	40	52	34	34	6	5	1	-	-

* Monthly record counts

The first winter period saw the usual numbers, with the exception of Breydon when 177 late Feb. Apart from tabulated sites 59 Salthouse April, 76 May and 41 June; also notable spring count of 39 Hickling April 1st. Other noteworthy records at this time included one east Walcott March 9th, 2 Whitlingham Lane GP March 15th, one Eccles March 27th (on beach) and 2 Rockland Broad April 8th.

The number of breeding pairs bounced back from last year's drop with 279-309 pairs at 14 sites, a record county total. Specific success or otherwise recorded at 6 sites where 233-253 pairs fledging only 57 young, illustrating the very poor fledging success. Flooding and predation was high at two of the main coastal sites with Foxes, Black-headed Gulls and Grey Herons causing much of the problem, while flooding at one inland site caused 24 pairs to lose clutches. Egg-collectors still continue to be a problem with one coastal site losing several clutches for the second year running.



Avocets (*Robert Gillmor*)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Pairs	126	157	174	209	214	203	181	252-267	186	279-309
Sites	n/a	n/a	n/a	n/a	10	11	13	16	11	14

Large numbers built up early at sites during late summer, possibly as a result of breeding failures. Breydon continues to attract increasing numbers each year; the months July-Oct saw the site's previous highest figures beaten each month peaking with 519 Aug 12th, while at Ongar Hill counts of 500 July 22nd and 450 Aug 5th were exceptional.

Movements noted at sea were more obvious between north coast breeding sites and late summer staging posts, with 2 west Mundesley June 4th, 11 south Hunstanton Aug 12th, 12 east Salthouse with presumably same birds passing south at Horsey Sept 23rd, and 4 west Weybourne Sept 30th. Also unusually one Pensthorpe Aug 27th.

Stone Curlew

Burhinus oedicephalus

Breeding summer visitor, mainly to Brecks

First records from Cockley Cley March 10th and 3 Weeting March 26th. Away from Brecks only spring record Langham April 30th. In Norfolk/Suffolk Brecks a total of 172 pairs (159 in 1999) another notable increase, with 88 pairs in Norfolk, though poor fledging success with only 94 definitely fledged (0.55 per pair) (per RSPB).

Late summer/autumn records from outside Brecks included juv Blakeney Point Aug 13th, then Cley Aug 14th-23rd, Breydon Aug 26th-Sept 27th, and West Runton east over village Sept 4th. No details submitted of any large gatherings during autumn. At one site 12 remained into mid-Dec.

Little Ringed Plover

Charadrius dubius

Breeding summer visitor and passage migrant

First arrivals Buckenham March 7th and 10th/11th, also 2 at Winterton/Horsey and Welney

March 17th and 19th respectively. Main arrivals daily from March 23rd. Largest spring counts: 5 Buekenham April 8th, 4 Lakenheath Washes March 31st, 7 Pensthorpe April 2nd, 5 Pentney GP April 23rd, 8 Welney April 30th and 5 Wissington BF May. Visible migration at this time included 2 west Scolt Head April 19th, and singles east Beeston Bump May 13th and Sheringham 15th.

Breeding again very similar to last year with 32-34 pairs (33 in 1999) at 16 sites (18 in 1999): *north coast* none; *Broads* 3 pairs at 3 sites; *inland* 17-19 pairs at 10 sites; *Fens* 12 pairs at 3 sites. Details of success poorly recorded, though the wet June weather and flooding of one site accounted for at least 8 nests failing. A min total of 18 young fledged from 7 sites, half of which came from 4 pairs that had previously failed due to flooding on May 31st/June 1st.

Late summer concentrations of 5+ included: 12 Cley July 4th and 8 Aug 14th; 7 Buekenham July 7th; 9 Cantley BF July 20th/21st and 5 Aug 17th; 5 Pentney GP July 19th; 10 Wissington BF July 8th; 12 Welney July 11th, 18 24th, 17 Aug 2nd, 13 18th and 10 28th. Visible migration included singles west Becston Bump Aug 14th and Scolt Head Sept 26th; also migrant Sidestrand Aug 26th. Last of year 2 Titchwell Sept 28th.

A colour-ringed bird at Lakenheath Washes March 31st had been marked in Yorkshire in 1999.

Ringed Plover

Charadrius hiaticula

Breeding summer visitor, passage migrant, and winter visitor in small numbers

Most regularly counted sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Snettisham		30	80	62	39	34	150	420	20	-	-	1
Holme	40	32	67	37	89	28	88	330	528	340	6	74
Titchwell	4	11	83	34	126	20	21	88	16	36	15	10
Scolt/Brancaster Hbr	63	88	93	97	375	279	335	1045	887	322	48	63
Wells Hbr	91	4	2	-	-	18	-	81	300	246	117	87
Blakeney Hbr	85	64	55	-	-	-	-	-	-	-	134	28
Breydon/Berney	81	84	53	32	305	38	68	242	204	124	53	84

National importance: 290 (winter), 300 (passage)

Impressive spring counts of *tundrae* race birds Scolt Head where 375 May 18th, 310 23rd and 279 June 4th, and Breydon 305 May 13th. Also noted inland at Welney where 43 May 12th, 37 19th, 25 25th and 12 June 7th.

A total of 182 pairs reported from 14 sites; though details not received from some sites this total still represents a very significant decline from 1995 when a NBC survey found 261-268 pairs. Totals included: Holme 16 (5-10 fledged), Titchwell 16, Brancaster Beach 8, Scolt Head 61 (75+ fledged), Holkham NNR 45 (22+ fledged), Blakeney Point 18, Salthouse 4, Overstrand 2, Horsey 1, Winterton 5 and Yarmouth 2. Inland only 4 pairs reported, at Gooderstone one and Welney 3 (all failed).

Autumn counts again highest Scolt Head where 1045 Aug 28th and 887 Sept 4th. Visible migration included 170 west Scolt Head Aug 13th and 21 west Sheringham Oct 31st. At Waxham 17 on arable Nov 11th.

Kentish Plover*Charadrius alexandrinus**Scarce but annual passage migrant, mostly in spring; rare inland*

Waxham/Horsey April 22nd, female west Salthouse June 5th and male Breydon June 17th.

Dotterel*Charadrius morinellus**Scarce but annual passage migrant; has over-wintered*

In spring 10 (2 males 8 females) Choseley April 26th, and in May Breydon 6th, female south Winterton 8th, female Acle and 2 south Horsey both 11th. A rare June record 2 west Cley 18th.

During autumn an adult Choseley Aug 23rd/24th, then in Sept 2 Gun Hill (Burnham Overy Dunes) 2nd, juvs Snettisham 7th and 10th-12th, Titchwell/Choseley 18th/19th, one from east Sheringham 21st, juvs Mundesley/Paston 23rd/24th and Walcott/Happisburgh 24th-26th, 2 Gun Hill 27th and again presumably same Thornham Point 28th.

Golden Plover*Pluvialis apricaria**Passage migrant and increasing winter visitor*

Most regularly counted sites:

	Jan	Feb	Mar	Apr	Aug	Sep	Oct	Nov	Dec
Snettisham	-	650	350	700	1000	1500	-	3125	1600
Holme	1000	900	1100	-	92	1500	90	470	700
Thornham/Titchwell	2000	3000	300	-	300	500	1500	1100	600
Scolt/Branchester Hbr	1050	950	380	40	1000	1500	1200	6	-
Blakeney Hbr	200	655	150	-	-	-	-	-	-
Breydon	*10600	10100	1420	-	1560	1150	4450	7300	8750

*National importance (winter): 2500**Use north coast counts with caution as much interchange between these and inland sites.*** Count was again a site and county record.*

Other than those tabulated there were a further 13 sites (8 in 1999) holding 2000+: Acle Marshes 4000 Nov, Burnham Norton 2550 Nov and 3-4000 Dec, East Harling 1500-2000 Dec, Edgefield 2000 Jan and Oct, Fakenham 3000 Jan, Felbrigg Park 2500 Dec, Hoe 2000 Feb and 2500 Dec, Oulton 2000 Nov, Ousemouth 4000 Dec, Postwick 2000 Jan, South Lopham 3000 Jan, Wretham/Thorpe Camp 3000 Dec, Yarmouth Bure Loop 3000 Dec; 13 other sites (7 in 1999) held counts of 1000 (unless otherwise stated): Castle Acre 1400 Jan, Cley Feb, East Wretham Feb, Felmingham Feb, Fersfield 1800 Feb, Great Hockham Jan, Halvergate Marshes Nov, Holkham GM Oct and Nov, Roughton Nov, Scole Common Oct, Sharrington Feb, Stiffkey Fen Sept, Winterton/Hemsby Dec.

Westerly movements noted Scolt Head where 81 Aug 2nd and 95 8th, later in autumn 180 Sheringham Nov 5th, and at Waxham 500 arrived in off sea 25th.

A grey bird resembling American Golden Plover (P dominica) Wereham Jan 30th/31st.



Grey Plovers
(Gary Wright)

Grey Plover*Pluvialis squatarola***Passage migrant and winter visitor**

Regularly counted sites holding 200+ birds:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Terrington	1546	726	1366	1403	1185	49	1662	2621	-	705	-
Ousemouth	629	49	40	757	1351	-	250	420	600	151	-
Snettisham	680	65	460	250	1530	1	1200	-	-	521	750
Holme	388	412	461	298	361	27	435	880	855	350	729
Titchwell	640	20	37	66	57	10	200	152	58	85	123
Scolt/Brancaster Hbr	246	297	220	263	359	59	235	305	268	183	196
Warham SM	260	260	-	120	-	-	320	1	270	197	81

International importance (winter): 1500; National importance (winter): 430

Only other counts of 200+ were 365 Stiffkey SM Jan and 368 Feb, 264 Thornham April and 283 Scolt Head June.

Inland numbers higher than last year. At Welney Jan 15th, March 26th, 2 27th, 30th/31st, 2 April 3rd, 5th, daily May 1st-17th max 9 on 5th, July 24th, 2 Aug 5th and Oct 1st. Elsewhere Fersfield Feb 15th, Lakenheath Washes March 26th and May 3rd, Hickling Broad April 1st and 2 May 13th, Buckenham May 3rd, Pentney GP May 5th/6th, 10th and 12th/13th, King's Lynn BF Aug 22nd, and Lopham Fen Nov 19th.

Visible migration noted Scolt Head where 27 north-east April 27th, and 51 west Aug 10th and 47 west Sept 10th, and at Winterton 30 south Nov 6th (0715-0815).

Lapwing*Vanellus vanellus***Passage migrant and winter visitor; declining breeder**

Most regularly counted sites:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Terrington	580	2200	-	-	-	1245	237		5010	-
Ousemouth	3789	4000	-	-	-	-	-	2000	4000	2000
Holme	460	430	154	66	50	-	3	70	140	220
Titchwell	880	1500	15	-	96	52	289	295	425	1000
Scolt/Brancaster Hbr	1950	380	220	-	40	75	9	30	450	950
Holkham NNR	405	476	828	358	130	432	928	404	343	1000
Blakeney GM/Cley	1059	1811	225	132	63	-	304	496	458	300
Breydon/Berney	17700	8400	1500	258	210	500	600	3100	7600	14100
Welney	1500	3490	326	-	400	360	600	2000	1500	1700

International and National importance (winter): 20,000

Less data available for some wintering sites. Counts of 1000+ occurred at 13 sites, compared with 26 in 1999. Other than those tabulated above, sites as follows: King's Lynn 1000 Jan, Wells Hbr 1600 Feb, Stiffkey 1500 Feb and 2500 Dec, Cley 1560 Feb, Bacton 1000 Jan, Horsey 2000 Jan, Halvergate Marshes 10,000 Nov, Buckenham 1000 Nov, Postwick 1000 Jan, Earsham 2500 Jan, Felbrigg Park 1000 Dec, Langham 1000 Feb.

Breeding coverage somewhat down on last year with total of 947-949 pairs (960 in 1999).

The lion's share as usual on north coast (388) with increasing numbers from Broads (265), and far fewer records from Brecks (106) and Fens (164). Numbers and sites (with last year's figures where applicable): north coast Snettisham 30, Holme 35 (33) very poor success, Thornham GM 9, Brancaster GM 13 very poor success due to corvid predation, Holkham NNR 296 (283) with 130 young fledged, Cley (Serpentine) 5; Broads Berney 129 (108) poor success due to fox predation, Buckenham/Cantley/Strumpshaw 135 (129), Claxton Marshes 1; Brecks Cranwich 2, East Wretham 2, Foul登 6, Gooderstone area 53, Lang Mere Hill 1, Larling 1, Northwold 1, Oxborough 2, Shropham 17, Stanford TA 8, Thetford Nunnery Meadows 7, Whitington 2; Fens Hockwold Sluice 4, Welney 160 (109) flooding on two occasions caused very poor success; inland Baconsthorpe 4-5, Briston area 4, Bergh Apton 2, Castle Acre 1, Edgefield 3, Felbrigg Park 6, Pentney GP 2, Reepham 2, Stody 3, Sustead 2-3. Numbers still continue to rise at Holkham, Yare valley, Berney and Welney, though flooding and fox predation at several sites kept productivity low.

June migration of failed adults and young birds noted at Scolt Head with 105 west 19th.

Autumn westerly migration: Scolt Head 135 Sept 18th, 185 20th, 415 Oct 16th, 350 18th and 1650 21st; Holme 470 Oct 15th, 433 17th, 585 Nov 15th, 790 16th, 800 Dec 1st and 310 2nd. Other counts included: 2360 Hunstanton Cliffs Oct 15th, 311 22nd and 600 Dec 20th(all south), 280 in from north Blakeney Point Nov 15th, 880 Salthouse Oct 15th, 400 Sheringham (1415-1615) Oct 16th and 500 Becston Bump (0750-0820) Oct 21st.

A leucistic individual at Welney July 1st-10th.

Knot

Calidris canutus

Passage migrant, winter visitor and non-breeding summer visitor

Monthly max at main sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Terrington	1430	1020	12960	11940	2000	-	9800	3430	20	-	8404	-
Ousemouth	210	28	610	600	1061	-	2000	-	470	3000	600	-
Snettisham	25250	18000	12015	36500	2012	3300	7630	20000	35000	10000	30000	30000
Holme	426	233	183	36	2000	-	150	24000	29050	27060	28000	4068
Titchwell	-	25	-	-	100	64	3	320	7190	340	200	32
Scolt/Brancaster Hbr	160	55	72	320	215	285	22	32	650	705	49	14
Wells Hbr	1020	35	70	-	-	-	-	-	-	106	642	1800
Warham SM	930	2510	-	-	-	-	-	66	-	100	860	510
Breydon	191	162	44	41	148	7	16	12	32	71	156	362

International importance (winter): 3500; National importance (winter): 2900

Birds recorded at Scolt Head almost daily throughout June and all in non-breeding plumage. Numbers appeared to have stabilised in Wash after declines in the 1990s.

Highest counts elsewhere: Ongar Hill 5000 July, Hunstanton 6500 Nov, Thornham 10,000 Aug and Stiffkey SM 451 Feb.

First juv Breydon Aug 13th.

Largest westerly coastal movements all Scolt Head where 228 Sept 10th, 305 17th, 420 30th and 185 Oct 10th. Only other movement of note 15 north Winterton July 11th.

More records than normal inland with most at Welney where one March 14th and an exceptional 32 March 21st, and almost daily May 3rd-13th when peak count 16 5th, and in

autumn one Sept 4th. Elsewhere one Lakenheath Washes May 4th and 2 6th, singles Buckenham May 1st, 3rd and Sept 15th, Pentney GP May 12th and Tibenham (with Golden Plovers) Nov 18th..

Sanderling

Calidris alba

Passage migrant and winter visitor

Monthly max at main sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Snettisham	-	30	240	10	441	875	2000	1600	730	-	160	50
Holme	498	261	750	1509	886	60	410	580	1060	590	162	571
Titchwell	83	170	280	100	467	72	180	31	80	109	130	550
Scolt/Brancaster Hbr	31	47	51	149	625	308	137	192	94	86	54	24

International importance: 1000 (winter); National importance: 230

Only noteworthy counts away from main sites: Hunstanton 60 Feb, 187 Sept and 41 Dec, Thornham 271 May, 101 Oct and 170 Dec, Brancaster 65 Aug, Burnham Overy 100 Sept and 30 Dec, Holkham Bay 75 May and 66 June, Wells Hbr 44 Aug, 140 Sept and 196 Nov. Numbers appear to be increasing in the north-west of county both as passage migrant and winter visitor, whilst at Breydon numbers are decreasing with the year's peak count just 16 April 16th.

Only movement of note 33 west Scolt Head Sept 11th.

Inland all records in May when up to 5 Welney on 8 dates 3rd-23rd, and singles Pentney GP 6th and 9th/10th, and Pensthorpe 9th.

Little Stint

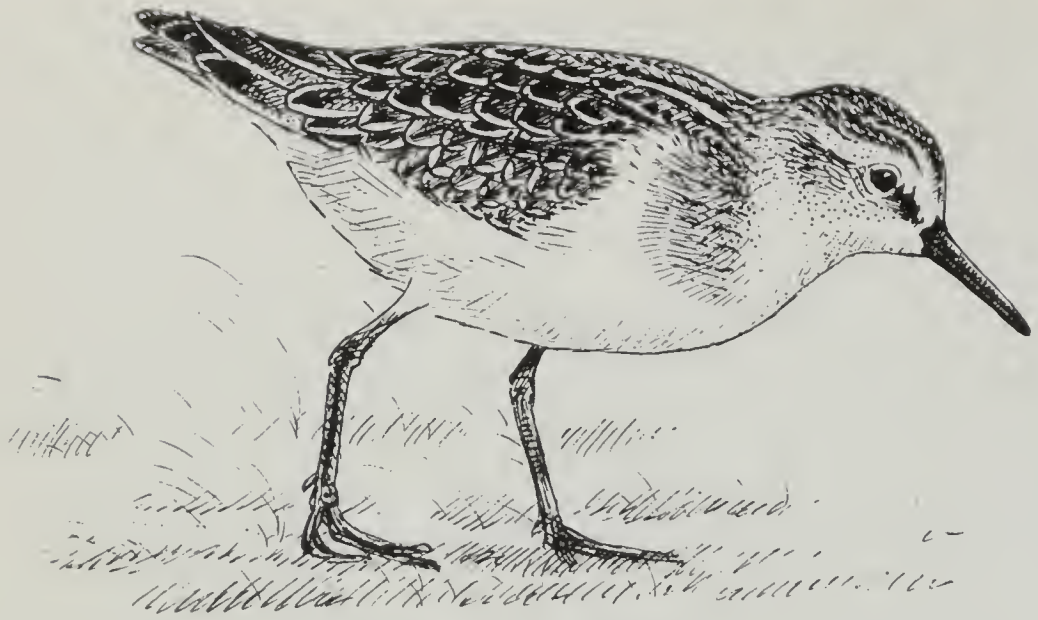
Calidris minuta

Double passage migrant in fluctuating numbers

Spring passage commenced much earlier than normal when in March singles Blakeney GM 11th, Cley 12th and Welney 26th-31st. In April up to 2 Welney 1st-6th and 18th, and singles Cley and Salthouse 30th. Numbers small in May when best counts 6 Welney 6th/7th, 5 Breydon/Berney 12th, 3 Cley 9th and 21st, and 1-2 Titchwell, Blakeney Point and Salthouse. Passage continued during June when at Cley 4 9th, 2 10th, one 20th, and 2 21st-23rd, 2 Breydon 14th and 21st-23rd, and one 17th, and one Titchwell also 17th.

Autumn passage did not commence until late July when first Cley 21st and Breydon 22nd. Highest counts during rest of month 3 Welney 24th and 4 Cley 29th. Movement during rest of autumn small, best counts in Aug 10 Titchwell 14th-31st and 7 Cley 30th, where 6 22nd and 31st. Away from these sites only other records 1-2 Snettisham, Holme, Scolt Head and Buckenham during month. Best site in Sept Cley where up to 12 1st-5th, 19 28th and 10 29th. Elsewhere max 13 Titchwell 29th, 9 Buckenham 27th-29th, 3 Holme 1st, and 7th-10th, 3 Welney 5th, and 1-2 Scolt Head, Burnham Overy and Cantley BF.

During first half Oct small numbers continued to be reported with highest counts 5 Titchwell 5th and 5 Cley 8th. Few after mid-month until small influx at end when 1-2 Titchwell, Cley and Welney. Small numbers continued to be reported during early Nov when on 1st 3 Welney, 2 Titchwell and singles Cley and Buckenham. During latter half of month Snettisham 19th/20th and Titchwell 30th. In Dec more than usual with one Snettisham 6th and 3 17th/18th, one Breydon/Berney 16th and 2 23rd, singles Buckenham 3rd and 19th, and Titchwell 29th.



Little Stint (Richard Millington)

Temminck's Stint

Calidris temminckii

Passage migrant, more frequent in spring

The best spring passage for several years with around 32 recorded, all during May and most in first half of month. Main site Cley where 2 5th/6th, 9 7th, 7 9th, 5 16th-18th, 4 19th/20th, 2 23rd/24th, and one 25th. Elsewhere 2 Berney 8th/9th, 3 14th, and one 16th, one Welney 11th/12th and 2 16th-22nd, 2 Titchwell 14th, and singles Scolt Head 6th, Stiffkey Fen 6th/7th, Pentney GP 8th, Sparham GP 9th and Burnham Norton 14th.

In autumn singles Titchwell Aug 22nd-25th, 29th/30th and Sept 6th, west Salthouse Sept 1st, Cley Sept 1st-3rd and 5th, and King's Lynn BF Sept 8th-10th.

White-rumped Sandpiper

Calidris fuscicollis

Vagrant from North America

After none the previous year, two typical records in autumn when adults Cley Aug 19th-22nd (MIE AJLS *et al*) and Welney Sept 1st-6th, 8th and 17th/18th (JBK *et al*).

Pectoral Sandpiper

Calidris melanotos

Almost annual autumn vagrant from North America/Siberia; rare in spring

Another good year with 11-12 recorded, all in autumn: Cley July 8th, 16th, Sept 9th-19th, 2 21st/22nd and one 23rd-Oct 3rd, Lakenheath Washes July 17th, Holme July 23rd-28th, Titchwell July 28th (same as Holme individual), Buckenham Sept 7th-17th, Snettisham Sept 20th/21st, Berney Sept 23rd, same or another Sept 30th-Oct 2nd, Welney Sept 30th, and Strumpshaw from early Oct to late in month.

Curlew Sandpiper

Calidris ferruginea

Autumn passage migrant in fluctuating numbers; scarce in spring

Spring passage light with first April when one Cley 26th-29th and 2 30th, and singles Winterton and Breydon 28th. Recorded on 22 dates in May, most Cley where 4 4th and 3 21st, and 1-2 on 9 other dates. Elsewhere during month 3 Breydon 7th and 1-2 Ongar Hill, Titchwell, Holkham GM, Winterton, Caister, Berney and Welney. Spring passage continued

in early June when at Titchwell one 1st, 3 4th and one 9th. Also during month an interesting series of records from Cley with up to 4 present daily from 14th until month end.

First definite autumn migrant Breydon June 28th. During first 3 weeks of July numbers small with 3 Titchwell 2nd/3rd, 3 Breydon 19th, and 1-2 Snettisham and Cley. From July 22nd numbers increased, best site Breydon where 7 22nd, 9 25th and 11 28th. Highest counts elsewhere 5 Welney 31st, 4 Titchwell 24th and 1-3 Snettisham, Holme, Scolt Head, Cley and Cantley BF. Passage of adults continued during early Aug when highest counts 12 Breydon 1st and 5 Welney 1st/2nd.

Passage light during rest of Aug until start of movement of juvs which was not on scale of previous year but still good; peak counts at main sites:

	<i>Aug 20-31</i>	<i>Sep 1-10</i>	<i>Sep 11-20</i>	<i>Sep 21-30</i>
Snettisham	12	6	-	1
Titchwell	21	10	7	3
Scolt/Brancaster Hbr	26	31	13	3
Cley	72	65	15	2
Breydon/Berney	9	5	3	5
Welney	26	28	3	1

Additional counts during this period: 4 Holme Sept 5th-8th, 8 Burnham Overy Sept 5th, 8 Cantley BF Aug 30th, and 1-3 Buckenham, Pentney GP and Salthouse. Small numbers also recorded moving west off Scolt Head where 3 Aug 27th, 7 30th and 6 Sept 10th.

Few in first half Oct when singles Breydon, Wells and Winterton, but small influx from middle of month when 1-2 Buckenham, Cley, Titchwell and Welney. Late birds in Nov when 2 Buckenham and 2 Welney 1st, and 1-2 Cley 6th-14th.

Purple Sandpiper

Calidris maritima

Passage migrant and declining winter visitor in small numbers

Peak monthly counts at main sites:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Heacham/Hunstanton	4	4	3	1	-	-	-	-	1	2	2
Titchwell	2	2	2	2	1	1	-	-	1	1	2
Scolt/Brancaster Hbr	1	1	1	1	2	1	1	-	1	1	-
Sea Palling/Waxham	3	3	2	4	-	-	-	4	3	4	5

Continues to decline as a winter visitor to the county, this especially evident at Heacham/Hunstanton where peak of 67 Feb 1987.

All other records: Holme Nov 3rd/4th and 6th, Blakeney Point 8 Nov 28th (an exceptional count), Cley Nov 7th, Sheringham Jan 4th, 8th-10th, Aug 30th, Sept 5th, and Oct 6th, Caister Feb 13th and 27th, Yarmouth 3 March 28th and one Dec 19th, and Breydon Oct 21st.

Last in spring 2 Scolt Head May 5th and one Titchwell 7th, with first returning birds Titchwell July 22nd and Scolt Head 30th.

Small numbers of migrants also noted moving west at coastal sites with singles Blakeney Point, Cley and Sheringham Sept 3rd, and 3 Cley and one Mundesley Sept 16th.

Dunlin*Calidris alpina**Passage migrant and winter visitor; non-breeders in summer*

Peak counts at main sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Terrington	7018	10700	24655	7440	13440	-	2493	3842	11268	-	9050	-
Ousemouth	1980	38	-	3550	2440	-	650	10	400	1650	422	-
Snettisham	11800	15196	6560	3620	7702	40	4418	6435	2358	-	4380	3500
Holme	730	761	305	297	110	1	53	675	590	170	340	1635
Scolt/Brancaster Hbr	200	396	433	385	435	13	540	718	790	611	460	457
Wells Hbr	586	90	230	-	-	-	-	65	120	250	580	381
Warham SM	1105	2400	-	-	-	-	12	4	-	400	590	736
Blakeney Hbr	121	499	276	-	-	-	-	-	-	-	280	456
Cley	121	85	116	114	120	5	172	40	129	93	22	60
Breydon/Berney	3160	3850	1713	2482	1921	15	511	543	711	1610	3385	3220

International importance (winter): 14,000; National importance (winter): 5300

Other notable counts: Thornham 300 Jan, Titchwell 395 Jan, Burnham Overy Hbr 320 Jan.

Peak inland counts at Welney where 61 March, 57 April, 58 May and 30 Aug, and 25 Buckenham March. First juvs noted Breydon July 16th and Scolt Head next day. An interesting record of 3 with Golden Plover flock Tibenham Nov 22nd.

Best coastal movements: 40 north at dusk Scolt Head May 29th, 715 west Sept 17th, and 285 west Oct 1st, 1288 west Cley Nov 8th (0740-1000), 242 west Mundesley July 16th, and 650 south Winterton Nov 6th (0715-0815) with 200 south 22nd (0745-0815).

Buff-breasted Sandpiper*Tryngites subruficollis**Vagrant from North America*Only record, a juv Titchwell Sept 10th/11th (RLe *et al*).**Ruff***Philomachus pugnax**Double passage migrant: increasing winter visitor; has bred*

Peak monthly counts at main sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Holme	-	21	12	2	-	1	15	4	5	2	40	-
Titchwell	100	93	31	100	1	5	30	100	145	165	150	37
Holkham NNR	4	2	7	7	11	5	3	35	16	16	16	-
Stiffkey FM	-	2	3	1	-	-	4	16	25	28	1	8
Cley	29	16	16	21	11	9	58	70	24	6	23	13
Breydon/Berney	55	144	78	73	27	3	12	29	10	20	6	18
Cantley BF	-	-	13	8	12	4	38	104	30	-	-	-
Buckenham	-	-	25	30	7	35	50	50	97	24	44	10
Welney	22	17	62	100	9	4	86	128	181	150	25	5

National importance (winter): 50

Much more widespread during winter months than usual when additional counts to those in table: 5 Lynn Point Feb 22nd, 9 Thornham Jan 1st, 54 Choseley Jan 8th and 30 Nov 3rd, 24 Brancaster Feb, 11 Burnham Norton March 1st, 12 Burnham Overy Dec 31st, 12 Blakeney GM Feb 17th, 5 Salthouse Feb 1st, 16 Halvergate Jan 13th and 20 Nov 26th, and 6 Pentney GP March 4th. The north coast and Ouse Washes are amongst the most important sites during the winter for this species nationally, and it appears to be increasing as a winter visitor at other sites around the county.

Spring passage poor and few other counts away from tabulated sites.

In contrast one of the best autumn passage for several years with many additional counts: 16 King's Lynn BF Sept 3rd-10th, 9 Lynn Point Sept 2nd and 9 Oct 26th, 4 Hunstanton Cliffs Sept 5th-17th, 21 Brancaster Hbr Aug 31st and 45 Sept 8th, 3 Yarmouth North Beach Sept 3rd, 38 Lakenheath Washes Aug 21st, 23 Wissington BF Aug 25th and 83 Ouse Washes Oct 9th (additional to Welney section).

Small numbers of migrants also recorded moving with 15 east Kelling WM April 2nd, 5 west Seolt Head Aug 7th and 6 south Beeston Bump Aug 19th.

Jack Snipe

Lymnocyptes minimus

Passage migrant and winter visitor; declining

In first winter period best counts from a sensitive site in north-east of county where 3 Jan 3rd, 6 8th and 11 March 5th. Elsewhere 1-2 Bayfield, Brancaster Hbr, Hickling Broad, Holme, Kelling Heath, Lyng-Easthaugh GP, Somerton, Wells and Whitlingham Lane GP. No records after end of March other than singles Martham Broad April 15th and north-east Norfolk May 5th and 7th.

First returning birds Sheringham Sept 20th and 30th, Seolt Head Sept 29th and Sea Palling Oct 6th. More records during rest of Oct when 3 Hempstead Marshes 10th and 1-2 at 11 other localities. Passage continued during early Nov when 4 Winterton 4th and singles at several other coastal sites. Numbers at end of year small with 3 Cantley BF Dec 11th and singles Cley, Dilham Broad Fen, Lyng-Easthaugh GP, Sparham, Titchwell, Upper Sheringham and Winterton. Also at end of year one in off sea Holme Dec 22nd.

Though difficult to detect during winter months, despite increasing observer coverage this species definitely seems to be declining as a winter visitor.



Jack Snipe (Stewart Wright)

Common Snipe

Gallinago gallinago

Passage migrant and winter visitor; declining breeder

During first winter period 30+ recorded at 12 sites (13 in 1999), actual numbers much higher at some: Holme 105 Feb and 50 March, Titchwell 140 Jan, 100 Feb and 64 March, Brancaster 50 Feb, Stiffkey Fen 40 Jan, Cley 60 Jan, Sea Palling 45 Jan, Horsey 70 March (in potato field), Breydon/Berney 207 Jan and 37 March, Horning Water Works 45 Jan, Mid-Yare RSPB 49 Feb and 50 March, Earsham 39 Feb, Harling 31 March in stubble field.

High numbers still present in early spring with 79 Berney April 1st, 53 Mid-Yare RSPB early April and 364 Welney April 6th, the majority soon moving on as evidenced by 10 out to sea Winterton March 31st and 40 east at dusk Holme April 5th.

A notable decline in reported breeding sites to 17 (22 in 1999) and the number of drummers/pairs to 68 (93 in 1999): *Wash* Ken Hill 1; *north coast* Holme 0 (1), Thornham GM 1, Brancaster GM 1, Holkham NNR 13 (9); *Broads* Berney 7 (6), Strumpshaw 2, Buckenham 4, Clippesby 1; *Brecks* Merton 1, Langford 1; *Fens* Welney 30 (47), Hilgay Fen 1; *inland* Castle Acre 1, Lopham Fen 1, West Acre 3. Under-recording may be painting a bleaker picture than in reality, even so this species is struggling to survive even at Welney the most important site, where flooding in late May caused extensive nest losses.

Autumn westward migration: Scolt Head 27 Aug 13th, 117 27th, 41 Sept 5th, 63 10th, 50 17th and 38 18th; Holme 84 Aug 25th, 50 27th and 45 Sept 23rd.

During autumn/second winter period only 11 sites (17 in 1999) held 30+ birds: Holme 50+ Sept; Titchwell 31 Aug, 40 Sept/Oct, 97 Nov, 35 Dec; Burnham Overy Hbr 30 Aug; Holkham NNR 45 Aug and 50 Dec; Stiffkey FM 48 Oct and 71 Nov; Breydon/Berney 145 Sept, 121 Oct and 30 Nov; Strumpshaw 40+ Sept; Buckenham 100 Nov; Cantley BF 50 Aug and 40+ Sept; Hempstead Marshes 52 Oct and 45 Nov.

Dowitcher sp

Limnodromus sp

Vagrant from North America

One in breeding plumage Berney May 7th (PRA KRD), but seen too briefly to be specifically identified.

Woodcock

Scolopax rusticola

Passage migrant and winter visitor; breeder particularly in Brecks

During winter months highest counts: 40-50 flushed during a shoot at Thompson Farms, Brancaster Dec 27th, 18 Grimston Heath Jan 24th, and 5 at Merton Jan 4th, Roydon Common Feb 20th, Wiveton Dec 30th/31st and Wolferton Feb 20th. Smaller numbers at many other sites. Also during winter months total of 18 shot at Repps-with-Bastwick.

Small numbers of coastal migrants noted in spring when 3 Scolt Head April 3rd and 1-2 Titchwell, Salthouse, Weybourne, Mundesley, Winterton and Yarmouth.

During breeding season roding males recorded at following localities: Babingley Common 2, Barton Turf Fen 2, Beeston Regis, Boughton Fen 2, Brettenham Heath 2, Buxton Heath 6-8, Catfield Fen, Flag Heath (Tottington), Cockshoot Broad, Drymere 3, Foulden Common 2, Great Hockham 7, Grimes Graves 4, Holkham Park, Holt Lowes 6, Honing Lock, Hopton, Houghton, Langford, Narborough, Necton, Pentney Heath 3, Roydon Common 3, Sandringham 3, Salthouse Heath, Selbrigg Pond (Bodham), Shadwell Estate 6, Sheringham Park, Stalham Fen 2, Thompson Common, Upton Fen, Wayland Wood, West Runton and Wolferton 4.

Protracted autumn passage with first Holme Sept 10th, but few others until small influx Oct 13th-16th when 1-2 Holme, Blakeney Point, Sea Palling and Happisburgh. Another larger and more widespread influx to coastal sites in first 10 days of Nov when 8 Waxham

8th, 4 Yarmouth 7th, 3 Sea Palling 9th, and 1-2 at 15 other localities including at least 10 noted arriving in off sea.

During a period of colder weather at end of Dec another influx of migrants: Scolt Head 25th, Breydon 26th, Holme, Holkham, Blakeney Point, 3 Eccles and 3 Horsey all 27th, Caister 28th, 2 Holme, 2 Blakeney Point and one Eccles 29th, and Salthouse 31st.

Black-tailed Godwit

Limosa limosa

Increasing passage migrant and winter visitor; declining breeder

Peak monthly counts at main sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Terrington	-	495	802	407	-	-	878	1453	21	-	280	-
Snettisham	-	-	-	-	-	27	30	710*	2100	1200	280	-
Titchwell	1	4	12	7	33	50	50	213	255	145	10	27
Scolt/Brancaster Hbr	-	-	-	375	35	40	15	74	15	1	1	-
Holkham NNR	3	-	17	233	225	58	151	50	37	38	9	1
Cley	64	180	231	192	28	50	129	22	48	76	53	31
Breydon/Berney	807	387	328	450	135	172	964	1387	1131	1020	1155	954
Welney	150	356	280	742	71	217	255	77	4	6	10	38

International importance (winter): 700; National importance (winter): 70

* Reserve record

Highest counts elsewhere: Ongar Hill 500 March, 1500 July and 1800 Aug, Ousemouth 1430 July, North Wootton 1430 July, Holme 57 Sept, Blakeney GM 58 Feb and April, Horsey 27 Nov, Ouse Washes 330 March (in addition to Welney counts) and King's Lynn BF 28 Aug.

Largest movements during year: 50 west Titchwell March 20th and 127 east March 23rd, 67 east Scolt Head/Brancaster Hbr June 30th, 60 west Sept 10th and 63 west 20th, 45 south-west Kelling April 2nd, 15 west Mundesley July 11th, 16 south-east Ranworth Broad March 31st and 13 west Feltwell June 30th.

No breeding records.

Bar-tailed Godwit

Limosa lapponica

Passage migrant and winter visitor; a few non-breeders summer

Monthly max at main sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Terrington	2155	375	582	450	14	-	217	54	26	-	-	-
Snettisham	3020	3650	3018	3500	847	485	750	760	3500	-	3200	2730
Holme	791	377	386	10	62	-	18	53	134	1720	429	221
Titchwell	31	84	-	3	11	1	104	600	3500	3500	433	126
Scolt/Brancaster Hbr	310	298	190	122	128	6	155	183	63	50	150	275
Wells Hbr	63	82	2	-	-	-	23	-	51	10	48	100
Stiffkey SM	430	230	-	-	-	-	-	-	-	-	-	300
Blakeney Hbr	36	44	45	175	-	-	-	-	-	-	41	31

International importance (winter): 700; National importance (winter): 70

Additional counts: Thornham 145 Oct, Burnham Overy Hbr 165 Jan, Cley 50 May and Breydon 25 Feb, 165 May and 28 Dec. During Jan/Feb a summer-plumaged bird regularly noted Cley.

Coastal movement noted in both spring and autumn. In spring 23 west Scolt Head April 12th and 175 north-east out to sea in 3 flocks Blakeney Hbr April 30th. Best counts in autumn: 22 Scolt Head July 3rd, 20 16th, 33 Sept 1st and 43 10th (all west), 36 north Horsey July 15th, 121 west Mundesley (site record) and 35 north Winterton both July 16th, and 23 west Sheringham Sept 6th.

Many more inland records than normal, best site Welney where singles March 25th, 27th and 31st, and in May 13 1st, 28 north 2nd, 32 3rd and 2 daily 7th-12th. Elsewhere: Burgh St Peter April 25th, 24 north Pentney GP April 28th and 21 east May 5th, 2 north-east Lakenheath Washes April 29th, 2 May 3rd, one 4th-6th and 2 5th, Pensthorpe April 29th, 5 Buckenham May 1st, 3 2nd, 11 3rd and 15 4th, one south-east Ickburgh May 5th, 5 Hickling July 7th, Cawston Heath July 29th and one over Norwich Nov 11th.

Whimbrel

Numenius phaeopus

Passage migrant in spring and autumn; rare in winter

Peak counts of feeding/grounded flocks at main sites:

	<i>Apr</i>	<i>May</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>
Holme	56	20	7	10	4
Titchwell	3	7	12	2	4
Scolt/Brancaster Hbr	33	52	30	41	20
Holkham NNR	22	3	6	25	1
Cley	120	100	10	22	-
Horsey	-	40	28	-	-
Breydon/Berney	37	71	15	12	1

National importance (passage): 50

First of spring Breydon March 27th-April 2nd and Holme April 1st/2nd, but no others until 2 Holme April 16th and 3 Scolt Head 17th. One of best spring passages for several years, with main movement April 24th-May 11th. Highest counts in addition to those in table: 12 Lynn Point April 30th and 11 May 6th, 15 Snettisham May 12th, 30 Salthouse April 28th and 16 May 3rd, 35 Waxham April 26th and 50 May 1st, 26 Hickling May 13th, 32 Brograve Levels April 24th, 20 Heigham Holmes May 2nd, 40 Haddiscoe Island and 14 Burgh St Peter both April 25th, and 8 Pentney GP May 13th.

Overhead passage in spring more evident than usual, best counts: 7 south Eccles April 22nd, and in May 25 north Lynn Point 3rd, 15 west Cley 5th, 12 south Waxham, 10 east Sheringham and 40 north East Tuddenham all 7th, 9 west Sculthorpe 8th, and 30 south Snettisham and 19 east Horsey 13th.

Last in spring during June when 2 Scolt Head 1st and one Cley 11th.

First returning birds late June when Holme 22nd and 26th/27th, Titchwell 25th, and 2 Scolt Head and one north-west Frettenham 26th. In autumn only counts other than those in table of grounded birds: 12 Ongar Hill Aug 6th, 14 Lynn Point July 21st and 7 Coltishall Aug 27th. Largest westerly movements: 30 Holme July 17th, 32 Aug 23rd and 24 27th, 16 Titchwell Aug 11th, total of 279 Scolt Head during July including 33 17th, 36 20th, 42 21st, 35 26th, 40 30th, 61 31st, 494 Aug including 32 3rd, 36 5th, 51 7th, 73 8th, 41 10th, 37 16th

and 14 Sept 1st, and 13 Cley Aug 15th. Few in Oct when 1-2 Titchwell. Scolt Head and Blakeney Point until 6th, with last of year a very late bird Breydon/Berney Nov 18th.

Curlew

Numenius arquata

Passage migrant and winter visitor; scarce breeder

Peak monthly counts at main sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Terrington	539	1461	1373	605	216	-	719	5176	3562	-	655	-
Ousemouth	294	424	649	360	142	-	101	870	454	290	74	2
Snettisham	231	511	606	390	32	50	1050	810	652	-	170	1025
Holme	200	272	244	65	30	-	70	70	8	67	170	120
Titchwell	15	59	127	12	2	5	66	124	21	29	20	55
Scolt/Brancaster Hbr	1006	447	299	455	62	750	1205	1400	829	389	610	637
Holkham NNR	176	100	115	47	6	-	77	63	12	82	167	240
Wells Hbr	72	36	20	26	-	-	-	642	396	111	68	77
Warham SM	131	116	29	26	-	-	71	112	126	166	174	90
Blakeney Hbr	80	70	70	-	-	197	500	-	-	-	78	89
Breydon	987	892	691	431	51	229	664	885	1042	839	797	1022

International importance (winter): 3500; National importance (winter): 1200

Additional counts: Heacham 325 Feb, 260 March and 442 Sept, Stiffkey 55 Jan, Blakeney GM 86 Jan and Cley 71 Jan.

Main departure in spring during April when north-east movements at Scolt Head of 23 8th, 64 13th and 18 16th.

Westerly passage in autumn far more evident than previous year, best counts June 25th when 25 Scolt Head, 150 Cley, 53 Sheringham, 30 Mundesley and 45 Hickling Broad. Other westerly movements at Scolt Head of 62 June 26th, 98 July 12th and 51 16th, and at Cley of 114 June 28th, 60 29th and 45 July 2nd. Elsewhere 70 in off sea Blakeney Point June 18th and 24 west Beeston Bump Aug 20th.

Largest feeding flocks inland: 260 Anmer July 18th and 68 Oct 29th, 42 Aylmerton Feb 9th, 75 Ingoldisthorpe Dec 20th, 60 Massingham Heath Oct 22nd, 47 Rougham Feb 15th and 57 Roydon Common April 16th.

Breeding: 25 pairs Stanford TA and up to 10 other pairs at 7 inland sites, mostly also in Brecks.

Spotted Redshank

Tringa erythropus

Passage migrant; small numbers over-winter

During Jan/Feb regularly recorded only at traditional wintering localities: at Titchwell/Thornham peaks of 4 Jan and 5 Feb, and at Breydon/Berney up to 3 regularly Jan/Feb with isolated count of 7 Feb 7th. Elsewhere only Brancaster Hbr where single Feb 6th and 21st/22nd.

Early March records from Burnham Norton and Holme likely to relate to wandering wintering birds from nearby Titchwell with first suspected spring migrants Cley March 12th and Welney from March 24th.

Light spring passage noted during April and early May with peak counts from most consistent and well-watched sites:

	<i>Apr</i>		<i>May</i>	
	<i>1-15</i>	<i>16-30</i>	<i>1-15</i>	<i>16-31</i>
Titchwell	2	2	2	1
Burnham Norton	2	3	3	-
Cley	1	3	3	-
Breydon/Berney	6	9	3	-

Elsewhere 1-2 at Holme, Scolt Head/Brancaster Hbr, Burnham Overy, Stiffkey, Kelling WM, Hickling Broad, Buckenham, Lakenheath Washes and Welney, with last of spring at Titchwell May 17th.

Return passage heralded by 2 Berney June 10th, but no further records until 15th, after which a gradual increase with early returning adults at 5 sites by month end.

Peak counts at most consistent sites during usual protracted autumn passage:

	<i>Jun</i>		<i>Jul</i>		<i>Aug</i>		<i>Sep</i>		<i>Oct</i>	
	<i>16-30</i>	<i>1-15</i>	<i>16-31</i>	<i>1-15</i>	<i>16-31</i>	<i>1-15</i>	<i>16-30</i>	<i>1-15</i>	<i>16-31</i>	
Snettisham	-	4	7	3	15	6	37	3	2	
Titchwell	6	9	8	20	20	8	12	17	18	
Cley	4	6	6	8	6	8	10	4	-	
Breydon/Berney	3	-	1	2	2	8	6	7	8	
Cantley BF	-	-	1	2	6	2	-	-	-	
Welney	1	2	1	-	3	1	27	-	-	

Peak of 27 (grounded by overnight rain) Welney Sept 20th is a record count for the site.

Away from above a further 8 coastal and 7 inland localities hosted 1-3 birds on isolated dates June-Oct with only larger counts 5 Lakenheath Washes Aug 20th, 4 Buckenham Aug 22nd and 5 Thornham Sept 23rd.

During Nov/Dec difficult to differentiate between late autumn migrants and unobtrusive winterers. Recorded at Snettisham (2 Nov 2nd, single Dec 5th), Titchwell (up to 7 throughout), Stiffkey (Dec 3rd), Cley (Nov 26th-28th), Breydon/Berney (4 throughout) and Mautby (Dec 16th).

Redshank

Tringa totanus

Resident, passage migrant and winter visitor; declining breeder in some areas

Monthly max at main and most regularly counted sites:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Terrington	283	402	443	583	169	-	553	1394	3129	-	344	-
Ousemouth	511	292	459	193	45	96	23	146	230	247	179	40
Snettisham	200	247	367	350	44	54	947	1095	1000	-	360	250
Holme	153	169	187	94	12	6	59	64	169	90	166	87
Scolt/Brancaster Hbr	358	395	299	213	113	141	702	943	711	389	395	356
Blakeney Hbr	162	89	146	-	-	-	-	-	-	-	186	135
Breydon/Berney	819	715	1092	828	122	171	611	853	1245	919	829	1054

National importance (winter): 1100

The most noteworthy count was 3129 at Terrington in Sept.

Spring visible migration noted at Scolt Head where 43 north-west April 27th and 50 north-west May 4th, all presumably relating to Icelandic bound migrants.

Breeding data incomplete with 452 breeding pairs (506-508 in 1999): *Wash* Ken Hill GM 20; *north coast* Holme 24 (15), Titchwell 32 (15), Thornham GM 1, Brancaster GM 12 (14), Scolt Head 29 (29), Holkham NNR 129 (115), Cley 2; *Broads* Breydon 6, Berney 76 (60), Buckenham/Cantley 58 (49); *Fens* Welney 75 (83); *inland* Pensthorpe 1. Significant increases at Holkham, Berney and in Yare valley. Decline at Welney with poor breeding success also due to extensive flooding in late May.

Inland highest counts: 12 Earsham Feb 12th, 17 Lakenheath Washes March and April, and 8 Wissington BF June.

Presumed autumn migrant flocks of 20 east Beeston Bump Aug 22nd and 22 west Weybourne Sept 26th with 12 Greenshank.

Greenshank

Tringa nebularia

Passage migrant in spring and autumn; scarce in winter

Very few in first winter period with sightings of singletons at Holme, Titchwell, Morston and Cley, and 2 Scolt Head/Brancaster Hbr Jan 19th suggesting the presence of only 1-2 wintering birds in county.

As with other species (*cf* Spotted Redshank) early spring records in March from Holme, Scolt Head/Brancaster Hbr and Titchwell most likely to have over-wintered, with first migrants in early April at Burnham Norton 6th, Wells 7th and Breydon 8th.

Passage slow to accelerate but more widespread from April 20th with max at most regularly counted sites during strong spring movement:

	Apr		1-10	May	
	11-20	21-30		11-20	21-31
Snettisham	-	2	6	19	1
Scolt Head/Brancaster Hbr	1	2	20	5	2
Cley	-	6	9	4	2
Hickling Broad	-	4	5	9	-
Breydon/Berney	2	12	54	2	1
Buckenham	-	2	15	2	1
Welney	-	2	32	4	2

A clear influx evident early May when the following notable counts: *5th* 15 Buckenham; *6th* 54 Breydon/Berney (site record), 32 Welney (equals site record May 2nd 1990), 16 Scolt Head/Brancaster Hbr; *7th* 30 Berney, 20 Scolt Head/Brancaster Hbr, 16 Ongar Hill, 9 Cley. Two other double-figure counts of 27 north at Ouse Washes near Hilgay May 9th and 21 Terrington (undated). Short spring passage concluded abruptly with no records after May 23rd.

Recorded throughout June with up to 9 Titchwell and 1-4 at Holme, Scolt Head/Brancaster Hbr, Cley, Hickling Broad, Waxham, Breydon/Berney, Buckenham and Welney. Gradual increase in sightings suggests returning birds but records early in month may relate to spring stragglers or over-summering individuals.

Strong autumn passage at most consistent and regularly counted sites:

	Jul			Aug			Sep			Oct		
	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-30	1-10	11-20	21-31
Snettisham	4	-	35	21	39	35	20	31	11	8	4	2
Titchwell	14	8	25	38	33	32	29	51	48	12	2	10
Scolt/Brancaster Hbr	6	8	32	47	14	51	28	48	23	7	8	2
Cley	3	5	13	10	7	11	30	20	13	6	1	4
Breydon/Berney	6	7	11	12	12	12	9	7	7	7	2	28
Cantley BF	1	7	4	4	10	5	1	1	-	-	-	-
Buckenham	1	3	5	4	1	-	5	2	1	-	-	-
Welney	4	2	4	4	4	4	3	3	2	1	4	1

Also max counts at Holkham NNR 20 July, 44 Aug and 28 Sept, 53 Snettisham Sept, and Titchwell 68 Sept and 17 Oct.

Elsewhere 1-9 reported from 16 coastal and 20 inland localities with larger counts of 24 Holme Aug 12th, 12 Lakenheath Washes Aug 13th, 21 Hickling Broad Sept 1st, 17 Stiffkey/Warham Sept 30th and undated counts from Terrington of 12 July, 107 Aug and 58 Sept.

A vocal diurnal migrant, in addition to above, a series of records involving flocks moving west at Scolt Head/Brancaster Hbr with 26 Aug 3rd, 12 on 4th, again 8th, and 14 13th. Elsewhere 34 west Holme Aug 8th and further 30 west Sept 19th, 14 south Langham Aug 10th, and 12+ west Beeston Regis and Weybourne Sept 26th.

Green Sandpiper

Tringa ochropus

Double passage migrant, most in autumn; small numbers over-winter

Early in year the trend towards individuals over-wintering at sheltered localities continued with inland singles at Bayfield, Briston, Cantley BF, East Tuddenham, East Winch, Hockwold, Illington, Larling, Middleton GP, Roudham, Saxlingham, Shouldham Warren, Thornage, Wereham, Weston Longville, West Walton and Whitlingham Lane GP, with 4 Earsham Jan 8th. In contrast recorded at just 2 coastal sites, Cley and Mundesley.

Gradual increase in sightings during March/April indicative of traditional early spring passage when recorded at mainly freshwater sites. Numbers as usual low and therefore



Green Sandpipers (John Williamson)

gatherings of 8 Earsham March 25th, 4 Pentney GP 27th, 5 Hickling Broad April 16th and East Ruston 17th noteworthy. Very few into May with 3 Burnham Norton 9th but no records after 11th.

An extremely early returning bird Hickling Broad June 3rd was highly unusual whereas arrivals June 14th/15th at Titchwell, Welney and Wissington BF presented a more typical start to usual extended autumn passage. As expected numbers in autumn much larger than spring, Cantley BF remained the premier locality for this gregarious species with peak counts as follows (although no counts received for Oct):

	<i>Jun</i>		<i>Jul</i>			<i>Aug</i>		<i>Sep</i>		<i>Oct</i>		<i>Nov</i>
	<i>16-30</i>	<i>1-15</i>	<i>16-31</i>	<i>1-15</i>	<i>16-31</i>	<i>1-15</i>	<i>16-30</i>	<i>1-15</i>	<i>16-31</i>	<i>1-15</i>		
Cantley BF	9	41	30	43	40+	20	11	-	-		2	

Widespread sightings elsewhere of 1-9 during July/Aug with importance of Cantley BF underlined by just 8 double-figure counts away from these settling lagoons. In July 14 Wissington BF 11th, 12+ Welney 20th and 12 Holme 30th, and in Aug 11 Strumpshaw 8th, 12 again Holme 14th, 15 Hickling Broad 15th, 14 still Wissington BF 25th and final count of unspectacular autumn 11 east Hickling Broad Aug 29th.

Steady drop in reports during mid-late Sept at Cantley BF and elsewhere, and few remaining by mid-Oct with only Buckenham, Felbrigg Park, Fritcham, Pentney GP, Sheringham and Sustead recording birds in second half of month.

During Nov/Dec now traditional wintering population again *in situ* at Breydon/Berney, Cantley BF (9), Cranwich GP, Earsham (3), East Winch, Garboldisham, Hoe, Holkham, Little London (2), Mid-Yare RSPB (2), Nar Valley Fisheries (3), Oxborough, Pensthorpe, Saddlebow, Saxlingham, Swanton Morley GP (2), Thornage and Wercham.

Wood Sandpiper

Tringa glareola

Passage migrant in spring and autumn

Earliest Buckenham April 22nd followed by 4 others by end of month. Peak counts during strong spring passage 4 Cantley May 6th and 7 Burnham Norton 7th increasing to 9 8th/9th. Elsewhere 1-3 Berney, Buckenham, Burnham Overy, Cley, Hickling Broad, King's Lynn BF, Lakenheath Washes, Ongar Hill, Salhouse, Scolt Head, Titchwell and Welney May 1st-29th.

Return passage commenced mid-June with first Tallents Meadow Lake 17th-20th, but slow to accelerate with only singles Holme June 22nd, Titchwell July 5th-7th and Welney 10th before more widespread arrival from 22nd.

Peak counts from most regularly counted localities during average autumn showing:

	<i>Jul</i>			<i>Aug</i>			<i>Sep</i>		
	<i>1-10</i>	<i>11-20</i>	<i>21-31</i>	<i>1-10</i>	<i>11-20</i>	<i>21-31</i>	<i>1-10</i>	<i>11-20</i>	<i>21-30</i>
Titchwell	1	-	2	3	4	3	1	-	-
Cley	-	-	3	3	4	4	2	1	-
Breydon/Berney	-	1	6	3	1	3	-	1	3
Cantley BF	-	-	5	9	9	4	2	2	-
Welney	1	-	3	3	1	-	1	-	1

Elsewhere only significant count 9 east Strumpshaw Aug 8th may relate to birds from nearby Cantley BF. As usual many sightings of small numbers from other sites during late

summer/early autumn with 1-4 Holme, Brancaster, Scolt Head, Burnham Overy, Blakeney GM, Salthouse, Sheringham, Buckenham, Strumpshaw, Pensthorpe, Thetford Nunnery Lakes, Lakenheath Washes and King's Lynn BF.

Obvious withdrawal during Sept with only Blakeney GM, Berney and Welney recording birds after mid-month with last of autumn early Oct at Berney 1st and Welney 4th.

Common Sandpiper

Actitis hypoleucos

Passage migrant in spring and autumn; rare in winter; has bred

In first winter period sightings from Wormegay High Bridge Jan 9th, Titchwell March 9th and Pentney GP March 23rd-26th, although latter bird and another at Titchwell April 7th perhaps early migrants.

First certain arrivals of spring Cley April 16th and Welney 19th followed by widespread arrival with 11 Breydon/Berney and 7 Lakenheath Washes 30th. As usual passage heaviest during first half of May and 1-5 at many coastal and inland localities until 23rd when last at both Cley and Felbrigg Park.

A noticeable influx May 6th/7th when larger counts: 6th 16 Breydon/Berney, 11 Scolt Head/Brancaster Hbr, 6 Lynn Point, 6 Pensthorpe; 7th 23 Scolt Head/Brancaster Hbr, 18 East Ruston, 15 Cley, 15 Berney, 13 Holme, 10 Lakenheath Washes, 8 Snettisham, 8 Titchwell, 7 Sennowe Park, 6 Stiffkey and numerous reports of smaller numbers. A further less pronounced peak May 12th-14th when 8 Pentney GP, 7 Holme and Felbrigg Park, and 6 Titchwell, Welney and West Mere; also 7 Cley 16th.

Midsummer singles Blakeney Hbr June 4th and Titchwell 6th, and 2 Breydon 18th, followed by return passage from 28th.

During unremarkable autumn, peaks at most regularly counted sites:

	Jul			Aug			Sep			Oct
	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-30	1-10
Lynn Point	1	2	8	-	21	-	8	-	3	1
Snettisham	4	-	12	1	1	6	2	2	2	1
Titchwell	1	2	6	2	3	3	-	3	-	-
Scolt/Brancaster Hbr	-	1	2	11	-	5	5	1	-	-
Cley	-	1	4	3	-	8	4	8	1	1
Breydon/Berney	4	7	17	8	7	17	4	4	2	-
Cantley BF	2	4	15	14	8	10	3	3	6	-
Welney	1	2	8	5	2	4	2	3	1	1

Also undated July max of 12 Titchwell

Elsewhere many sightings of 1-5 from 28 coastal and inland localities during usual extended autumn passage. Larger counts: 8 Cranwich GP July 3rd, 6 Pentney GP July 26th and Aug 15th, 14 East Ruston Aug 21st (12 still present 22nd), 10 Winterton Aug 22nd, 12 Hickling Aug 30th and 7 East Ruston Sept 12th. Clear withdrawal during late Sept/early Oct with latest Cawston Oct 19th and Lynn Point 29th.

An incredulous observer at Holme July 28th witnessed a female Sparrowhawk attempting to drown a migrant. When, after holding the bird under water for several minutes, the predator departed without its intended prey, the Sandpiper surfaced and flew off immediately apparently unharmed!

Turnstone*Arenaria interpres**Passage migrant and winter visitor; some summering non-breeders*

Monthly peaks from most consistently counted localities:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
King's Lynn	150	180	-	30	8	-	-	-	-	-	30	40
Snettisham	-	32	61	96	140	-	650	315	102	-	22	-
Holme	64	111	42	117	83	-	39	142	81	46	40	63
Titchwell	70	66	79	44	47	5	16	7	18	27	15	257
Scolt/Brancaster Hbr	98	198	138	134	292	124	235	517	376	358	169	125

National importance (winter): 640

Many other counts of 20 or more elsewhere: *Jan* 64 Blakeney Hbr, 49 Stiffkey SM, 45 Sheringham, 29 Waxham, 25 Wells Hbr; *Feb* 150 Sheringham, 23 Wells Hbr, 22 Blakeney Hbr; *March* 29 Wells Hbr; *April* 23 Eccles; *May* 36 Lynn Point, 25 Thornham Point; *Sept* 22 Burnham Overy, 21 Eeles; *Nov* 58 Blakeney Hbr, 50 Wells Hbr, 46 Lynn Point, 40 Waxham; *Dec* 96 Thornham Hbr, 68 Blakeney Hbr, 47 Hunstanton, 40 Bacton, 34 Wells Hbr.

Visible movements involving more than small numbers are rarely reported and therefore 41 north Scolt Head May 25th and a further 30 north there May 29th notable. The only comparable count in autumn 46 west Cley Nov 19th.

Inland, a series of records from Welney where 1-4 present April 25th and intermittently May 1st-21st peaking 7 May 4th, and 6 May 3rd and 6th. Elsewhere 2 Cantley BF May 6th and Wisington BF June 9th, and singles south Pentney GP May 25th and Cantley BF July 30th.

Following reports in 1999 Report further evidence of the species' versatility provided by sightings at both ends of year of birds feeding on arable farm land with 41 Sheringham Park Feb 5th and 40 Waxham Nov 18th.

Red-necked Phalarope*Phalaropus lobatus**Scarce passage migrant*

A brief spring adult at Buckenham June 6th flew off north mid-evening. More regular in autumn, this year proved no exception with one at Snettisham Aug 30th followed by juvs at Titchwell Sept 4th-16th and Oct 8th/9th, and another Cley Oct 24th-Nov 7th.



Red-necked Phalarope (John Geeson)

Number of records per season/year during previous 5 years:

	1995	1996	1997	1998	1999
Spring	0	1	0	0	1
Autumn	5	3	1	4	7
Total	5	4	1	4	8

Grey Phalarope

Phalaropus fulicarius

Scarce autumn passage migrant; rare at other times

A poor year with just three typical autumn records all in Nov: Mundesley 7th (on sea), Titchwell 11th-18th and Salthouse/Kelling WM intermittently 23rd-29th.

An unidentified phalarope seen landing on sea Holme Oct 6th probably of this species.

Pomarine Skua

Stercorarius pomarinus

Passage migrant during autumn; small numbers at other times

Recorded in all months except April and June. At start of year 3 south Sea Palling Jan 5th, singles Cley 1st/2nd and south Winterton 4th/5th. In Feb 2 Old Hunstanton and one south Winterton 27th, and in March singles Yarmouth 3rd and 16th/17th, and Holme 4th.

More than normal in spring when in May 4 adults past a fishing boat 2 miles offshore from Yarmouth 12th, and 2 north Winterton and one east Walcott 28th.

First of autumn in July when singles Cley and Sheringham 15th, but no others until Aug when 2 east Walcott 7th, and singles Hunstanton 10th and 12th, and Cley 14th. Recorded on 4 other dates during month most 26th when one West Runton, 3 south Horsey and one south Winterton.

Recorded on 11 dates during Sept most 2nd, 3rd and 16th. On 2nd Holme, 2 Scolt Head, Sheringham, 2 east West Runton, east Cromer and 4 south Sea Palling (1715-1930). On 3rd 3 Hunstanton, Holme, Cley, 2 east Sheringham and Overstrand, 3 Cromer, 3 east Mundesley and one north Yarmouth. On 16th 3 Hunstanton, Holme, 3 east one west Scolt Head, west Weybourne, east Sheringham (0620-1620) and 6 south Yarmouth. Only other noteworthy count during month 6 west Scolt Head 20th. Few in Oct with records on 12 dates, most 6th when 3 Hunstanton, 3 east Weybourne and 2 Sheringham, and 21st when Hunstanton, Titchwell, 6 east Sheringham, 5 East Runton and 3 south one north Waxham.

Reported virtually daily during Nov when best day of autumn 7th, with 34 south-west Hunstanton, one west Holme, 17 east Sheringham (1000-1600), 5 Mundesley, 5 Sea Palling and one Winterton. Smaller numbers next day when 5 south Lynn Point, one Hunstanton, 4 east Sheringham and 4 Sea Palling. Apart from 3 Waxham 11th, all other counts of ones and twos. Reported on 14 dates in Dec, max 3 Mundesley 15th and 25th. Best day of month 26th when one Hunstanton, 2 east Mundesley and 2 Yarmouth. Last of year Hopton 31st.

Arctic Skua

Stercorarius parasiticus

Mainly autumn passage migrant, scarce at other times

In first winter period only record Hunstanton Jan 18th. Spring passage almost non-existent with only May record at Titchwell 10th. Slightly more in June when Scolt Head 4th-8th and 15th, west Beeston Bump 17th, Holme and Sheringham 25th, and 4 Titchwell and one Sheringham 29th.

In July few in first week with singles Cley 2nd and 4th. Recorded daily from 10th when 4 east Cromer and 6 Walcott. Highest counts during rest of month 5 Scolt Head and 5 Sheringham 11th, 8 west Cley 15th and 7 Scolt Head 18th. Also during the month one inland

Breydon 22nd. Numbers small in Aug with no large movements, best counts 20th when 6 Titchwell, 12 west Cley and 4 south Sea Palling, and on 29th, when 6 off Wells and 7 south Winterton.

Highest counts of year in Sept when peak counts 2nd, 3rd and 16th. On 2nd 30 Hunstanton, 15 west Holme, 37 west Titchwell, 27 west 25 east Scolt Head, 24 Cley, 59 Sheringham, 10 east East Runton, 30 east Cromer, 37 south Sea Palling (1715-1930) and 4 Horsey. On 3rd 25 Hunstanton, 3 Holme, 6 Titchwell, 33 west Scolt Head, 6 Blakeney Point, 75 east 8 west Sheringham (all day count), 37 east Overstrand, 51 west Cromer (0645-1145), 25 east Mundesley, 20 south Sea Palling (0630-0815), 4 Horsey and 23 Winterton. On 16th highest counts of autumn when 18 Hunstanton, 54 Holme, 110 east 48 west Scolt Head (all day count), 20 east Weybourne (0730-1030), 54 east Cley, 90 east 15 west Sheringham (0620-1620), 76 east Cromer, 6 Mundesley and 10 south Sea Palling. Smaller numbers next day when 20 west Holme and 32 west Scolt Head. Birds still reported daily in Oct but few large counts with 22 Hunstanton 13th and 8 east 7 west Cley 21st the best.

As last year more records than normal in Nov especially on 7th when 2 Hunstanton, 13 east 11 west Holme, one Titchwell, 7 east Cley, one Weybourne, 20 east Sheringham, 8 east Mundesley, 16 Sea Palling, 8 Waxham and 2 Winterton. Best counts during rest of month 6 Holme 8th, 4 Mundesley and 5 north Winterton 11th, 6 Blakeney Point 17th, 4 Holkham 25th, and 5 west 2 east Holme 30th. In Dec recorded daily until 19th with max counts 6 Titchwell 2nd, 4 east 3 west Holme 4th, 4 Titchwell 10th, 3 Holkham 14th, 4 Titchwell 18th and 2 south Yarmouth 19th. Last of year singles Sheringham 25th and Mundesley 26th.

Two inland records: 2 north Wymondham Aug 20th and 2 imms south-west Welney Nov 26th, the first reserve record.

Long-tailed Skua

Stercorarius longicaudus

Autumn passage migrant increasingly identified in recent years

An average autumn and as usual most records of juvs or imms. First in Aug when 2 east Cley 20th, west Sheringham and 2 south Sea Palling 22nd, east Cromer and south Winterton 26th, Cley 27th, east Cley and Sheringham 28th, and Cley 29th. Recorded on 9 dates in Sept, most 2nd when 2 Hunstanton, 2 Holme, 2 west Scolt Head, 2 Blakeney Point, 6 Cley, 2 east Sheringham (1 adult), one west West Runton and 2 south Sea Palling (1715-1930). Smaller numbers next day, when Titchwell, Cley (adult), 2 Sheringham (adults), 2 west Cromer (1 adult) (0645-1415) and north Horsey. Only records over next two weeks singles Mundesley 4th and west Cley 6th. On 16th 5 west Holme (1045-1325), 5 east one west Scolt Head (2 adults - all day count), one west Cley and 2 west one east Sheringham (0620-1620). Only other records during month singles east Overstrand 17th, Holme 18th, Sheringham 23rd and east Titchwell 30th. Only record in Oct 2 Titchwell 21st. Once again a late series of records in Nov when west Weybourne 13th and singles Sheringham 7th, 8th and 18th, the last being the second latest county record.

Great Skua

Catharacta skua

Passage migrant mostly in autumn; small numbers at other times

Unusually no records in first winter period and only 2 singles in spring, east Scolt Head May 5th and Holme 24th. First of autumn July 11th when singles Scolt Head and Sheringham. Others during the month at Sheringham 15th, Mundesley and north Winterton 16th, and Winterton 25th. Recorded on just 9 dates in Aug, with max 3 Holme 13th.

Passage better in Sept, but not as good as in recent years with peak counts 2nd, 3rd and 16th. On 2nd 9 Hunstanton, 6 Titchwell, 19 west 6 east Scolt Head, 2 Cley, 23 Sheringham

and 11 east Cromer. On 3rd 39 west Holme, 3 Titchwell, 57 west Scolt Head, 20 Cley, 23 Sheringham, 24 west Cromer (0645-1415), 22 east Mundesley and one Winterton. One of best days of year 16th when 61 Holme, 63 east 9 west Scolt Head (all day count), 9 east Cley, and 80 east 2 west Sheringham (0620-1620). Only other noteworthy counts 30 west Holme and 6 west Scolt Head 17th. Few in Oct except 6th when 83 west Holme, 28 Titchwell, 12 west Scolt Head, 3 east Cley and 3 west Weybourne.

In Nov highest counts on 7th when 33 south-west Hunstanton (one catching and eating a Fulmar), 4 west Holme, 5 Titchwell, 25 east Sheringham, 8 east Mundesley and 9 Sea Palling, and on 8th when 41 south-west Hunstanton and 7 Sheringham. Also during month 6 Holme 4th and 8 Sheringham 9th, with 1-5 at many other sites daily during month. In Dec recorded on 5 dates up to 19th, most 15th when 2 Cley, 8 east 4 west Sheringham, 2 west Weybourne and one Beeston Bump. After this date only records one east and west Sheringham 24th, east Mundesley 25th and Holme 31st.

Mediterranean Gull

Larus melanocephalus

Regular all-year visitor in increasing numbers, often remaining for weeks; recent breeder

Recorded from 32 coastal/near coastal and 15 inland localities. One pair attempted to breed Blakeney Point but deserted. Two pairs (one sitting) at another site May 21st and at a third site up to 3 pairs displaying but no breeding attempt. Of 6 juvs noted from July 23rd, 5 were within a 4-day period in Aug. Most/all were probably of continental origin; Cley July 23rd, and in Aug Cley 10th, Hunstanton 11th, 2 Cley and one Breydon 13th.

The following table shows min present each month though true numbers difficult to quantify as ever. Counts slightly down on 1999 (presumably still increasing long-term) and unusually no obvious spring arrival of 1st-summer occurred. Numbers of 1st-years seemed comparatively low throughout.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Juv	-	-	-	-	-	-	1	5	-	-	-	-
1st-year	5	5	3	6	4	1	6	-	2	7	3	2
2nd-year	7	7	5	7	1	1	1	-	5	4	3	4
Adult	19	19	21	11	10	11	15	8	18	16	20	17
Unaged	-	-	-	1	-	-	-	-	-	-	-	-
Total	31	31	29	25	15	13	23	13	25	27	26	23

Favoured sites were Hunstanton, Titchwell, Scolt Head, Blakeney/Cley, Cromer/Overstrand and Yarmouth/Breydon.

Gatherings at Yarmouth included 16 Jan 1st, 19 Feb 27th, 5 April 17th, 15 Sept 4th, 12 Oct 8th/9th, 12 Nov 11th-19th and 13 Dec 9th. Other counts of note 8 Scolt Head April 7th, 4 Titchwell Jan 19th-25th, 4 Cley Sept 30th, 4 Heacham Nov 15th, 3 Overstrand Jan, 3 (roost flight) Lynn Point Feb 8th and 3 Breydon April 13th.

Inland noted Holt/Saxlingham/Langham area (all adult) Jan 1st, Feb 6th, March 3rd, 2 March 25th with 3 26th, April 1st, May 3rd and 6th, and July 1st; at Holkham Park Lake 1st-winter Jan 6th, adult Feb 23rd and March 19th; at Northrepps 2 adults Jan 27th and intermittently Sept; at Hickling Broad 1st-summer April 28th and adult Oct 30th; at Welney adult April 23rd, 1st-winter Oct 26th and adult Nov 6th. Elsewhere adult Ringstead March 3rd/4th, Aldeby Tip March 7th, adult Felbrigg Park March 14th, 1st-summer Pensthorpe April 6th, 1st-winter Saddlebow Nov 10th, adult Pentney GP Nov 12th and adult King's Lynn Dec 28th.

Two adults at Yarmouth Dec 3rd were ringed as pulli in Belgium May 25th and June 25th 1998.

Little Gull

Larus minutus

Non-breeding summer visitor, passage migrant and winter visitor

A quiet Jan when max 7 Titchwell, 5 Scolt Head and 1-2 at 5 other localities. First marked movement Feb 24th-26th when 750 west Titchwell 24th, 300 west Holme 25th, 235 east 42 west Holme and 284 Titchwell 26th. Further westerly movements off Holme during March included 267 3rd, 21 4th, 60 7th, 40 (heading inland) 8th, 5 10th, 170 11th and 24 22nd. A single Ormesby Broad March 22nd was first inland record of year.

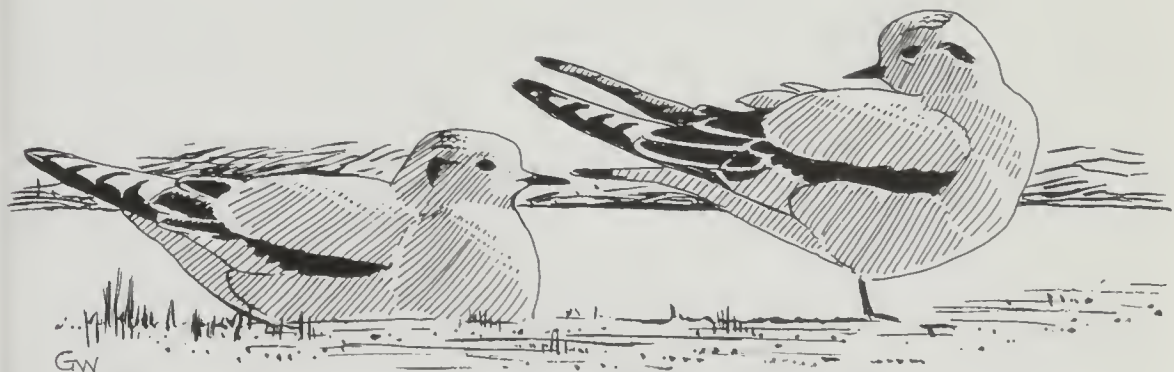
Fewer coastal records in April but 60+ passed through inland sites; Welney attracting 32 (31 2nd-summer/adult) April 23rd and 17 (9 2nd-summer/adult) 30th. Widespread in small numbers until end May when an increase to 33 1st-summer Titchwell 31st. The Titchwell flock rose to a splendid 53 (all 1st-summer) June 15th; other June records included 11 east Breydon 7th, 30 Wolferton 13th, 12 Scolt Head 14th and an early adult Cley 25th.

Few recorded July/Aug; Titchwell saw peaks of 16 July 3rd and 11 Aug 17th. Also of interest returning adults Cley July 17th and 19th, and Cantley BF July 27th followed by juvs Walcott Aug 5th, 2 Cley and one Breydon Aug 26th.

More activity during Sept evidenced by 10 west 7 east Cromer (0645-1415) 3rd, and 26 west Scolt Head, 25 Cley, 20 east Sheringham and 8 north Waxham 16th. Passage accelerated through Oct with flock of 57 west Titchwell 7th, 69 east Sheringham 13th, 250 Hunstanton 17th, 45 Scolt Head 19th and 524 south Horsey (0900-1100) 22nd.

First day of movement in Nov occurred on 6th when 53 north-east Hunstanton, 40 Titchwell, 30 Cley and 100 Sheringham. This was eclipsed on 7th when phenomenal numbers passed offshore including a county record at Mundesley. Counts included 300 Hunstanton (rafting below cliffs before departing into Wash), 127 east 2 west Cley, 144 east Weybourne (0850-1030), 1400 east Sheringham (all day count), 2687 east Mundesley (all day count), 915 Sea Palling, 200 Waxham (20 mins) and 90 Winterton. The remainder of Nov seemed quiet by comparison but notable counts: 24 south Lynn Point, 150 east Mundesley and 231 Sea Palling 8th; 70 Overstrand 10th; 223 west Blakeney Point 17th; 60 Hunstanton, 100 west Titchwell (1 hr), 60 Sheringham and 107 east Overstrand (1010-1130) 19th; 60 Winterton 21st; 53 west 5 east Holme 28th and 137 east 54 west there 29th.

Numbers remained offshore well into Dec especially in north-west with Holme recording 236 west 91 east 2nd, 270 west 37 east 3rd, 184 west 18 east 10th and 196 west 2 east 14th. Largest counts elsewhere in Dec included 600 Hunstanton 3rd, 500+ (mostly 2nd-winters/



Little Gulls (Gary Wright)

adults) Hunstanton-Holme 6th, 300+ Titchwell 9th, 50 Holkham Bay 14th, 55 Mundesley 21st, 66 Sea Palling 22nd with 74 there and 63 Waxham (1 hr 40 mins) 23rd.

Very few inland records Sept-Dec but an adult over ploughed fields Baconsthorpe Dec 22nd was unusual as were 12 south-west Welney Dec 30th bringing to a close an outstanding year for this species.

Sabine's Gull

Larus sabini

Almost annual but scarce autumn vagrant from High Arctic; extremely rare in spring

Of the 7 recorded below over the 2 years 5 were on typical autumn dates but singles in May and June were highly unusual though not without precedent.

A 1st-summer Breydon Water May 1st (KRD) must have been quite a surprise for the observer. In autumn (all juvs) south Winterton Aug 29th (INS), west Scolt Head Sept 2nd and 16th (NML), and West Runton also on latter date (SSm).

1999 Additions: An adult Hunstanton June 20th (AMB) and an additional adult Cley Oct 4th (JRMc).

Black-headed Gull

Larus ridibundus

Breeds colonially, dispersing in winter when many immigrants from Eastern Europe

Breeding pairs recorded as follows (success unknown unless stated): Snettisham 596, Holme 240 (moderate success), Titchwell 150, Scolt Head 1035 (1000+ young fledged), Holkham NNR 70, Wells Saltmarsh 350, Stiffkey Binks 511, Blakeney Point 200 (2 young fledged), Berney one, Strumpshaw 80, Middleton GP 50, Wissington BF 12, Welney 53. Breeding data incomplete.

A huge decrease in breeding pairs at Blakeney Point presumably accounts for increase at Scolt Head. An increased presence at Welney probably due to prolonged flooding.

Monthly roost counts:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lynn Point	14500	14000	5000	1325	550	149	4603	2200	9000	9750	-	10500
Ranworth Broad	1200	-	-	60	-	-	-	-	-	1350	2500	2200
Thornham	-	350	1250	3916	250	288	73	85	94	127	-	-
Scolt Head	-	400	60	3000	1500	1700	2500	5000	10000	388	-	-

Roosts elsewhere: 10,000 Hickling Broad Jan 8th, 10,000 Wroxham Broad Jan 14th, 8000 Feb 12th and 600 March 31st; 6600 Welney Jan 17th, 815 Sept 18th and 7100 Nov 16th; 10,000 Scolt Head Sept 8th and 8000 Filby Broad Dec 16th.

Early in year Holme saw 195 east 35 west Feb 20th followed by 125 west there March 7th, and 150 east Sheringham March 31st. A total of 1000 east at Paston May 13th was notable. Less than a month later westerly passage began at Scolt Head with 115 (mostly 1st-summer) moving June 2nd. From this date through to Oct 17th Scolt Head recorded 6503 heading west with monthly peaks of 155 June 28th, 185 July 17th, 125 Aug 12th, 1850 Sept 11th and 2150 Oct 17th. At nearby Holme 800 moved west Oct 17th.

The coast between Thornham Point and Scolt Head attracted large numbers in April evidenced by counts of up to 4472 Titchwell, 3000 Scolt Head 1st and 2400 Thornham Point 9th. Other daytime concentrations included 400 Weston Longville Jan 26th, 435 Attlebridge Jan 30th, 773 Titchwell Feb and 1400 March 5th, 1250 Holme March 7th, 611 Titchwell May with 312 there June, 585 Snettisham July 17th, 975 Blackborough End Tip July 29th with 1350 there Oct 28th and 1600 Nov 11th, 850 Bectley Tip Nov 24th, 1800

Blackborough End Tip Dec 9th, 320 Thorpe St Andrew Dec 16th and 400 Snettisham Dec 26th.

Masses of birds observed feeding on flying ants at Scolt Head with 2500 July 28th/29th and 5000+ Aug 24th-27th, also at Old Catton where 500 behaving similarly July 31st.

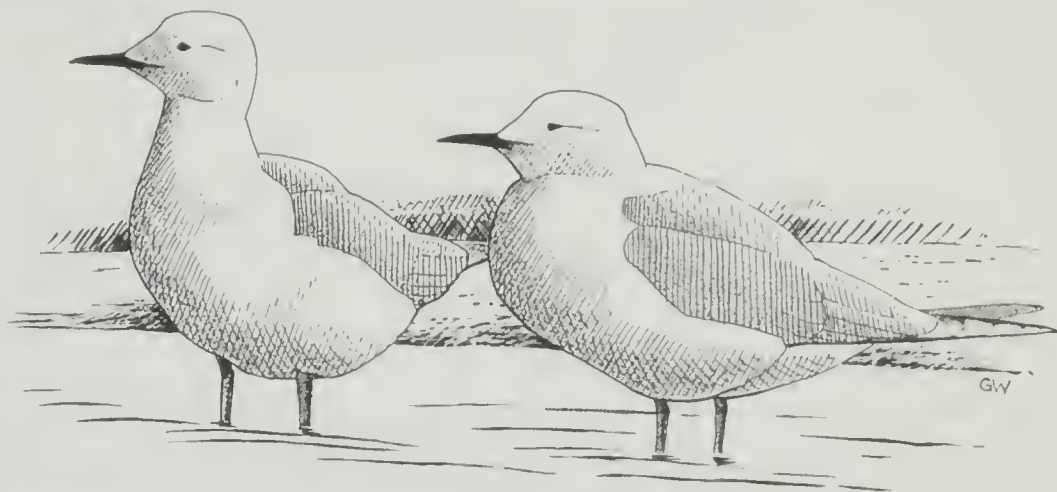
Oddities this year were the regular leucistic bird at Yarmouth Jan-March and a leucistic adult Breydon May 31st, which was considered different from the Yarmouth individual.

Slender-billed Gull

Larus genei

Vagrant from the Mediterranean

Arnolds Marsh, Cley was graced by two adults (presumably a pair) for much of May 5th in an amazing repeat performance of the May 1987 birds. The excitement was all too short-lived as they were seen to leave to the east in the early evening (BD *et al*). See article on page 284.



Slender-billed Gulls (*Gary Wright*)

Common Gull

Larus canus

Passage migrant and winter visitor with non-breeders remaining all summer; spasmodic breeder

Breeding attempts were confined to Blakeney Point where 4 pairs (1 young fledged) and Stiffkey Binks where 2 pairs (min 2 young fledged).

Monthly roost counts at selected sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lynn Point	-	2200	900	1375	1000	4	585	550	2250	2500	2000	3000
Thornham	-	2100	4150	2673	-	-	-	-	-	-	1500	3850

Roosts elsewhere: 3000 Hickling Broad Jan 8th, 2000 Wroxham Broad Jan 14th and 1000 Feb 13th, 1640 Welney Jan 17th, 350 Ranworth Broad March 31st and 580 Welney Nov 16th.

Westerly passage observed Scolt Head from July when 45 14th, 130 17th and 310 20th; a further 55 west there Sept 17th before peak movement of 780 Oct 17th and 500 Holme same date.

As with Black-headed Gull largest gatherings in April when max 2703 Titchwell, 2000 Scolt Head 1st and 1250 Thornham Point 9th. Good numbers were seen into early May

judging by 1000 (970 1st-summer) Lynn Point 3rd and 550 Scolt Head 6th. Other counts through year included 850 King's Lynn Docks Jan 9th and 900 Feb 20th, 300 Attlebridge Jan 11th, 800 Titchwell Jan 17th, 1200 Weston Longville Jan 26th, 800 St Benet's Level Jan 30th, 320 Attlebridge Feb 10th, 637 Tottenhill GP Feb 13th, 515 Titchwell March 5th, 750 Tottenhill GP March 11th, 400 Felbrigg April 23rd, 105 Scolt Head June 4th with 625 Aug 1st and 2000 there Sept 8th, 350 Hunstanton (pitch and putt) Nov 12th, 400 Titchwell Nov and 500 Dec 19th, 250 Holkham Bay Dec 16th and 300 Snettisham Dec 26th.

Of interest was one found dead with a Dutch ring Saxthorpe April 12th and a leucistic 1st-summer bird at Aylmerton in early May.

Lesser Black-backed Gull

Larus fuscus

Passage migrant and migratory breeder; increasing in winter

Continued increase in breeding numbers on Blakeney Point and at Yarmouth resulted in 180 and 20 pairs respectively. Wells Saltmarsh held 32 and single pairs nested at Titchwell and Gorleston. A pair again prospected at Pentney GP from late April but without attempting to breed.

Counts of roosts/roost flights as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lynn Point	14	28	-	254	825	432	2100	2690	987	745	207	424
Ranworth Broad	-	-	-	-	-	-	-	-	-	200	200	-
Welney	-	-	-	-	-	-	-	145	109	86	54	-

The pattern of occurrence was similar to last year with a general increase in spring followed by a marked peak in late summer/autumn. Largest numbers in winter occurred on pig-fields in south of county (these birds probably roosting at Lackford WR, Suffolk). Counts from Lynn Point and Saddlebow in Dec were exceptional for the north-west at this time of year. A preference was shown for inland areas outside of breeding season, indeed few large counts were received from coastal sites.

Notable gatherings: *Jan* 64 Thetford Nunnery Flood 1st, 196 East Harling Heath and 120 West Harling Heath 9th; *Feb* 200 Shadwell Estate 5th, 200 West Harling Heath and 150 East Harling Heath 5th; *April* 69 Welney 12th, 50 Cley 16th, 79 Blackborough End Tip 19th, 49 Scolt Head 21st, 230 Saddlebow 27th; *May* 550 Saddlebow 15th; *June* 73 Blackborough End Tip 29th, 500 Saddlebow 30th; *July* 500 Blackborough End Tip 15th, 97 Bridgham 16th, 55 Scolt Head 19th, 457 West Harling Heath and 170 Brettenham 22nd, 1000 Saddlebow 28th, 200 Snettisham 30th; *Aug* 147 Lyng-Easthaugh GP and 72 Fustyweed GP (Elsing) 11th, 2000 Saddlebow 16th-21st, 200 Blackborough End Tip 29th; *Sept* 1800 Saddlebow 1st; *Oct* 160 Lyng-Easthaugh GP 7th, 700 Saddlebow and 350 Clippeby Hill 12th, 215 Weston Green 28th; *Nov* 200 Saddlebow 2nd, 100 Holme 3rd/4th, 150 West Harling Heath 11th, 400 Kenninghall 21st, 175 Weston Green 24th; *Dec* 110 Thetford Nunnery Flood 11th, 375 Saddlebow 13th, 400 Kenninghall 22nd.

Spring passage observed Scolt Head April where 21 west 20th and 13 west 27th. At Paston 40 east during a large movement of Black-headed Gulls May 13th, followed by 39 west Scolt Head May 23rd. Light passage noted through Colney GP and Wensum valley during April/May with peaks of 46 and 22 respectively. Birds were still moving off Scolt Head in early June evidenced by 36 west 1st and 113 west 2nd.

First returning birds to be logged were 15 west Sheringham Sept 10th with a further 35 west there 17th.

A number of birds with a red ring (white inscription) on left leg observed in King's Lynn area including up to 6 at Saddlebow in Aug; one similar at Whitlingham Lane GP Dec. These were probably ringed at Orfordness, Suffolk.

Several birds showing characteristics of *Lfintermedius* recorded with monthly estimates as follows:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All localities	1	-	-	3	-	-	5	3	9	18	12	3

Records included: Blackborough End Tip April 3rd, 2 Lynn Point April 8th, Brettenham July 16th, 3 West Harling Heath July 24th, Cley July 25th, max at Saddlebow of 3 Aug 12th-23rd, 9 Sept 27th and 11 Oct 25th, 7 Weston Green Oct 28th, Titchwell Nov 4th, 4 Blackborough End Tip Nov 11th, 3 Cley Nov 19th, 4 Weston Green Nov 24th and 3 Saddlebow Dec 13th.

Herring Gull

Larus argentatus

Herring Gull *L (a) argenteus/argentatus*

Increasing breeder, late summer migrant and winter visitor

Breeding reported from 5 sites, numbers (in pairs) similar to 1999: Titchwell 8, Scolt Head 5, Wells Saltmarsh 88, Blakeney Point 170 and Yarmouth 25+.

Strong northerly winds during early to mid-April resulted in a wreck of starfish along north-west coast. Vast numbers of Herring Gulls took advantage of this and the north coast WeBS count on April 19th produced a total of 16,200, virtually all between Holme and Scolt Head, with a quite astounding 10,000 at latter site. A count of 1600 (mostly imms) Blackborough End Tip June 29th was high for time of year. Peak numbers at selected sites:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lynn Point	850	458	300	151	1900	-	500	415	540	1070	1850	658
Snettisham	-	-	-	-	975	400	2500	-	-	-	-	1100
Holme	3000	3000	2850	2000	300	-	770	1480	850	570	400	740
Titchwell	3175	439	780	3370	350	165	917	-	-	198	875	1013
Scolt/Brancaster Hbr	-	-	3000	10100	425	224	425	135	950	-	-	-
Blackborough End Tip	-	-	-	200	-	1600	320	-	1350	260	-	2000

Gatherings of note elsewhere: 1500 Thornham Jan, 95 Attlebridge Jan 19th with 60 there Feb 10th, 195 Saddlebow Feb 25th, 1800 Hunstanton and 2000 Thornham Point April 15th, 200 Beetley Tip Oct 7th, 220 Docking Tip Nov 4th, 600 Beetley Tip Nov 9th, 550 Saddlebow Dec 27th and 500 Beetley Tip Dec 30th.

Coastal movements in Jan included 150 west Overstrand 2nd and 1700 east Holme 21st. A total of 300 west Scolt Head March 6th was followed by a large exodus March 31st when 2300 east there and 1000 east Sheringham. A further 2000 headed east off Holme April 5th. Small numbers recorded passing for rest of year, all to west: 165 Scolt Head June 2nd with 440 there July 11th, 100 Holme Oct 17th and 30 Overstrand Oct 31st.

For first time during spring/summer regular movements of mostly adults (up to 30) observed going south-east am, then returning north-west pm over Wensum valley, presumably involving birds making daily movements from coast to feed on inland rubbish tips?

At Scolt Head a leucistic/albino April 1st-12th and a leucistic bird Blakeney Hbr June 5th. At least 2 1st-summerers at King's Lynn Fisher Fleet from late June had been ringed at Orfordness (Suffolk) in 1999. Several others in King's Lynn area through the year (including max 4 Blackborough End Tip July 28th) showing a red ring with a white inscription on the left leg were almost certainly ringed at Orfordness.

Small numbers showing characteristics of *L a argentatus* observed at 10 sites are presumably the tip of the iceberg. 1-4 recorded at several localities Jan-April and Oct-Dec with larger counts of 8 Thornham Point and 7 Hunstanton April 15th, 5 Blackborough End Tip Oct 28th with 29 there Nov 11th, 5 south-west (amongst *argenteus*) Welney Nov 12th, 8 Blackborough End Tip Dec 16th and 7 Saddlebow Dec 27th. During summer months: 2 2nd/3rd-summer Blackborough End Tip June 29th, 1st-summer King's Lynn Fisher Fleet July 25th-27th and 2nd/3rd-summer Blackborough End Tip July 29th.

Yellow-legged Gull *L (a) michahellis*

Increasing visitor from southern Europe

Another bumper year with records from 40 localities following the expected pattern. Numbers appeared to be similar to 1999 although increasingly identified in winter and even into spring.

Estimated number of individuals per month:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Juv	-	-	-	-	-	-	-	3	-	-	-	-
1st-year	4	2	-	2	1	5	5	13	3	1	2	4
2nd-year	1	1	-	2	1	4	7	5	9	2	3	4
3rd-year	2	-	-	1	-	-	6	2	5	3	3	2
4th-year/Adult	5	5	2	2	2	1	15	25	26	15	8	9
Unaged	2	3	4	1	-	1	-	2	1	-	-	2
Total	14	11	6	8	3	11	33	50	45	21	16	21

The higher numbers in June and July probably reflect observer diligence. Interestingly 1st and 2nd-summer birds began appearing in June and July in advance of older birds, which didn't arrive in force until the end of July. The largest count was an excellent 37 amongst Lesser Black-backed Gulls at Saddlebow Sept 1st, where also 3 June 30th, 15 July 28th, 27 Aug 21st, 35 Sept 28th, 15 Oct 3rd, 7 Nov 7th and Dec 14th.

Other notable counts included: at King's Lynn Fisher Fleet 6 June 27th and July 27th, 7 Aug 8th and 5 Sept 9th; at Blackborough End Tip 3 June 29th, 11 July 13th/14th and 3 Nov 18th; at Lynn Point 15 Sept 21st and 6 Dec 9th; also 3 Aldeby Tip March 7th, 3 Titchwell Nov 4th and 3 Beetley Tip Dec 30th.

An adult King's Lynn Fisher Fleet from at least Aug 8th-Oct 18th had a metal ring above the right knee and was reportedly ringed in France.

Caspian Gull *L (a/michahellis) cachinnans*

Increasing visitor from eastern Europe

An exceptional year for this enigmatic gull with probably 13-15 individuals recorded. Although undoubtedly very scarce this form does appear to be occurring with some regularity. It is interesting to note that in Leicestershire and Rutland alone 33 individuals were recorded in 1999. Even taking into account the possibility that *cachinnans* gravitates towards inland counties in midwinter it suggests that this year's total could become the norm for the county.



Caspian Gull (*Peter Wilson*)

Sightings were within the period Jan-April and Aug-Dee and of single birds except for 3 at Smoker's Hole, Saxlingham Jan 3rd and 2 there Jan 4th.

All records listed: 2nd-winter Smoker's Hole Jan 2nd/3rd (AMS *et al*), 2 adults also there Jan 3rd/4th with one to 7th (AMS *et al*), adult Longwater Industrial Estate (Costessey) Jan 9th (NM JRW), 1st-winter Saddlebow Feb 29th-March 13th (PMW), 2nd-winter Smoker's Hole March 9th (AMS), with a different 2nd-winter there March 26th (AMS), 1st-summer Thornham Point April 15th (PMW), 2nd-summer Smoker's Hole Aug 5th (AMS), adult Roughton Aug 15th (BJM), adult Saddlebow Sept 5th (PMW), juv/1st-winter near Hunworth Sept 28th (SCV), 1st-winter Beetley Tip Nov 9th (JRW), sub-adult Saddlebow Nov 28th (PMW), adult Blaekborough End Tip Dee 9th (PMW) and 2nd-winter Titehwell Dee 16th (IGJ).

A 1st-summer gull initially reported as a Caspian Gull at King's Lynn Fisher Fleet July 21st caused excitement when Heuglin's Gull was mooted as a possible alternative. After this was dismissed, a hybrid *cachinnans x argentatus* or *cachinnans x michahellis* was suggested until things went full circle and Caspian was again favoured by some observers. It seems the bird probably was a Caspian Gull (albeit a large male) though maybe the hybrid possibility cannot be ruled out. The bird was last seen Aug 5th.

Iceland Gull

Larus glaucooides

Annual but very scarce winter visitor and passage migrant

The county seemed destined to miss out on the large influx of Iceland Gulls to Britain during the 1999/2000 winter until one at Waleott Feb 27th became the first in an excellent run of records through to April 16th.

Most arrived in early April following strong northerlies, the majority associating with the large numbers of Herring Gulls present along north coast between Hunstanton and Holkham Bay. Probably a min of 7 individuals (3 1st-summer, 3 2nd-summer and one 3rd-summer) occurred, though the more optimistic might arrive at a figure approaching 12 different birds.

All records listed: *Feb* 1st-winter west Waleott 27th; *March* 1st-winter Titehwell 5th, 1st/2nd-winter tracked west Salthouse (0914 hrs), west Cley (0920 hrs) then west Titehwell (1130 hrs) 20th; *April* 2nd-summer Titehwell 2nd-16th with 2 2nd-summer there 14th and 1st-summer 10th-15th, 1st-summer Blaekborough End Tip April 3rd/4th joined by a 3rd-summer there on latter date, 1st-summer Yarmouth 4th-7th, 2nd-summer Seolt Head 5th-9th, 1st-summer and 2nd-summer (different bird) 12th, 1st-summer Thornham Point 9th and 15th, 2nd-summer Holkham Bay 12th/13th and 1st-summer Hunstanton 15th.

No further sightings to year end.

Glaucois Gull

Larus hyperboreus

Winter visitor in fluctuating numbers; rare in summer

Another reasonably busy year for this species with at least 10 and probably nearer 20 individuals recorded. Most occurred Jan-April while in early to mid-April a min of 4 individuals frequented Thornham Point-Scolt Head area. A 2nd-year bird summered in the King's Lynn area having found the Fisher Fleet to its liking. This bird roosted at Ousemouth, being observed from Lynn Point on several dates, and also at Blackborough End Tip Feb 11th and April 4th, and Saddlebow April 27th.

All records listed: *Jan* 2nd-winter King's Lynn Fisher Fleet (remaining in area until Aug 26th), 1st-winter and 2nd-winter Smoker's Hole, Saxlingham 3rd, 3rd-winter Lynn Point 9th, one (unaged) Titchwell 23rd, 2nd-winter (different bird) Lynn Point 30th; *Feb* adult Holkham Bay and adult Old Hunstanton 20th; *March* 1st/2nd-winter west Trimmingham 5th; on 12th 1st-winter west Overstrand, then west Sheringham and 1st/2nd-winter west Blakeney Point presumed same bird, on same day also an adult west Sheringham was later seen flying west Cley; *April* 1st-summer Scolt Head 1st intermittently to 9th and 2 2nd-summer 8th/9th, 1st-summer Titchwell 3rd intermittently to 16th, 2nd-summer 15th and 3rd-summer 16th, 3rd-summer Thornham Point 9th intermittently to 18th and 1st-summer 14th, one (unaged) Burgh St Peter 25th; *Nov* 1st-winter west Cley (later on Blakeney Pit) 25th; *Dec* 1st-winter Saddlebow 14th/15th, 1st-winter Breydon 15th/16th and 1st-winter Cley 30th.

Great Black-backed Gull

Larus marinus

Passage migrant, winter visitor and non-breeding summer visitor

Large gatherings typically occurred at Scolt Head and Attlebridge, meanwhile this species appears to be decreasing at Breydon. The Oct roost flight through Lynn Point was particularly noteworthy as were the numbers on Beetley Tip at end of year.

Max numbers at selected sites:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Lynn Point	150	-	-	13	55	-	231	105	140	440	98	79
Scolt/Brancaſter Hbr	-	-	-	85	80	31	250	210	455	434	45	136
Breydon	214	-	-	-	-	-	-	117	112	104	-	150
Blackborough End Tip	-	-	-	26	-	131	-	67	-	-	130	50

Notable counts at other localities: 77 Docking Tip Jan 16th, 325 Attlebridge Jan 19th and 140 Feb 10th, 73 Cley July 9th and 143 Aug 10th, 85 Holme Aug 31st, 136 Scrobey Sands Sept 3rd, 150 Berney Nov 4th, 180 Beetley Tip Nov 9th, max 104 Titchwell Nov, 70 Snettisham Dec 26th and 240 Beetley Tip Dec 30th.

In ſpring 30 eaſt Beeton Bump (0530-0730) May 7th. Weſterly paſſage in autumn noted at Sheringham where 50 Sept 26th and 80 Oct 6th, and at Overstrand where 45 Oct 31st.

Kittiwake

Riſſa tridactyla

Mainly paſſage migrant; occaſional non-breeding concentrations in ſummer

Rather low numbers preſent off coaſt for much of year until an immense eaſterly paſſage Nov 7th (which alſo involved Little Gulls). Thereafter this ſpecies became more evident on ſeaſatches.

A count of 20 off Titchwell Jan 5th was largest until 33 west Holme March 5th and 50 Sheringham March 29th. A flock of 60 in Scolt Head ternery May 29th built up to 155 June 4th before falling to 12 June 30th. Movements in June (presumably relating to failed/non-breeders?) included 325 east Scolt Head 3rd and 300/hr Walcott (0600-0730) 26th with 450/hr there (0600-0730) 30th. Then followed counts of 240 west Mundesley July 12th, 72 west Cromer (0645-1415) Sept 3rd, 90 west Holme and 51 east Sheringham Oct 31st.

Nov 7th was a truly remarkable day for seawatchers who between them logged: 1200 Hunstanton (rafting below cliffs before departing into Wash), 750 east Holme, 211 east Cley (0920-1045), 5000 east Sheringham (all day), 20,000 east Mundesley (all day), 5330 Sea Palling and 1000 Waxham (20 mins). Largest numbers after this date included: Nov 116 Sea Palling 8th, 615 Sheringham 9th, 100 Sea Palling 10th, 250 Sheringham 12th, 500 Cley 13th; Dec 60 west Titchwell, 300 Sheringham and 300 west Beeston Bump 16th, 387 Sea Palling 18th, 380 west 150 east Sheringham 25th with 1500 off there 30th.

Sandwich Tern

Sterna sandvicensis

Migratory breeder and passage migrant

First arrival Titchwell March 13th followed by Blakeney Point 21st, Titchwell and 2 west Cley 25th with singles there 26th, 28th/29th, 2 Sheringham 27th and 3 Scolt Head 31st.

An excellent breeding season at Scolt Head where 4200 pairs fledged at least 5000 young. The first nest recorded by end of first week in May with 3000+ nests by 10th, the first chick hatched 28th, first fledging June 26th/27th and 2000+ fledged by 30th. A very poor season at Blakeney Point following three successive good years, only 75 pairs fledged no young due mainly to Herring and Lesser Black-backed Gull predation.

At Scolt Head a 1st-summer May 8th-June 25th at least, begging and being fed by accompanying adult for most of May. The first juvs recorded away from breeding colony, Breydon June 29th with 2 30th, and Walcott 30th.

Notable movements/gatherings away from Scolt Head: 200 Cley April 17th and 20th, 140 west Beeston Regis (1430-1630) and 616 Cley 21st with 300 22nd, 100 Hunstanton 23rd, 100 over Snettisham and 350 Cley on 24th, 475 29th, 125 May 2nd and 800 on 5th, 150 east Holme May 5th, 114 (including 108 east) East Runton Sept 2nd, 230 east 20 west Sheringham and 426 east Cromer 3rd, 200 west Holme, 120 east 50 west Sheringham, and 209 east Mundesley on 16th.

Recorded at only one inland locality, Hickling Broad July 5th and 2 on 20th.

1-2 recorded at 13 coastal localities in Nov. Winter records, singles Blakeney Hbr Dec 2nd and 2 on 3rd, Blakeney Point 6th and west Sheringham/Weybourne 15th.

Roseate Tern

Sterna dougallii

Uncommon summer visitor; has bred

Another good year with birds recorded mid-May to Sept; breeding was attempted for the fifth successive year. At one locality a pair hatched a single chick but it died after just 2 days during a period of inclement weather. At another site a pair observed carrying out courtship activities and acting aggressively towards other nearby terns but no breeding recorded.

Elsewhere a total of 5 Scolt Head May 14th-July 14th: Cley July 3rd-29th with 4 on 4th; Yarmouth North Beach tern colony 2 June 22nd/23rd and one 27th/28th; one Yarmouth South Beach Sept 9th; Breydon 1-2 May 16th-20th, singles 28th, June 21st, 23rd-27th, 2 28th-30th, one July 1st and 2 15th-20th. It is presumed that there is some movement of birds between Yarmouth North Beach and Breydon.

Common Tern

Sterna hirundo

Migratory breeder and passage migrant at both coastal and inland sites

Recorded between March 25th (Wroxham Broad) and Nov 13th (Sheringham). Interestingly four of the last five years' first dates have been at Wroxham Broad and 2000 is the second earliest on record; the earliest, again at Wroxham Broad, was March 24th 1993.

The only notable spring concentrations at Scolt Head where 145 April 20th, 165 21st, 200 27th-May 5th, 250 11th-19th and 500 20th-31st.

Min of 744 breeding pairs, an increase of 32 on 1999. A decrease in fledged young compared to last year's excellent figures but still a good fledging rate compared to recent years. Still no figures from some sites.

	<i>No of prs</i>	<i>Young fledged</i>
Snettisham	99	0
Scolt Head	300	250
Burnham Overy-Stiffkey Binks	78	40+
Blakeney Point	30	very few
Breydon	199	254
Ranworth Broad	24	unknown
Barton Broad	19	unknown
Lyng-Easthaugh GP	1	unknown
Sparham Pools	12	22
Middleton GP	14	unknown
Earsham	1	1
Welney	10	1

A complete failure at Snettisham, cause unknown. At Scolt Head the highest number of breeding pairs since 1986 but a decrease in fledged young on last year. At Blakeney Point a further decline on the notable reduction of 1999, predation by large gulls being the main cause.

At Breydon a record number of pairs fledged a record number of young; all but 4 pairs nested on the four RSPB platforms and all the young fledged from these platforms; 3 pairs failed on the saltings and one pair on the Yarmouth Wildfowler's Assoc platform. The increase at Sparham Pools was due to improved management. At Welney first nests were flooded out May 31st/June 1st and most of second attempts predated, probably by American Mink; only 2 clutches hatched and 2 adults were killed at nests.

At Breydon 1-3 imms on various dates June 4th-July 29th with 4 on July 22nd.

In Aug 105 Snettisham 1st, 116 Scolt Head 2nd and 260 Breydon 29th. In Sept 105 west Scolt Head 11th, 145 27th and 105 on 28th.

Arctic Tern

Sterna paradisaea

Double passage migrant; a few pairs breed

A second successive very light spring passage with 1-9 at only 4 sites in April including earliest Welney 10th with 16 there on 28th, and 16 west Beeston Regis (1430-1630) on 21st. 1-7 at 11 sites in May with 12 Welney 3rd, 13 north-east Aylmerton and 10 north Lynn Point 7th, and 30 east Mundesley 27th.

Breeding: 1.5 pairs Scolt Head fledged one young and 4 pairs Blakeney Point fledged no young due to predation by large gulls.

1st-summer birds at Scolt Head all June and Breydon June 29th-July 1st. A good midsummer count of 27 west Mundesley July 16th.

Light autumn passage with 1-7 at 10 localities with exception of 19 west Scolt Head Sept 2nd and 15 west Holme on 16th; latest 3 Holkham Bay Nov 4th.

Little Tern

Sterna albifrons

Local migratory breeder

Earliest Scolt Head and Breydon April 16th and latest Scolt Head Sept 22nd.

Breeding: a max of 551 pairs, a decrease of 50 on 1999 with a major decrease of 378 fledged young. At Scolt Head several young found dead or half-starved and many nests deserted, thought due to lack of small fish locally in harbour, whilst frequent bad weather resulted in other failures. A 30% decrease at Burnham Overy-Stiffkey Binks compared to 1999. At Burnham Overy 40 hatchlings early on but many died of starvation - the fish supplied by the parents were too large for the chicks to eat, suggesting the population of Sand Eels and Whitebait had reached a larger average size than previous years. At Blakeney Point poor fledging was due to gale-force winds at a time when things were going very well, causing chicks to move to a more open area and leading to predation by large gulls. At Winterton first nests were washed out by high tides, the colony moved approx one mile north and second nests suffered the same fate. Some moved back but with the same results; only 3 chicks were seen and no fledged young. At Yarmouth North Beach Kestrel predation was the main problem again.

	<i>No of prs</i>	<i>Young fledged</i>
Holme	4	2
Scolt Head	87	2
Burnham Overy-Stiffkey Binks	81-86	28
Blakeney Point	115	6
Winterton	31	0
Yarmouth North Beach	228	36

Impressive midsummer counts at Scolt Head where 235 July 17th, 255 18th, 520 19th, 515 20th and 220 21st, and 300 Winterton North Beach 20th.

Inland: singles Rockland Broad May 6th and Lakenheath Washes 7th.

Black Tern

Chlidonias niger

Regular double passage migrant in variable numbers; has bred

First recorded at Welney where singles April 19th and 21st, 2 on 22nd, 3 23rd and 25th, and 7 there 30th. Only other April occurrences were 2 Ouse Washes (Hilgay Turn) 23rd with 3 there 30th, and one Salthouse 29th. A good spring passage followed May 1st-15th with min of 553 birds at 24 localities, mainly 1-6 but 10 Welney 5th/6th and 40 Ouse Washes (Hilgay Turn), 15 Ranworth Broad and 11 Barton Broad all 6th. Main movement on 7th with 307 birds at 20 localities producing high counts of 14 Snettisham, 19 Titchwell, 14 Hickling Broad, 18 Rockland Broad, 21 Ranworth Broad, 25 Barton Broad, 30 Hardley Flood, 21 Lakenheath Washes and 83 Welney. Otherwise 19 Titchwell, 7 east Scolt Head, 12 Middleton GP and 18 Welney 8th; 8 Holme and Pentney GP, and 14 Lakenheath Washes 12th; 12 Rockland Broad, 10 Ranworth Broad and 9 Welney 13th; 15 Barton Broad 14th/15th. The only subsequent May occurrence was 2 Titchwell 27th.

Two June records, singles east Scolt Head 2nd and Welney 8th. In July: singles Rockland Broad 1st, Pentney GP 7th, Cley 18th, 27th and 30th, Stiffkey Fen 19th and 5 Breydon 25th. Only 32 birds at 8 localities in Aug, mainly 1-3 but 6 Titchwell 2nd and 13 Breydon 26th.

Little passage noted early Sept with only 2 Holme and one Titchwell 1st, 2 west Scolt Head 1st and 3rd, 2 west Sheringham 1st and 3 west there 3rd, and single Pentney GP 13th. A light passage followed from 16th-30th with a max of 98 at 11 localities mainly 1-5 but on 16th 9 west Cley, 14 west Sheringham and 11 Sea Palling; also 16 east Scolt Head 20th.

Only a single Oct record, east Sheringham 7th. In Nov 2 Snettisham 5th, Walcott 6th and 1-3 Cley 6th/7th, the latest since 1983.

White-winged Black Tern

Chlidonias leucopterus

Vagrant from south-east Europe

One west Cley at 1930 hrs May 28th (AJ) and another adult Winterton July 27th (SJA). Now recorded for the third successive year.

Guillemot

Uria aalge

Passage migrant and winter visitor; occasional wrecks

In first half of year few records with 14 east Scolt Head May 11th and 25 Cley July 15th. Many records in second winter period when some excellent counts, but numbers small until Oct when highest counts 70 Scolt Head 20th and 200 Sheringham 29th. In Nov max 400 Titchwell 19th and 200 Cley 13th. In Dec thousands appeared off the north coast daily, highest counts: Hunstanton 1000s 21st-31st; Titchwell 1000 19th with 7000 west in one hour 20th, 1000 past per hour 21st, 900 west 16th (in 2 hrs) and 400 28th; Burnham Overy 6000 passing per hour 31st; Cley 420 west 3rd with 1000+ east 4th, 4000+ east 20th and 2000 west 29th; Sheringham 4500 28th (in 1 hr 30 mins). It was estimated that up to 5000 were present in the Blakeney/Cley/Salthouse area during second half of Dec and total for whole north coast must have greatly exceeded 10,000 birds (see also Guillemot/Razorbill).

No inland records, but one on R Ouse at King's Lynn Jan 16th.

Razorbill

Alca torda

Passage migrant and winter visitor

As usual few positively identified with best counts during year: Titchwell 10 Sept 30th and 20 Oct 20th; Scolt Head 40 Oct 12th, 45 Oct 19th and 100 Oct 20th; Cley 8 July 15th and 30 Oct 15th; Sheringham 60 June 25th and 10 Nov 9th.

Guillemot/Razorbill

Largest movements in first half of year thought to have been mostly Guillemots with 32 west Scolt Head May 3rd, 150 east Sheringham Feb 16th with 385 June 25th, and 450 Mundesley June 24th.

There were no other movements of note until Oct when best counts 400 east Weybourne, 7500 east (3 hrs) Sheringham, 678 east 20 west Beeston Bump (0815-0915) and 330 Sea Palling 6th; 420 west 3 east Sheringham 10th; 350 east 20 west Sheringham 11th; 350 west Scolt Head, 500 Sheringham and 2200 Happisburgh 20th.

Numbers were even higher in Nov and Dec and in contrast to previous month, most observers thought that Guillemots were almost exclusively involved in these movements. In Nov 3500 west Mundesley and 620 north Waxham 11th, 530 Sheringham 12th, 622 east 250 on sea Sheringham 18th with 900 there 19th, 2000 west Mundesley 22nd, 1000+ Holkham Bay and 430 north Waxham 25th, 950 east 280 west Holme, and 1000s on sea

Holkham Bay 30th. In Dec highest counts at Holme where 2950 west 95 east 14th (0800-0930), 3000 east 1000 west 15th (0800-0900), 2900 east 310 west 27th (0800-0900) and 5640 west 230 east 28th (0810-0910). Additional counts elsewhere during month: 1000s Titchwell, 400 Cley and 300 Mundesley 15th; 900 Mundesley 16th with 1000 there 20th; 1000+ Holkham Bay 29th.

Black Guillemot

Cephus grylle

Rare passage migrant and winter visitor

Another good year with singles Titchwell Oct 1st (juv); Salthouse Nov 12th (adult); Sheringham west Oct 31st (adult), east Nov 11th and 12th; west Overstrand Nov 12th and west Mundesley Nov 11th and 12th. It seems probable that just 2-3 birds account for all these records.

Little Auk

Alle alle

Passage migrant, and most during northerly gales; occasional wrecks

A very poor year with only record in first half of one found moribund Heacham South Beach Jan 15th and taken into care. In autumn a very early summer-plumaged adult west Sheringham Sept 16th (JRW) and then 3 west Holme Oct 6th. No others until Nov when singles west Holme and Titchwell 4th, Cley 7th, 3 west Holme and singles on sea and west Sheringham 8th, west Holme 14th and Titchwell 17th. In Dec numbers still low with 3 west Holkham Bay 14th and singles west Cley 2nd, Brancaster 6th, Titchwell 10th and 16th, north Waxham 16th and Mundesley 21st. Also during month one found in a road at Hunstanton 18th, which was rescued and released onto the sea.



Little Auk (*Andy Benson*)

Puffin

Fratercula arctica

Passage migrant and winter visitor

At the start of year only records singles east Titchwell Jan 1st and east Cromer Jan 9th. Small numbers in spring when in May west Sheringham 27th, 2 west Cromer 27th and 29th, and east Scolt Head 29th. Similar numbers in June when 3 east Cromer 4th, and singles Mundesley 24th and west Holme 25th. In July east Sheringham and 2 Mundesley 11th, with further singles east Scolt Head and Mundesley 12th, east Cley and south Yarmouth 15th, and east Sheringham 16th.

Autumn passage light with none until Sept when Cley and east Cromer 2nd, 2 west Scolt Head, 2 east Sheringham and 2 west Overstrand 3rd, west Scolt Head 6th, Cley 16th and east Weybourne 24th. Few in Oct when at Holme 3 west 2 east 6th and one west 26th, and at Sheringham singles east 5th and west 27th. Surprisingly few in Nov and Dec considering the large numbers of auks offshore. In Nov 2 west Holme 6th, west Mundesley 7th, 5 west Holme and 3 west Sheringham 8th, and 2 east Sheringham 18th and 19th. In Dec only records singles west Holme 9th, and east Holme and Mundesley 19th.

Rock Dove/Feral Pigeon

Columba livia

Introduced/escaped resident in most urban areas

Few records received. Three-figure counts of 120 Kilverstone April, 117 Hunstanton and 100 Wells North Point Nov, and 104 Earsham Dec.

No records of coastal movements this year.

Stock Dove

Columba oenas

Resident, passage migrant and winter visitor

Highest counts in first winter period included: *Jan* 107 Brancaster (Sussex Farm), 100 Ringstead, 75 Diddington, 65 Attlebridge/Morton-on-the-Hill, 60 Holme, 60 Waxham; *Feb* 125 Holme and Ringstead, 116 Caston, 80 Wolferton, 70 Whittington; *March* 65 Elsing, 61 Morston, 30 Holme; *April* 79 Langham, 38 West Somerton/Horsey.

First coastal movement noted Holme where 8 west Feb 1st and 6 west 25th. Movement continued into March with westerly passage again Holme where 11 5th, 12 6th, 70 7th, 11 11th, 8 12th and 6 25th. Elsewhere during March 6 west Sheringham 6th, 5 west Beeston Bump 21st, at Sidestrand 2 east 1st, 12 west 5th, 7 east 2 west 6th, 17 west 13th and 3 east one west 25th, and Paston where 12 east 12th and 7 east 19th. Only movements noted April at Sidestrand where 2 east one west 2nd, and Horsey where 20 south 1st and 16 south 5 north 8th.

Breeding records received: one pair Blakeney Point, 3+ Bylaugh, 5 Langham, 7 Merton, 9 Ringland, 4+ Sennowe Park, 5 Welney, 5-6 Wiveton and 11 Wootton. NBA results showed the species was present in 73% of tetrads covered in breeding season with an average of 5.5 pairs per occupied tetrad.

Coastal movement in autumn noted Beeston Bump where 20 east Nov 4th and one in off sea Wells Dec 20th.

Max counts in second winter period included: *Oct* 90 Holme, 55 Pensthorpe; *Nov* 75 Holme, 65+ West Somerton/Horsey; *Dec* 160 Clippesby Hill, 50 Holme, 46 Ouse Washes, 45 Stiffkey.

Woodpigeon

Columba palumbus

Resident, passage migrant and winter visitor

In first winter period highest counts: *Jan* 1500 South Lopham, 1300 Feltwell Common, 800 Hindleveston, 400 Holme; *Feb* 5000 Horsey, 2000 Thelveton, 600 Holme, 500 Snetterton, 480 Brancaster, 400 Illington; *March* 1000+ Merton, 600 Holme, 330 UEA.

Westerly coastal movements Holme from mid-Feb with peaks of 120 14th and 80 20th; in March 260 7th, 220 12th, 1995 25th and 410 26th; also 77 west April 18th. Elsewhere max counts on March 25th when 302 west 51 east Beeston Bump (0530-0730) and 500 east Paston. Migration continued well into May with several flocks of 20-30 east Beeston Bump 16th. At Scolt Head 550 feeding on saltmarsh May 29th.

NBA results showed the species was present in 96% of tetrads covered in breeding season with an average of 59.4 pairs per occupied tetrad.

Movements during autumn more limited with 199 south Hunstanton Cliffs Oct 22nd and several flocks of 20-40 plus one of 100+ south-west over Watton Oct 24th. In Nov 1837 south Hunstanton Cliffs 13th. A cold weather movement at Holme of 130 west Dec 14th.

Highest counts in second winter period: *Oct* 200 Potter Heigham; *Nov* 600 Winfarthing; *Dec* 1200 Aslacton, 750 Wacton Common, 500 Brancaster.

A leucistic bird Ingham April 28th.

Collared Dove

Streptopelia decucocto

First bred in Britain at Cromer in 1955, now widespread and common resident

Max counts in first winter period at King's Lynn Docks where 300 Jan, 120+ Feb and 128 March. Elsewhere in Feb 40 Downham Market and 40 Ormesby.

A few coastal migrants noted in spring with (all west) one Sidstrand March 20th, 2 Beeston Bump March 25th and 3 next day, and 2 Sheringham April 24th.

NBA results showed the species was present in 87% of tetrads covered in breeding season with an average of 10.5 pairs per occupied tetrad. A large summer gathering of 80 Hockering June 27th.

Autumn migrants noted from Sept 24th when 2 west Sheringham with 3 west 29th, one in from north there Oct 9th and 3 east Oct 12th; at Beeston Bump 9 west 8 south Oct 19th. Final autumn movement noted Hunstanton Cliffs where 21 south Nov 11th.

Highest counts in second winter period: *Sept* 103 King's Lynn Docks; *Oct* 150 Tittleshall, 100 Blakeney Quay, 76 Hilgay; *Nov* 226 King's Lynn Docks, 75+ Ormesby, 56 East Ruston; *Dec* 214 Fritcham, 120 Wreham.

A number of birds at King's Lynn showed plumage abnormalities with possibly 3 leucistic birds Jan 11th, with a virtually all white bird and a dark brown one March 30th, both showing normal neck markings. A pale cream-coloured bird East Tuddenham July 30th to year end and one similar Hilgay Oct 27th.

Turtle Dove

Streptopelia turtur

Migratory breeder and passage migrant; evidence of recent decline

First of year at Felbrigg Park where a very early singing male March 24th-26th, the second earliest county record. No further arrivals until April 9th when single Castle Acrc. By end of month reported from many sites with max of up to 7 Berney daily from 27th with 3 Holme same day, 5 Eeoles 28th, 4 Lynn Point 29th with 6 30th. More widespread in May, recorded at numerous localities with highest counts 18 Eeoles (at feeding station), 15 Snettisham, 8 Holme and 5 West Beckham.

Visible westerly coastal migration noted as follows: 2 Sheringham April 23rd, 3 Holme 26th and 3 there next day, Beeston Bump May 7th, 4 there 8th, with 3 14th and 10 16th, 8 Cromer also 16th, 4 Cley and 2 north Winterton 31st, 7 Cley June 2nd with one north Winterton 4th.

Records submitted during breeding season widespread with highest at Cut-off Channel, Methwold where 'abundant' with 30-40 breeding pairs. One observer commented that "General increase? Good numbers seen in suitable breeding habitat". However, report from Broads suggested a considerable reduction in numbers (50+%) with the same situation echoed in nearby north-east Norfolk. NBA results showed the species was present in 59% of tetrads covered in breeding season with an average of 2.3 pairs per occupied tetrad.



Turtle Dove (John Geeson)

Some late summer concentrations with max 15 Eccles July, 26 Hoe Common Aug 20th and 24 Brancaster Aug 27th.

Last recorded Holme Oct 1st/2nd and 5th.

Ring-necked Parakeet

Psittacula krameri

Introduced vagrant

The long-staying bird in 1999 last seen Caister Jan 1st (GRO). Subsequent singles in March at Saxthorpe 19th (PG) and Ormesby 26th (D&LM) and at Mundesley/Walcott/Winterton intermittently July 27th-Aug 13th (MDF *et al*).

Unidentified parakeets also at Holme Aug 10th and Sept 11th, and Castle Rising Nov 1st.

Cuckoo

Cuculus canorus

Migratory breeder and passage migrant

First spring record Stanford Rectory April 10th followed by singles East Tuddenham April 17th, and Corpusty and Holme next day. Thereafter more widespread being reported from numerous sites to month end.

May records included a hepatic phase female, a rufous colour - morph, at Pensthorpe on 21st (ADC). NBA results showed the species was present in 58% of tetrads covered in breeding season with an average of 1.6 pairs per occupied tetrad.

More juvs than previous year with records July to mid-Sept from Barton Turf, Blakeney GM, Buckenham, Burnham Overy Dunes, Cley/Salthouse, Eccles, Holme, Horsey, Morston, Paston, Pensthorpe, Ringstead, Scolt Head, Sculthorpe, Stiffkey, Strumpshaw, Thetford Nunnery Lakes, Titchwell, Warham Greens, Weeting, Welney, Winterton and Yarmouth Cemetery. Late birds in Sept at Mileham 23rd, Holme 26th, Horning Hall Marshes 29th and Halvergate 30th/Oct 1st.

Barn Owl

Tyto alba

Resident, continental race has appeared as a vagrant

Recorded at 262 localities, an increase of 20% on 1999 total. Records widespread throughout county indicating a continued healthy population and maintaining our standing as one of the best counties in Britain for the species. Breeding reported at 29 sites with 34 pairs involved, a reduction on 1999. In Stanford TA 3 pairs found and birds noted at a further 9 sites. Undoubtedly breeding under-recorded, taking into account the species' sedentary nature. Interesting behaviour noted at Methwold where on July 29th, in warm still conditions, two seen flying low over R Wissey cut-off, making repeated passes and swooping within inches of water on several occasions; hunting for large flying insects is thought to be the likely explanation.

Little Owl

Athene noctua

Introduced resident

Reports from 106 sites, an increase of 9% over 1999 total. Fewer reports of pairs, the majority of records relating to single birds. Distribution shows similar pattern to previous years. Breeding noted at 21 sites involving 23 nests with pairs noted at a further 14 sites during breeding season. Fledged young noted at only one site. As with the last species breeding undoubtedly under-recorded as the majority of sites probably hold breeding pairs.

Tawny Owl

Strix aluco

Widespread resident

Records received from 57 sites, half of these relating to calling birds. In Holkham Park two occupied the usual roost during first winter period with three reported April 1st. During breeding season (April-July) birds noted at 22 sites although breeding confirmed at only 10 of these with 16 pairs involved. Highest concentrations were at Stanford TA where 5 pairs produced 8 young, and Snettisham with 3 pairs min. In second winter period one present at usual roost in Holkham Park throughout Dec. Unusual behaviour noted at Croxton Heath where on July 2nd an adult was seen dangling from a branch with wings open and eyes half closed; when approached by observer to within a metre it suddenly took flight.

Long-eared Owl

Asio otus

Scarce and local resident, passage migrant and winter visitor

During first winter period reports only from Cockley Cley (dead) Jan 23rd, Didlington Jan 25th, and Anmer Jan 26th where a roadside corpse had been dead for at least a week. In spring a good series of records from Holme with bird(s) noted March 16th and 19th, and April 13th, 19th and 20th/21st. At Litcham one present March 24th-April 9th. Other spring records, some no doubt relating to returning migrants: *March* Walsey Hills 15th; *April* Scolt Head 3rd, Cromer 18th, Felbrigg Park 18th and 23rd (dead), Martham 23rd, East Tuddenham 24th, Burnham Market 25th and Pensthorpe 27th; *May* Hickling Broad 1st, Lynn Point 11th, Holkham Meals 15th, Breydon 22nd/23rd and Shadwell 30th.

Records of confirmed breeding South Creake where pair reared one young and at a site in north-west where pair reared 3 young. Elsewhere young were heard calling Grimston Warren May 21st, Harling Woods May 27th and Cockley Cley July 27th. Also noted at Santon Downham during breeding season.

In early autumn recorded at Breydon Aug 23rd and Waterden, South Creake Sept 15th. Later in autumn noted in off sea at Cromer and Eccles Oct 15th, Holme Oct 26th and Egmerc Nov 16th. No subsequent records received.

Short-eared Owl

Asio flammeus

Rare breeder, regular passage migrant and winter visitor

Records widespread during first winter period with regular sightings of singles at Snettisham Feb 20th-May 14th with 3 Feb 20th and two displaying May 13th, Holme Feb 27th-May 1st, Titchwell Feb 17th-April 15th with 2 Feb 22nd and March 19th, Scolt Head/Brancaster Hbr Jan 14th-April 30th (one dead on tideline May 7th) with 2 Feb 13th and 21st. Blakeney Point Jan 26th-May 20th with one dead April 6th, and Salthouse March 30th-May 31st. Elsewhere during period noted at Ongar Hill (2 March 13th), Lynn Point, King's Lynn BF, R Babingley, Burnham Deepdale, Burnham Norton, Burnham Overy, Holkham, Warham Greens, Stiffkey, Stiffkey Fen, Morston, Blakeney, Cley, Sheringham, Eccles, Sea Palling, Waxham, Horsey, Winterton, Yarmouth, Breydon, Acle, Berney (one dead May 23rd), Chedgrave/Haddiscoe Marshes, Stubb Mill, Neatishead, Rockland Marshes, Hopton Point (Little Cressingham), Great Bircham, Gooderstone Warren, Hilborough, Stanford TA, Boughton Fen, Lakenheath Washes, Ten Mile Bank, Welney and near Wisbech.

No reports relating to breeding but recorded during summer at Cley June 7th, Salthouse June 8th, Blakeney Point June 9th, Breydon July 17th, West Walton July 29th and Berney Aug 13th, 18th and 29th.

In second half of year regular Snettisham Sept 18th-Dec 24th and Holme Sept 20th-Nov 6th with 2 Sept 25th and Oct 26th, and 3 in off sea Nov 6th. Other migrants arriving in off

sea Scolt Head Sept 10th, Winterton Sept 20th, Cley and Horsey Oct 15th, and Sheringham Nov 6th (2) and 8th. Other birds flying over the sea Sheringham Oct 14th, Weybourne west Oct 15th and Overstrand east ~ mile offshore Nov 8th. Multiple sightings during autumn/second winter period Breydon (2 Oct 1st, 4 Oct 20th and 3 Nov 14th), Brancaster (7 flushed during a shoot Nov 20th), Bure Park, Yarmouth (2-3 Nov 26th) and Morston (2 Nov 30th). Elsewhere singles Hunstanton, Thornham, Titchwell, Burnham Norton, Burnham Overy Dunes, Holkham, Cley, Salthouse, Sheringham, West Runton, Overstrand, Paston, Happisburgh, Eccles, Sea Palling, Waxham, Horsey, Bure Loop (Yarmouth), Runham, Berney, Chedgrave/Haddiscoe Marshes, Rudham, Belton/Fritton, Hilborough, Pentney Heath and Welney.

Nightjar

Caprimulgus europaeus

Local migratory breeder and rare passage migrant

First records for year came from central Norfolk May 12th and Brecks May 14th. During breeding season a total of 58 churring males submitted with 3 in east, 15 in north, 31 in west, 7 in central and only 2 in Brecks. These totals are only a fraction of the true numbers with Brecks vastly under-recorded. Breeding confirmed at 4 sites; fledged young seen at one site in north and a nest found, which was later predated, in the east. At one site in west where breeding had occurred in previous years, no birds were recorded despite several visits. At Weybourne birds were seen on several evenings on the coast taking moths. In autumn migrants noted at Sculthorpe Fen Aug 17th and Holme Sept 6th-8th.

1998 addition: At Haddiscoe Marshes one flushed July 16th.

Swift

Apus apus

Common migratory breeder and passage migrant

First records in April at Scolt Head 19th, Cley, Kelling WM and Sea Palling 21st, Holme, Titchwell, Cromer, Mundesley, Sea Palling, Waxham, Horsey and Winterton 22nd, and Castle Marshes (Barnby) and Colney GP 23rd. Sightings then more widespread but apart from 50 Colney GP May 5th, numbers low until mid-month when at Scolt Head totals noted moving west of 43 15th, 55 17th, 20th and 23rd. In second half of May best counts 100 Cley 20th and 150 23rd, 300 Welney 21st, 100/hr west Hickling Broad 27th and 1500 west Northrepps 29th.

Largest total of year occurred June 2nd when 11,200 west Scolt Head; also on this date 1500/hr south Hunstanton. Other notable June counts 405 west Scolt Head 12th, 1300 Welney 13th and 1500/hr east Paston (0500-0900) 19th. In July 500 Welney and 200/hr east Paston (0630-0830) 9th, 300 Cley 14th, 300 Langham 18th, 300 Snettisham 23rd, 1350 west Scolt Head 28th and 500 Old Catton feeding on flying ants 31st. In early Aug 400 west Beeston Bump (0600-0700) 2nd.

NBA results showed the species was present in 82% of tetrads covered in breeding season with an average of 13.5 pairs per occupied tetrad.

Birds noted throughout Sept with 50 in off sea Cromer 22nd and multiple counts during last week at Holme (5) 29th, Salthouse (3) 26th, Sheringham (5) 26th, (3) 27th and (4) 29th, Eccles (2) 26th and Yarmouth Cemetery (5) 27th. Birds lingered well into Oct with records from Holme and Happisburgh 3rd, Foxley 5th, Sheringham 7th, Cromer, Ranworth Broad and Reepham 9th, Yarmouth 10th, Sheringham 12th, Cromer (4) 14th, Sheringham and Cromer 15th, Waxham 16th, Titchwell and Waxham 17th, and Happisburgh 21st.

A remarkable occurrence in Dec when one appeared at Brancaster Staithe on 1st (KH *et al*). What was presumably the same bird then moved to Burnham Deepdale 2nd and was

last seen again Brancaster Staithe 4th. Only second county record in Dec, previously one Yarmouth on 18th and 20th 1951.

A partial albino at Burgh Common, Filby June 6th.

Pallid Swift

Apus pallidus

Vagrant from southern Europe and north-west Africa

1999 addition: One at Happisburgh Oct 25th (RHe) was a different bird from those at Mundesley and Winterton, bringing the total for the year to an incredible seven.

Kingfisher

Alcedo atthis

Resident, numbers fluctuating in response to severity of winters

Noted at 140 sites during year with records from all areas of the county, a slight decrease on 1999. In first winter period at 44 sites with best count 4 Ranworth Broad March 12th. Elsewhere 2 at Beeston Regis, Costessey Pits, Fakenham, Holme Hale, Horning, Lakenheath Washes, Pensthorpe, Pentney GP, Snettisham, Swanton Morley GP and Tottenhill GP. Breeding confirmed at 13 sites with birds present at a further 33 localities during breeding season.

At Narborough an injured male was taken to the RSPCA after flying into a window July 25th; at Westmerc on Aug 11th a bird bathing was seen to plunge into the water 27 times within a 15 mins spell, following which it spent 10 mins preening and 5 mins drying..

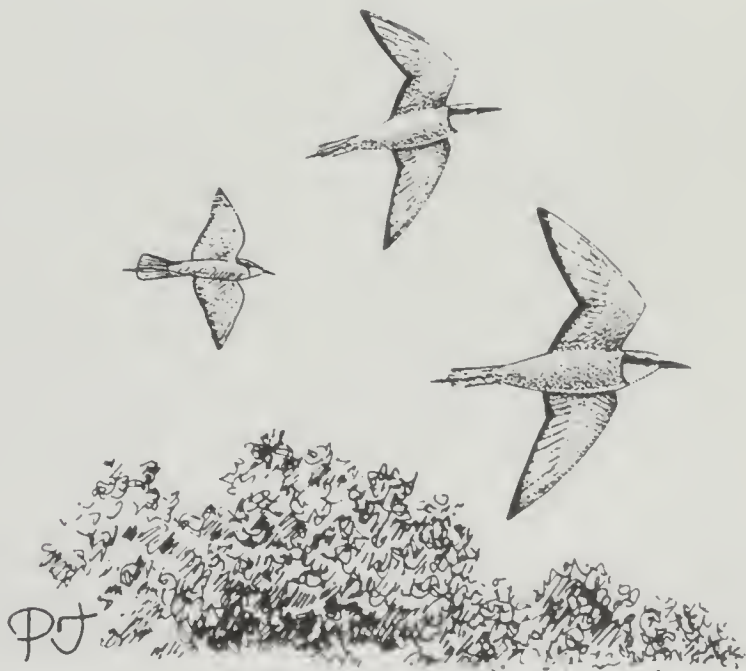
Reports in second half of year from 77 localities with two or more at 11 of these. Best counts 7 Thetford Nunnery Meadows Dec 2nd, 4 Horning Marsh Farm Aug 21st, 3-4 Wells saltmarsh in Oct and 3 Ranworth Broad Oct 22nd. Other sites where two noted Dilham, Hickling Broad, Pensthorpe, Snettisham, Stiffkey, Welney and Weybourne.

Bee-eater

Merops apiaster

Vagrant from southern Europe

Two spring records: one heard calling only Wighton April 23rd (A1B) and 4 at Burgh Castle May 10th/11th (PCN *et al*). See article on page 288.



Bee-eaters (Phil Jones)

Hoopoe

Upupa epops

Annual vagrant in very small numbers

The second poor year running with only one record, Hunstanton GC April 25th.

Wryneck

Jynx torquilla

Former breeder; now scarce annual passage migrant, mostly in autumn

Following the year's first at Salthouse Heath April 19th the usual small sprinkling of spring migrants: Scolt Head 22nd, Cley 22nd-24th, Strumpshaw 24th, and Blakeney Point May 12th and 14th.

A relatively normal autumn showing. In Aug singles Morston 25th, Winterton North Dunes 27th, Winterton South Dunes 28th/29th and Langham 28th. Sept produced 10 more birds: 2 Blakeney Point 2nd, increasing to 3 3rd with one until 5th, Cley and Winterton 3rd, Salthouse/Kelling 4th, Horsey 5th, Mattishall 14th, Wells East Hills 17th and Burnham Overy Dunes 26th.



Wryneck (*Vince Hanlon*)

Green Woodpecker

Picus viridis

Resident

Since the request in the early 1990s for all records of this charismatic bird, we are at last beginning to appreciate just how well this species is distributed.

Records from 134 localities with birds at 61 sites in breeding season. This is now the third year when reported from more sites than the other two woodpeckers. Undoubtedly this is due to a greater effort in recording, although the recent succession of mild winters would have been beneficial. As usual a fairly even scattering of records except for Fens where singles Hilgay and Ouse Washes Nov and Dec the only reports. Of the breeding sites, other than 3 pairs at both Merton and Wootton Carr, singles pairs seen elsewhere. NBA results showed the species was present in 60% of tetrads covered in breeding season with an average of 1.9 pairs per occupied tetrad.

Usual autumn/winter scatter of wandering feeding birds at coastal sites from Snettisham in west to Burgh Castle in east. Largest concentrations 4 Trimmingham Feb 26th and 6 Winterton Sept 9th.

Great Spotted Woodpecker

Dendrocopos major

Common resident; birds of the northern race occasional in autumn

Still very much under-recorded as only noted at 80 sites of which 41 held birds in breeding

season. In contrast the NBA results showed the species was present in 70% of tetrads covered in breeding season with an average of 2.3 pairs per occupied tetrad. A wide scatter of records received from across the county with only Fens producing very few. Most breeding sites held single pairs other than Holkham Park (min of 10 pairs but not fully surveyed), Merton 5 pairs, Corpusty, Wheatfen and Wootton Carr with 4 each, Kettlestone Common 3, and 2 pairs at East Tuddenham, Pentney, Wayland Wood, West Harling and UEA.

Largest winter concentration reported 7 Sheringham Park Feb 24th.

Unusually a presumed migrant over Winterton Dunes in spring on May 29th. A sprinkling of autumn coastal migrants as usual Sept 9th (over Breydon) to Nov 21st (Yarmouth Cemetery). A total of 15 birds with records from Hunstanton, Holme, Sheringham, Beeston Bump, Waxham, Winterton, Breydon and Yarmouth.

Lesser Spotted Woodpecker

Dendrocopos minor

Declining local resident

Recorded at following 51 sites (an * denotes a locality where birds were either drumming or seen in breeding season): Barnham Broom, Barnhamcross Common*, Beeston Regis*, Blickling Park*, Brancaster*, Bridgham*, Buckenham Tofts*, Cawston (3 at TG1622 Feb 26th), Cockley Cley*, Cringleford*, Dereham STW*, East Harling*, East Welton, Fakenham*, Felbrigg Park* (2 pairs present), Filby*, Gressenhall, Great Hockham*, Gunton Park*, Holkham Park* (3 territories) Holt*, Horning Marshes*, Little Barningham*, Little Thornage*, Lopham Fen, Lynford*, Mannington Hall*, Merton*, Northrepps, Norwich* (Northumberland St and Sweet Briar Marsh), Santon Downham* (2 pairs bred), Scarning, Shadwell* (seen entering nest hole), Sheringham Park*, Snettisham, South Wootton Common* (pair bred), Sparham Pools (pair bred), Sprowston GC*, Stanford TA* (Smoker's Hole and The Screens), Strumpshaw*, Titchwell*, Thetford Nunnery* and Nuns' Bridges, Thetford Warren, Thorpe St Andrew*, Tottenhill*, UEA, West Harling* (pair bred), Weybourne (juv early July), Wheatfen* and Wolferton.

Due to the species more conspicuous behaviour not surprisingly most reports late winter/early spring in contrast to Aug/Sept when no records at all.

A most interesting series of events noted Sweet Briar Marsh, Norwich where in May the young still in their nest hole were also watched being fed by a Great Spotted Woodpecker. Quite bizarrely at same location June 4th a Great Spotted Woodpecker's nest with well-developed young were seen to be fed at regular intervals by a male Lesser Spotted Woodpecker. Whilst fervent excitable calls from a nest of young birds can sometimes prompt feeding from another species, BWP (Cramp Vol IV) comments that Lesser Spotted have in the past only been occasionally noted helping to feed nestling Great Spotted. Both Wryneck and Great Spotted have also been seen on rare occasions feeding young Lesser Spotted at the nest. It seems strange, however, that the above events should be noted from the same site by presumably the same breeding birds. BWP also goes on to say that Great Spotted are generally viewed as a serious threat to the safety of nestling Lesser Spotted and the presence of one near a nest hole is usually enough to ignite a fierce attack by the parent Lesser Spotted.

Short-toed Lark

Calandrella brachydactyla

Vagrant from southern Europe east to Afghanistan

One record, a bird on north wall Breydon May 6th, which spent much of the time feeding on gravel track behind floodwall (AS *et al*).

Woodlark

Lullula arborea

Uncommon migratory breeder, recently increasing; also scarce passage migrant

Earliest records from breeding sites Feb 5th/6th; singles elsewhere Northrepps Feb 23rd, Wighton 2+ March 5th and one Southrepps next day.

Spring migrants Sidestrand March 6th and south Horsey 25th, and in April at West Runton and west Inceborough Hill 16th, Mundesley and east Paston 18th, and in off sea Beeston Bump 24th.

In breeding season a full survey in Thetford Forest found 249 singing males/pairs within the county, only three fewer than in 1999. The report makes reference to the current number of Woodlark in Brecks being the highest in living memory. However, there were two areas where significant decreases noted, the first attributable to there being no new felling for six years, but at the second there is no apparent explanation for the decline. Away from Brecks breeding confirmed in 8 areas with birds present during breeding season at a further 22 sites.

At Holme an exceptional set of records with 4 present June 17th-Aug 25th, 2 Aug 26th-Oct 5th, one 16th and 3 west 17th. Other autumn migrants Snettisham Sept 30th, south Hunstanton Cliffs Oct 19th, 2 Titchwell Sept 20th and one Nov 7th, 3 Pentney Oct 19th and south Beeston Regis Nov 22nd.

Outside of breeding season largest groups were 21 Feltwell Feb 27th, 25 Weeting Heath Oct 2nd and 15 Bridgham Oct 7th.

Skylark

Alauda arvensis

Resident, passage migrant and winter visitor

During first winter period largest concentrations: *Jan* 180 Scolt Head/Brancaster Hbr, 145 Titchwell, 120 Horsey, 100 East Harling and East Tuddenham; *Feb* 205 Illington and 100 Acle Marshes; *March* 130 Holkham. The WeBS counts on north coast produced totals of 521 Jan, 408 Feb and 272 March.

Few reports of migrants in spring apart from 9 west Holme March 11th and 4 west 25th, 4 west Scolt Head April 19th and 120 Sheringham May 7th.

Records received of breeding pairs/singing males indicate a stable population in several areas although at Edgefield a marked decline was noted. Totals reported: Wootton Carr 8, Scolt Head 86, Burnham Overy Dunes 7, Blakeney Point 42, Yarmouth North Denes 25+, Lower Saxthorpe 11, Gateley Hill 20 and Welney 25. Elsewhere healthy numbers reported at Sparham and stable numbers at Little London.

NBA results surprisingly showed the species was present in 98% of tetrads covered in breeding season with an average of 13.2 pairs per occupied tetrad.

In autumn first migrants noted Scolt Head Sept 9th. Thereafter: *Sept* 100 in off sea Sheringham 30th; *Oct* 305 south Hunstanton 15th, 337 west Holme 17th and 65 west 20th, 105 Scolt Head 16th, 585 17th, 305 19th and 115 22nd (all west), 70 Sheringham 7th, 130 10th, 120 plus 30 in off sea 29th, 70+ west Beeston Bump (0730-0900) 17th; *Nov* 200 south-west Hunstanton and 123 in off sea Cromer (0900-1115) 6th.

Second winter gatherings noted: *Nov* 350 Holme, 159 Stanford TA, 123 Warham SM and 98 Scolt Head/Brancaster Hbr; *Dec* 158 Scolt Head/Brancaster Hbr, 120 Thorpe Great Heath, Wretham and 105 Baconsthorpe. The north coast WeBS counts produced totals of 432 Nov and 377 Dec.

A leucistic bird with mostly creamy-white plumage apart from grey-brown patches on wings Berney July 19th.

Shore Lark

Eremophila alpestris

Scarce winter visitor and passage migrant; exceptional in summer

Numbers during first winter period considerably lower than previous year with main concentration Holkham Bay where max totals 49 Jan, 41 Feb and 40 March. Only other site where recorded regularly Scolt Head with 4 Jan-Feb reducing to 3 by late March. Two other sites held double-figure totals, Blakeney Hbr 33 Jan and 23 Feb, and Titchwell 12 Jan. Elsewhere 2 Salthouse Jan 8th, 4 Burnham Overy Dunes Feb 19th and 4 Brancaster March 11th.

In spring Scolt Head continued to hold birds with 3 April 2nd-18th, one 19th-24th, 2 28th, 2 May 1st and 6 10th-13th. Other spring records: 2 Horsey April 15th/16th with one 19th and 21st, Holme May 5th and 10th-13th, Cley/Salthouse May 11th and Happisburgh May 13th.

Fewer birds in autumn with earliest 2 Scolt Head Oct 9th. Further Oct records of 4 south Holme 20th, 3 21st, 2 west 26th, and one in off sea 29th, Titchwell 27th and 3 west 28th, Scolt Head 22nd/23rd, and Sheringham 23rd. In Holkham Bay 2 Nov 4th increased to 3 on 7th, 5 20th-25th and 6 30th, these then remaining throughout Dec. Elsewhere in Nov 4 west Holme 3rd and 6 west 4th, 11 Titchwell 12th, 3 west Sheringham 17th and 4 Yarmouth North Dunes 6th with one 9th. Apart from Holkham Bay no records in Dec.

Sand Martin

Riparia riparia

Local migratory breeder and common passage migrant

First arrival Wymondham March 5th, 8 days earlier than last year and the earliest county record by one day. Further early sightings at Titchwell with one 9th, 2 11th and 4 12th. Subsequently in March 6 Welney 15th, 4 Pentney GP and 8 Welney 17th, 3 Holme/Thornham 19th, and 12 Strumpshaw and 10 Swanton Morley GP 20th. In final week of month numbers increased with 70 Rockland Broad 24th, 100 Tottenhill GP 28th and 30 Ranworth Broad 31st. Birds widespread during April with best counts at inland sites of 240 Colney GP and 280 Pentney GP 25th, and 300 Welney 26th. Coastal movements noted at Holme with 600 west 19th, 430 west 21st and 300 22nd, and Scolt Head (all west) where 680 19th, 1375 21st, 1025 22nd, 395 25th and 715 26th. Elsewhere on coast 400 west Sidstrand 19th, 220 Happisburgh 22nd and 750 west Paston 24th. In first half of May gatherings of 200+ Colney GP 1st-4th, 150 Welney 3rd, 300+ Gunton Park Lake 10th and 170 Pentney GP 11th.

Records during breeding season from 13 sites: Bittering GP colony but not counted, Cranwich GP 80 new nest holes, Cromer Cliffs 40 pairs, Lyng-Easthaugh GP 20 nests, Middleton GP 40-50 pairs, Northwold (Cottage Fen) 16 holes, Paston-Mundesley 171 holes, Pentney GP 25-30 active nests, Sandy Hill (Stanford TA) 290 holes, Sheringham 2 colonies with 6 pairs at one, 300 new holes with 100 pairs at other, Sparham GP 20 nests, Swanton Morley GP 60 pairs and Wolferton 15 pairs.

Summer concentrations of 200 Pentney GP July 1st with 250+ July 9th, and roost of 500+ Martham Broad Aug 8th-10th. First signs of autumn migration Scolt Head where westerly movements commenced July 12th with peaks 65 18th and 115 19th. These continued in Aug with peaks 43 6th, 45 12th and 40 27th; 1-4 then noted daily until Sept 21st. A count at Cantley BF of 300 Sept 8th was largest of month but smaller numbers continued to be reported until month end; in final week 2 Pentney GP 25th, one Weybourne 26th, 5 west Sheringham 27th, 3 Pensthorpe and one Snettisham 30th. Only Oct records at Pentney GP where one 3rd and 2 7th. Two exceptionally late records in Nov with 3 east Overstrand 2nd and one Holkham 17th.

Swallow

Hirundo rustica

Common migratory breeder and passage migrant

A late arrival in spring with no reports in March. In April Holme and Waxham 1st; Holme (3), Titchwell, Scolt Head (3), Brancaster, Cley, Kelling Heath, Beeston Bump (2), Inceborough Hill, Bridgham and Pentney GP 2nd; Winterton, UEA (11), Pentney GP, Thetford Nunnery Lakes, Tibbenham (2) and Welney 3rd. Numbers only slowly increased until mid-month after which three-figure counts were made daily at Scolt Head with max (all west) 465 19th, 385 21st, 485 22nd, 605 25th and 565 26th. Best totals elsewhere 500+ Holme 18th with 600 west 19th and 300 29th, and 400 west Paston 18th. Movement continued through May; at Scolt Head (all west) 105 8th, 145 15th and 175 22nd peak counts. Other May passage noted on 7th with 200/hr east Paston (0700-0930) and 185 south Waxham (1000-1130). Passage still apparent in early June with 335 west Scolt Head 2nd and latest 35 7th.

Breeding reports few: Scolt Head 2 pairs, Blakeney Point 5 pairs and Stanford TA 106 pairs. At Welney although 40 pairs nested just one pair were double-brooded and many failed due to Sparrowhawks entering hides and taking adults. NBA results showed the species was present in 93% of tetrads covered in breeding season with an average of 8.2 pairs per occupied tetrad.

A large gathering Winterton North Dunes Aug 17th-19th where at least 1200 were feeding on Silver Y moths. Other large feeding flocks at Scolt Head where 1500 Aug 28th and in Sept 1000 4th, 1500 8th and 1000 9th. Evening roosts reported at Holme where 170 July 27th with 380 Aug 24th, 500+ Martham Broad Aug 8th and 1000 Cley Aug 24th.

First westerly movement of autumn noted at Scolt Head with 33 west July 27th. Numbers increased there through Aug with 155 2nd, 775 12th, 330 13th and 415 29th. Movement continued in Sept with 325 on 2nd, 375 15th, 785 18th and 185 28th. Elsewhere best movements 1500/hr east Mundesley Aug 19th, 1000/hr Paston Sept 1st and thousands in passage Hunstanton Sept 27th-29th. Max inland count in Sept 100 Ranworth Broad 18th.

Birds remained late into autumn with many records in Oct, including 75 north in 1 hr 30 mins at Caister 8th. Nov saw records from Winterton 1st, Happisburgh 4th, Holme (2) 6th, Titchwell (2) 10th, Waxham (2) 11th, Holme and Holkham 12th, Old Hunstanton, Titchwell (12) and Holkham (3) 14th, Holkham 17th, Holkham, Paston and Waxham 18th, Winterton (2) 19th and Titchwell (2) 30th. Remarkably records continued into Dec with singles at Cromer 1st, Waxham and Horsey Mere 2nd, Cley and Gorleston/Hopton 4th and Holkham Park 9th. The year finished with an amazing run of records at Cromer with 2-3 on 6th, 3 9th, 2 10th, 3 11th, 2 13th and finally one 14th (see also House Martin).

Two aberrant birds noted during year, a leucistic bird Welney July 4th-17th and an albino Oby Sept 8th-10th.

House Martin

Delichon urbica

Common migratory breeder and passage migrant

An exceptionally early bird West Runton (MDC *et al*) and later at Mundesley Feb 29th becomes the earliest ever county record. A further early record involved 2 at Ranworth Broad March 10th. More expected were April arrivals at Surlingham Broad (2) 1st, UEA Broad (3), Pentney GP and Thetford Nunnery Lakes 3rd, Holkham Park and Thetford Nunnery Lakes 5th, Holme 6th, and Cley, Mundesley and Winterton 7th. Sightings then became more widespread through month with counts Scolt Head of (all west) 105 on 19th, 135 21st and 95 26th. Elsewhere 25 west Sheringham 18th, 24 Titchwell 20th, and 40 Colney GP 23rd with 60 there 25th were best totals. Numbers built up in May with 100

Colney GP 4th, 250/hr east Paston (0630-0930) 17th, 315 Scolt Head 23rd and max of 185 Titchwell during month. In June 1050 Scolt Head 2nd was highest count with passage continuing until 17th.

In breeding season declines noted at Great Hoekham, Heydon (large decrease), Little London (down 50%) and Snetterton (no nests, 6 pairs 1999). Stable numbers reported at Broome Green and East Ruston. At Bedingham 20-40 nests were noted annually 1949-1998 but none nested in 1999; in 2000 4 pairs commenced building after arriving on very late date of Aug 1st/2nd. Numbers of nests elsewhere: Chedgrave/Hardley/Langley 74 (50 in 1999), Edgefield Green 4, Gooderstone 32 (30 in 1999), Langham 5, Old Catton (Wrcningham Rd) 8 (2 in 1999), Old Catton (The Paddocks) 4, Old Catton (Greyfriars) one, St Olaves 11, Snettisham 60, Welney 34 adjacent to reserve, West Runton 21 (19 in 1999) and Wiveton 30. NBA results showed the species was present in 79% of tetrads covered in breeding season with an average of 10.3 pairs per occupied tetrad. Two nests, at Spixworth and Old Catton, were still active Sept 30th.

Late summer concentrations: Aug 120 Lakenheath Washes 13th, 200+ West Aere 17th/18th, 600 Burnham Overy 26th and 100 Holme 27th: Sept 250 Pensthorpe 3rd, 112 Bodham 13th, 300 West Aere 15th, 100 Ranworth Broad 18th, 100 West Runton 20th, 200 Beeston Bump and 208 Barrow Common 28th, and 200 Cromer 29th.

Westerly passage first noted at Scolt Head Aug 12th with largest monthly count 185 29th; in Sept numbers increased with 275 on 2nd, 235 15th, 875 27th and 520 28th. Other coastal movements in Sept of 200/hr west Titchwell 1st, 800 west Holme 20th, 500 west Sheringham 27th and 'thousands' Hunstanton 27th-29th. Birds remained through Oct with 300 south-west Hunstanton, 100 west Sheringham and 80 south Ranworth 9th, 300/hr east Paston 10th and 100 Cromer 22nd. Reports continued throughout Nov. the final week producing records from Cromer (3) and Paston (2) 25th, Weybourne, Sheringham and Mundesley (4) 26th, and Heacham, Salthouse and West Runton 30th. Warm southerly winds saw an 'arrival' of birds in Dec with 13 at Cromer 6th-8th decreasing until final 6 were seen 14th. Elsewhere Mundesley (4) and Sea Palling/Waxham (7) 2nd, Happisburgh (2) and Waxham (3) 3rd, Mundesley/Paston (3) 9th, Overstrand 12th, Walcott (2) 13th and Mundesley/Gimingham 14th.

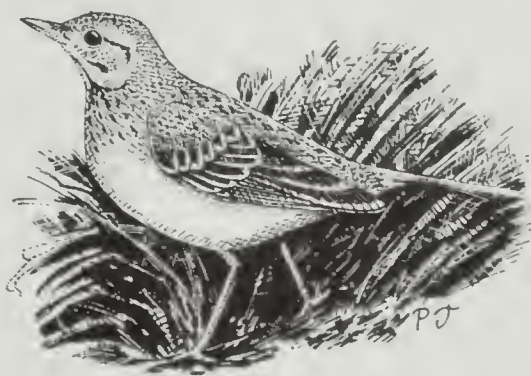
At Cromer a bird with white wings noted Oct 22nd.

Richard's Pipit

Anthus novaeseelandiae

Virtually annual autumn migrant from western Siberia; rare in spring and winter

Unusually five seen in second half of April: Winterton 18th, Holme 25th, Cart Gap, Happisburgh 27th with 2 there next day, also west Lynn Point 28th.



Richard's Pipit (Phil Jones)

Following a very early arrival Sheringham Aug 30th (PML), in Sept singles west Scolt Head 21st and present 24th, west Weybourne 23rd, Sheringham 24th and west Holme 27th. In Oct singles Holme and west Scolt Head 1st, and on 13th south Hunstanton, west Wells and Cley; on 15th south Hunstanton, remarkably at Holme at least 8 in morning (2 in dunes with 3 together and 3 singles all west), 2 in off sea Thornham Point mid-day and one west Salthouse. Subsequently singles west Holme 16th, in off sea Sheringham 22nd with same/another there 23rd, and south Hunstanton 24th.

In Nov west Beeston Bump 5th, west West Runton and south-west Hunstanton 6th, and west Titchwell 18th.

Tawny Pipit

Anthus campestris

Scarce migrant from southern Europe

After only one in 1998 and two in 1999 a total of 7 records: Winterton May 5th/6th (PCa *et al*), Scolt Head May 5th (NML MESR NW) and 14th (NML NW), Blakeney Point also May 14th (AMS *et al*), West Runton Sept 10th (D&MJS *et al*), Sheringham Sept 21st-23rd (TW *et al*) and Stiffkey Greens Sept 26th (PLa).

1999 Addition: Scolt Head Sept 3rd (NML).

Tree Pipit

Anthus trivialis

Migratory breeder and passage migrant

Earliest records in April at Winterton 3rd, Weeting Heath 7th, Hickling Broad 8th and Cromer 9th. Subsequently only light coastal passage of mainly 1-3 birds mid-April to end May with max 7 west Scolt Head April 24th.

Several observers have commented on the apparent decline in breeding numbers and hence all reports of singing males are listed: Babingley Common 3, Brettenham Heath, Bridgham Heath, Crostwight Heath (Honing), Dersingham Bog 2, Great Hockham, Hilborough, Holt Lowes 2, Kelling Heath 5, Roydon Common 7, Salthouse Heath 3, Santon Downham 5, Sheringham Park, Stanford TA 15, Thompson, West Harling, Weeting Heath 10 and Weybourne Heath 3.

In autumn migrants at Sheringham Aug 12th and Holme 22nd and 26th, and then in only small numbers from Sept 20th with max 7 Wells East Hills 27th. In Oct singles Yarmouth 1st, Holkham Meals 7th and Holme 20th, and at Wells East Hills Nov 6th, the latest county record.

Meadow Pipit

Anthus pratensis

Locally common migratory breeder and passage migrant with small numbers in winter

Winter counts included 80 Wissington BF Feb 2nd, 70 Edgefield Street Feb 15th and 85 Pentney GP Feb 22nd, with 80 still there March 19th.

First spring movements 6 west Beeston Bump Feb 2nd and 7 west Scolt Head Feb 22nd. Main migration west along north coast March/April with peak counts: Holme 153 March 7th and 502 March 25th, with 425 next day; Scolt Head 165 March 31st and 2045 April 19th; Blakeney Point 250 present April 2nd; Sheringham 150 plus 40 present April 4th; Beeston Bump 250 April 2nd (0630-0930).

Breeding counts of pairs/singing males include 86 Scolt Head, 54 Blakeney Point, 40 Welney, 7 Stanford TA, 6 Wootton Carr, 6 Sheringham, 5 Gillingham and 5 Cley. NBA results showed the species was present in 46% of tetrads covered in breeding season with an average of 6 pairs per occupied tetrad.

Largest autumn count 1025 south Horsey in 2 hrs 30 mins Sept 23rd with 350 present next day. Elsewhere 200 Holme Sept 7th with 200 west Oct 19th and 21st, 200 Scolt Head

Sept 25th-28th, 200 Burnham Overy Hbr Aug 19th, 190 east 25 west and 30 present Sheringham Sept 29th, 200 Happisburgh Oct 21st and 300 Yarmouth South Denes Sept 13th.

Only notable counts in second winter period 80 Paston Nov 4th and 41 Blakeney Hbr Dec.

Red-throated Pipit

Anthus cervinus

Vagrant from northern Europe

An above-average number of records: Holme April 22nd (JRW *et al*) and May 7th (PLa), Winterton May 15th (INS), Burnham Norton May 16th (AIB), Stiffkey Sept 19th (DBr AJLS) and Blakeney Quay also Sept 19th (IBu).

Rock Pipit

Anthus petrosus

Winter visitor and passage migrant, most probably of the Scandinavian race littoralis

The north coast WeBS counts gave totals of 309 Jan, including 109 Scolt Head, 104 Warham SM and 67 Stiffkey SM; 213 Feb, including 73 Scolt Head and 61 Warham SM. The March figure had reduced to 21, including 18 Warham SM. During this period recorded inland at Cantley BF where 5 Feb 13th, 3 March 12th and one March 18th. Stragglers in April at Cley and Breydon 1st, Horsey 8th and 2 Sheringham 21st.

A singing bird Scolt Head May 15th considered to be of British race.

In autumn earliest migrants in Sept at Happisburgh 12th, Scolt Head 13th, and Holme and Weybourne 20th. Main westerly movement Sept 30th-end Oct with peak counts 47 Holme Oct 13th and at Scolt Head where in Oct 42 17th, 73 20th and 33 22nd. Largest concentrations in second winter period also Scolt Head where 101 Oct 16th, 147 Nov 16th and 61 Dec 17th. The north coast WeBS counts also revealed 291 Nov, including 98 Warham SM, and 220 Dec, including 103 Warham SM and 70 Stiffkey SM. At Cantley BF 5 Dec 16th and at least 2 next day.

Water Pipit

Anthus spinoletta

Local winter visitor

In first winter period (Jan-March) irregularly at Holme (max 3), Titchwell (max 2), Cley (max 4), Hickling Broad (max 4), How Hill (max 9 Jan 21st-24th and Feb 22nd) and Buckenham (max 4). Elsewhere Haddiscoe Island Jan 22nd, Lakenheath Washes Feb 17th, March 26th with 2 31st, Horsey Feb 26th, and also in March Cantley BF 11th/12th, Weybourne 12th, Berney 13th and Salthouse 14th. In April regularly Buckenham until 10th (max 6 on 5th); elsewhere singles Salthouse 6th, Snetterton GP 12th, and Waxham 11th, 20th and 28th.

In Oct earliest Holme and Titchwell 15th. Then recorded in second winter period at above principal localities in small numbers (1-3), with 4-6 Strumpshaw Dec 22nd. Elsewhere Cromer Oct 28th, 2 Happisburgh Nov 12th, Pentney GP Nov 30th, 2 Stiffkey Fen Dec 12th and one Lynn Point Dec 23rd.

1999 Amendment: Nov/Dec records at Damgate Marshes, Martham not Acle.

Yellow Wagtail

Motacilla flava

Yellow Wagtail M (f) flavissima

Declining migratory breeder and passage migrant

First arrival Holme April 1st followed by 1+ there 5th and singles Welney also 5th, Waxham

6th, and Buckenham, Pentney GP and Breydon/Berney 7th. A steady movement throughout April with first double-figure count 10 Waxham 8th. Main passage from 18th with max 30 Holme, 35 Scolt Head, 30 Breydon and 16 Kelling WM on that date, followed by 105 Scolt Head 19th, 75 Holme 22nd, 70 Waxham and 60 Old Hunstanton/Holme 24th, and 50 Horsey 27th. Lower numbers as expected in May with highest count only 10+ Halvergate Marshes and 13 Scolt Head 6th, and 12 Burnham Norton and 12 Waxham 7th.

Breeding reported at Buckenham, Cantley BF, East Ruston, Egmere, Holkham NNR, Oby, Ormesby, Sheringham, Stanford TA and West Walton. A poor season with only 5+ pairs Oby, 4 Welney where no sign of improvement after flooding, 3 Holkham NNR, and max 1-2 at other named localities. A total of only 26 breeding pairs submitted. By contrast NBA results showed the species was present in 24% of tetrads covered in breeding season with an average of 3.1 pairs per occupied tetrad.

Other than 5 Titchwell July 30th with 3 there 31st, plus 4 Burnham Overy Staithe 30th, main autumn movement commenced Aug 12th with 12 west Scolt Head. Counts elsewhere included 79 Welney 22nd, 35 Holme 28th and 50+ Sea Palling 31st. A steady light passage throughout Sept produced only small concentrations/movements of 22 Welney 1st and 18th, 18 east Holme 1st with 14 east there 9th, 15 Cantley BF 5th and 15 Saddlebow 8th.

In Oct Welney 2nd, Lynn Point 5th and the last 2 Cley 23rd.

Blue-headed Wagtail *M (f) flava*

Regular migrant from continental Europe, mainly in spring

The first Snettisham April 16th and Blakeney Point 19th, followed by mainly 1-2 at 12 predominantly north-east and east coastal localities in association with the main Yellow Wagtail passage until end of month. Larger concentrations of 3 Waxham 19th with 6 there 20th and 7 21st, plus 4 Burnham Norton 24th and 5 there 25th.

In May only 7 singles at 5 localities and in Aug one Holme 28th was only autumn record.

Grey-headed Wagtail *M (f) thunbergi*

Scarce spring migrant from North Fenno-Scandia

Just 4 singles, Holme April 24th, Sea Palling and Waxham May 7th, and Blakeney Point May 13th/14th.

Grey Wagtail

Motacilla cinerea

Local breeder, fairly common passage migrant, less common in winter

Records of 1-2 but mainly singles from at least 45 widespread localities during first winter period. Very light spring passage noted at 10 coastal sites March/April with only notable counts at Holme in March where 4 7th, and 3 10th and 12th (all moving west).

Birds on territories from mid-March with 12 confirmed breeding pairs at Bridgham, East Harling, Lakenheath, Langford, Loddon Mill, Lyng Bridge, Norwich Fye Bridge, Norwich Oak Street, Raynham Park, Sculthorpe Mill, Thetford and West Acre Trout Farm (2 broods). At least 13 more pairs at traditional breeding sites where some may have bred, plus 1-2 at several other suitable sites during summer.

First post breeding dispersal noted on coast in Aug with singles King's Lynn 1st, Walcott 5th, 2 Breydon 7th with one 28th, 3 Sidestrand 15th and one 25th. Main passage from early Sept and continued throughout Oct into early Nov with records from around whole coastline. Mostly 1-2 but in Sept 4 Beeston Regis 10th with 6 29th, and 3 West Runton 21st. In Oct 4 south Hunstanton 15th, and 4 King's Lynn and 3 Cromer on 20th.

In second winter period recorded at 24 widespread localities in Dec.

Pied Wagtail *M (a) yarrellii***Common breeding resident and passage migrant**

At start of year the major roost locality again Brigg St, Norwich where 50 Jan 1st, 490 2nd, 523 8th, a drop to 237 on 11th increasing to an incredible 2150 on 24th, reducing to 300+ Feb 14th with very few 18th and only 32 by 23rd. Roosts of note elsewhere in first winter period: 80 Brancaster Staithe (tidal reedbed) Jan 5th, 80 Feb 3rd, 100 March 8th and 110 on 13th; 115 Holt STW Jan 23rd, 140 Feb 14th/15th, 60 21st and 30 on 22nd; 92 Safeway, Cromer Feb 21st; 60 Hcigham Sound Jan 16th; 80 Rockland Broad during Feb; 200 Threxton STW, Watton Jan 8th with 100 Feb 13th; 150 Lopham Fen March 3rd.

Notable pre-roost gatherings 60 Yarmouth South Beach Jan 25th, 120 Cley also 25th, 42 Sheringham (in bect field) 30th, 71 Waxham (in ploughed field) Feb 19th with 50 there 24th, 75 St Stephen Street, Norwich March 13th and 100 Garboldisham March 15th.

Spring movements mainly light with main passage in March noted Holme where (all west) 23 10th, 47 12th, 90 25th and 43 on 26th; elsewhere no counts exceeded 10.

NBA results showed the species was present in 91% of tetrads covered in breeding season with an average of 3.9 pairs per occupied tetrad.

In July gatherings of 75 Cantley BF 21st and 30 Titchwell 30th. In Aug 100 Cantley BF 5th, 100 Cley 15th, 49 Welney 21st and 42 Weybourne Beach car park on 29th; 50 Cley Sept 12th.

Only autumn coastal movements of note 38+ Waxham Oct 8th and 40 south Hunstanton Cliffs 15th.

End of year roost counts were again dominated by Brigg St, Norwich where Nov 645 12th, 462 13th, 805 14th, 520 17th, 799 20th, 770 26th, 1350 29th; Dec 1058 4th, 1050 11th, 520 17th, 690 26th. Elsewhere impressive counts at Brancaster Staithe from late Sept where 150 26th, 450 Oct 7th, 515 8th, 110 11th, 160 14th and 60 Nov 24th; 235 Thetford Nunnery Lakes Sept 24th; 100 Holkham GM Nov 25th; 55 Womack Water Nov 27th; 86 Threxton STW, Watton in Nov and 100 Dereham Dec 1st. Of interest a flock of 30 south-west at Holt Nov 18th, presumably to roost.

White Wagtail *M (a) alba***Regular passage migrant from continental Europe; has bred**

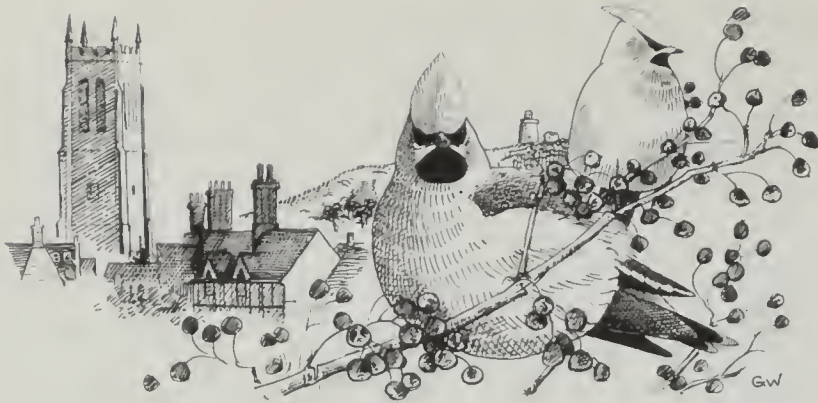
First 2 Winterton March 5th followed by 3 Cley 11th then a trickle of 1-2 throughout rest of month with exception of 8 Paston 26th. Main movement in April with good numbers at several coastal localities: 4 Horsey 1st, up to 16 Waxham 2nd with 10 6th and 5 on 22nd, 3 Mundesley 8th, 18 plus 5 west Scolt Head 19th, 20 Titchwell 20th and 9 there 23rd, 10 Blakeney Point 21st and 4 Beeston Bump 26th.

In May singles Salthouse 2nd, Holme 4th, Horsey and Pentney GP 6th, Yarmouth South Denes 16th and 2 Titchwell during month.

The only autumn records, all singles, at Overstrand Aug 30th, Cley Sept 1st, 19th, 23rd and Oct 10th, and late birds at Salthouse Nov 4th and Yarmouth 5th.

Waxwing*Bombycilla garrulus***Irruptive late autumn and winter visitor**

In first winter period largest groups reported 10 Potter Hcigham Jan 2nd, 10 Sutton Jan 5th, 10 East Ruston Jan 9th increasing to 14 on 10th, and 3 Wymondham March 12th increasing to 14 13th and 15 on 16th. Elsewhere present at Acle (4) Jan 3rd, Cockshoot/Ranworth Broad Jan 16th, Gayton Feb 9th, Gimingham (4) Jan 1st, Holkham Jan 2nd/3rd and (2) 5th.



Waxwings (*Gary Wright*)

Horning (9) Feb 3rd, Morston (2) Jan 9th, Wroxham Road, Norwich (6) Jan 21st-24th, Sprowston Park GC Jan 15th-Feb 6th (3 increasing to 6 30th with 5 Feb 6th), and Thorpe St Andrew Jan 3rd-22nd (2 3rd, 3 5th).

In second winter period only records prior to last week Dec were 6 West Runton Nov 11th and one Brancaster Staithe Dec 18th. A single flying east Beeston Regis Dec 24th heralded the beginning of a major influx, which continued into 2001. At Cromer numbers built up from a single 26th to 35 on 31st. In last 3 days of year flocks present at several sites, largest 40 Acle 29th, 22 Sheringham 30th, and 60 Thornham and 50 Northrepps 31st. Other records for period Dec 27th-31st (max in brackets, otherwise singles): Aylmerton, Aylsham (13), Beeston Bump (10 west), Beeston Regis (10), Beetley, Brancaster (6), Bridgham Heath (3), Briston (5), Burnham Norton, Caister (5), Cawston Heath, East Ruston (7), Fakenham (12), Fritcham (2), Great Walsingham (15), Haddiscoe (8), Holt (11), Horsey Mere (2), Kettlestone (7), Lynford Arboretum, Martham Ferry (2), Northrepps (12), North Walsham (16), Drayton Road, Norwich (10), Ormesby (2), St Olaves (7), Stalham (7), Strumpshaw, Swanton Abbott (8), Thorpe Marriott (3), Titchwell, Trunch, Warham Greens (2), Wells (14), West Lynn, Weybourne, Winterton (2) and Wymondham (17).

Dipper

Cinclus cinclus

Almost annual winter visitor in very small numbers

Two records of race *cinclus* known as Black-bellied Dipper: one at Itteringham Mill, present since Nov 1999, was last seen March 1st. What was almost certainly the same bird present Corpusty/Saxthorpe March 14th-18th. A second bird Holkham Park Lake April 5th.



Black-bellied Dipper (*Phil Jones*)

Wren

Troglodytes troglodytes

Very common resident and passage migrant in small numbers

Breeding data received from only 5 sites giving totals of singing males/territories: Brancaster 23, Scolt Head 34, UEA 35, Welney 38 and Wheatfen 68+. Scolt Head total same as 1999 but Welney showed increase of 4. At UEA a better coverage than in previous years accounted for the large increase (6 in 1999). Although no numbers received from Kettlestone Common a good breeding season reported. NBA results showed the species was present in 93% of tetrads covered in breeding season with an average of 22.8 pairs per occupied tetrad.

In Sept 35 at Scolt Head 30th included some migrants.

Dunnock

Prunella modularis

Common resident and passage migrant, especially in autumn

Breeding data from only 5 sites giving totals of singing males/pairs: Blakeney Point 5, Scolt Head 64, UEA 3, Welney 9 and Wheatfen 6. NBA results showed the species was present in 91% of tetrads covered in breeding season with an average of 10.8 pairs per occupied tetrad.

Autumn reports relating to migrants: *Sept* 18 Scolt Head 9th, 43 19th, 25 20th and 45 30th, 10 south Beeston Bump 20th with 3 west 25th; *Oct* 5 Hunstanton Cliffs 9th, 3 13th, 2 15th and one 19th (all south), 4 west Scolt Head 10th with 10 west 19th, 5 west Beeston Bump 14th with one west 19th; *Nov* 4 west Beeston Bump 4th.

Robin

Erithacus rubecula

Common resident and passage migrant, especially in autumn

Spring passage at Scolt Head end of March-May 21st with double-figure counts of 23 April 3rd, 20 5th and 24 6th; elsewhere 20+ Holme April 5th, 35 Waxham 8th and 50 Yarmouth Cemetery same day.

Breeding: high numbers reported from several sites including 78+ territories at Wheatfen, 24 singing males UEA and 12 Welney; counts of singing males in early March of 16 Wayland Wood and an incomplete survey at Morton of 30. NBA results showed the species was present in 92% of tetrads covered in breeding season with an average of 17.6 pairs per occupied tetrad.

Fewer reports than usual of autumn passage but small arrival last half of Sept with 10 Beeston Bump 19th, 9 ringed Wells North Point and 8 Blakeney Point both 20th, peaks of 12 Scolt Head 24th and Oct 1st, peak of 35 Sheringham 27th and up to 30 Holkham Meals 30th. Passage in Oct poor with max 39 Holme 21st and 10 Scolt Head 22nd. Sizeable influx noted at several sites first week Nov with 100 Holme 6th/7th, 50 Scolt Head 6th, 'many' Holkham Meals, 10 'continental' birds trapped Sheringham and 10+ Yarmouth Cemetery all 7th.

An adult leucistic bird was feeding young in Sheringham in June and 2 at Melton in Nov.

Nightingale

Luscinia megarhynchos

Local migratory breeder and very scarce passage migrant

Simultaneous arrival April 18th when singles at Cromer, Merton, Pentney GP and Salthouse Heath. By end of month records, mostly of singles, from 28 sites but also 3 Holme 23rd and Old Hunstanton 24th, 5 Salthouse Heath 26th-29th and 6 Pentney GP 28th.

A survey by the BTO of the county's stronghold in the Peat Fens, an area bounded by the

A10, the Cut-off Channel and the Suffolk boundary, located no fewer than 98 singing males. Most of these were concentrated in 10 km square TL69 with the highest concentrations on Feltwell and Methwold Commons, where a plentiful supply of tall hedgerows along drainage ditches provides suitable habitat. Unusually, birds were occasionally heard singing as late as July 2nd in this area.

Elsewhere singing males in breeding season at Alderford Common 2-3, Babingley Bridge 2, Bagthorpe, Barnhamcross Common 3, Barton Brandish 2, Beechamwell Fen, Bodney Warren, Boughton Fen 2, Brandon 2, Buckenham Tofts, Castle Rising, Crostwick, Cranwich 2, Didlington 4, Eastmoor, Feltwell Quarry 5, Foulden Common 5+, Holme Village 4, Hopton Point, Hunstanton GC 2, Kettlestone Common 2, Kilverstone, Leziate, Lynford GP 2, Merton, Narborough, Norwich (Sweetbriar Marsh) 2, Oxborough 3, Salthouse Heath 11, Scarning, Shadwell 2, Stanford 8, Weeting and Whittington. In addition juv ringed Garboldisham June 26th indicated breeding nearby, another trapped at Weybourne July 4th and two ringed Wissington BF July 28th.

Four autumn records all in Aug: singles Snettisham 7th, Holme 13th and 2 there 27th.

Bluethroat

Luscinia svecica

Scarce passage migrant, now more frequently recorded in spring

Only two records, Blakeney Point Sept 20th and Cley Nov 8th.

Black Redstart

Phoenicurus ochruros

Rare migratory breeder, regular passage migrant and occasional in winter

In first winter period (Jan-Feb) singles Heigham Holmes (present since mid-Oct 1999), How Hill (present since Dec 17th 1999) and Sheringham. Spring passage March 11th (Burnham Overy) to May 14th (Blakeney Point) but very light with singles at 27 sites, max 6 Scolt Head (April 3rd) and up to 2 at Heacham, Hunstanton, Holme, Sheringham Cemetery and Winterton. Inland, singles at Norwich Waterworks March 23rd, Sporle March 20th/21st and Diss April 3rd.

In breeding season birds arrived back in Yarmouth area April 3rd and subsequently up to 4 males in song at 5 sites; at one site 3 pairs raised 5, 2 and one young, at a second site 2 young were raised. In Norwich one pair raised 2 broods, totalling 7 young, in the Riverside multi-storey car park; at a second site another pair fledged at least one brood. In contrast to the numbers present at Cromer in summer 1999 none present this year. July records of singles at Choseley Barns 9th and Titchwell 12th.

Autumn passage, Sept 18th (Waxham) to Nov 19th (Caister), also very light with only 2 records in Sept - the first returning bird followed by 2 Holme 25th. Singles at over 20 sites in Oct and slight increase in records around 21st/22nd when up to 2 at Cley, Cart Gap and Yarmouth Cemetery. Definite arrival Nov 7th when 5 Holme, 4 Wells Beach, 3 North Gap (Lessingham), 2 Weybourne and 2 Winterton, followed by 3 Caister 11th and 2 Happisburgh 12th. Birds in breeding areas also lingered into early Nov. Elsewhere inland South Lopham Oct 25th-Nov 5th, West Walton Oct 30th, Swaffham Nov 3rd and Holt Nov 12th.

At end of year singles Little Cressingham Dec 7th, Walcott 9th, Bacton 12th and Sheringham 15th to year end.

Redstart

Phoenicurus phoenicurus

Local migratory breeder (most in Brecks), common passage migrant

A male Stanford TA on exceptionally early date of March 25th, the earliest county record,

followed by a second Holme April 4th, then a lengthy gap until one Beeston Regis and 3 Yarmouth Cemetery 17th. Fairly slow passage of 1-2 at 11 coastal sites until end of month with peak of 8 Holme 22nd. Passage during May similarly uneventful with singles at 9 sites, peak of 3 Blakeney Point 12th; latest Waxham 21st.

In breeding season 93 singing males in Brecks at Stanford TA, an increase of nearly 20 compared to recent years. At Brettenham Heath and East Wretham 2 males in song mid-May at both sites where breeding has been recorded in previous years. In Sheringham Park pair displaying May 1st, male in song 26th and later seen collecting food.

First in autumn Holme Aug 21st. As in spring, passage into Sept generally light with peaks of 5 Blakeney Point Aug 26th, 14 Scolt Head Sept 2nd, and 8 Holme and 15 Blakeney Point Sept 20th. Sizeable influx centred on north coast Sept 24th with peaks of 50 Holme, 55 Scolt Head (all except 4 having moved on by next day), 51 Blakeney Point, 20 Burnham Overy Dunes, 8 Happisburgh, 8 Holkham Meals, 5 Weybourne-Sheringham and 4 at Warham, Trimingham and Sea Palling. By Oct 1st 13 Scolt Head (with 4 2nd), 4 Holme and 4 Yarmouth Cemetery, otherwise very few in month with singles at 4 other sites in first week, and another Surlingham 12th. Very late birds at Winterton Nov 7th and Cley next day.

Whinchat

Saxicola rubetra

Common passage migrant; has bred in past

First returning birds, 2 Holme and single Scolt Head April 19th. Exceptionally 14 Holme 22nd, otherwise up to 3 there to month end. Elsewhere records of 1-3 from 13 sites with 4 Blakeney GM 27th. Passage during May very light with records of mostly singles from 17 sites except 4 Scolt Head May 6th, and 5 Blakeney Point and 4 Sheringham 7th; last of spring Blakeney Point and Winterton June 4th. Inland records of singles Babingley April 27th, Thetford Nunnery 29th, Weeting Heath May 8th and Santon Downham June 7th.

Autumn passage began Salthouse Aug 13th with arrival peaks along coast in latter half of month when 13 Winterton 22nd, 5 Snettisham 24th, 12 Holme, 11 Scolt Head and 6 Burnham Overy Dunes 26th, up to 7 Beeston Bump 26th-29th, and 11 Blakeney Point, 10 Brancaster and 6 Horsey 27th. Steady passage continued through Sept with intermittent influxes mostly along north coast of 30 Scolt Head 2nd, 10 Blakeney Point 3rd, 18 Salthouse 4th, 18 Waxham 9th/10th, 20 Blakeney Point, 10 Sheringham and 14 Winterton all 20th, 20 Holme and 29 Scolt Head 24th, and 8 Cley 25th, after which numbers declined to ones and twos by month end. Eight records in Oct, mostly singles except for 2 Beeston Bump 6th and 3 Holme 23rd. Reordered inland at Acle, Baconsthorpe, Buekenham, Felbrigg, Lopham Fen, Norwich Airport (2), Ten Mile Bank, Thetford Nunnery (max 4) and Welney (max 3). Last of year a late bird Stiffkey Nov 6th.

Stonechat

Saxicola torquata

Very small breeding population; regular passage migrant, local in winter

In first winter period regular sightings of singles or pairs at several sites along north coast with max 6 Holme, 3 Titchwell, 6 Brancaster, 3 Scolt Head and 3 Cley; inland records from Grimes Graves, Hickling Broad (3), Mundford, Reedham and Welney (3).

More numerous from end Feb when influx 6 Northrepps 28th with peaks at Holme of 19 Feb 29th, 22 March 1st, 17 8th and 15 10th/11th; also 11 Scolt Head 8th with singles at 20 other sites. By April most had returned to breeding areas with little evidence of further passage, except for singles at Lakenheath Washes 16th. Beeston Bump May 1st and Blakeney Point June 4th.

Total of 16 breeding pairs, mostly at traditional sites - 7 pairs (same as 1999) between Waxham and Winterton Dunes and in the Brecks (3 pairs at one site). Elsewhere successfully bred at Cromer, Haddiscoe Island, Kelling Heath, Salthouse Heath, Santon Downham and Weeting.

First in autumn Blakeney Point Aug 12th followed by 2 Holme 26th and single Sheringham 31st. In Sept away from breeding sites singles at Titchwell 9th and Paston 21st were only migrants. In breeding areas numbers remained stable throughout with up to 6 Waxham, 4 Horsey and 8 Winterton and up to two at several other sites. No sign of any large-scale autumn passage with max in Oct 3 Holme and 5 Salthouse 15th, 6 Sheringham 23rd and 3 Titchwell 24th; in Nov 3 Happisburgh 1st. At end of year regular sightings of 4 Haddiscoe, 3 Hickling Broad, 3 Mundesley, 2 Titchwell and 3 Winterton; also singles Bodney Camp, Cantley, Hemsby, Ten Mile Bank, Welney and Wiggenhall St Germans.

Isabelline Wheatear

Oenanthe isabellina

Vagrant from Central Asia and Middle East

A 1st-winter Blakeney Point Oct 1st (SCJ AMS). The second record for the county and the first since one at Winterton in May 1977. See article on page 285.

Wheatear

Oenanthe oenanthe

Increasingly rare migratory breeder and common passage migrant

A male at Holkham Feb 27th equals the earliest ever record of one seen in 1926. Almost as early were singles Pentney GP and Winterton March 4th. Main spring passage from March 10th but no large arrivals apart from an influx April 19th-25th when on 19th 32 Blakeney Point and 36 West Runton, on 22nd 61 Scolt Head, 22 Sheringham and 36 Upper Sheringham, on 25th 21 Hunstanton, 50 Holme, 15 Brancaster, 29 Scolt Head, 26 Burnham Norton, 10 Cley and 39 Beeston Regis/West Runton. Passage in May light with max 8 Waxham 4th; last of spring Holme June 18th.

The only breeding records were from Brecks where at least 4 pairs at 4 sites.

In July singles Snettisham 11th and 23rd, Yarmouth 14th and Horsey 22nd, and 2 Burnham Overy Dunes 30th. A steady passage continued through Aug, highest count 27 Holme 26th. Two main arrival periods in Sept: on 2nd 36 Scolt Head, 25 Blakeney Point and West Runton, and 16 Waxham with 20 Horsey next day; on 24th 42 Holme, 33 Scolt Head, 20 Burnham Overy, 45 Blakeney Point, 31 Blakeney GM, 12 Cley, 12 Weybourne-Sheringham, 21 Beeston Regis and 14 Happisburgh; on 25th 10 Hunstanton, 33 Blakeney Point, 39 West Runton and 12+ Horsey; on 26th 25 Thornham Point, 44 Blakeney Point and 35 Sheringham; on 28th 56 Blakeney Point and 27 Happisburgh. Oct passage mostly singles but max 8 Yarmouth South Denes 6th. An unusual number in Nov with singles at 8 sites, 3 at Yarmouth South Denes and Salthouse 3rd, and 4 Beeston Regis 4th (including a partly melanistic bird); last of month Paston 17th. A male in a beet field at Dicklcburgh on the extraordinary date of Dec 11th (SG JHM).

Desert Wheatear

Oenanthe deserti

Vagrant from North Africa or Central Asia

A female at Holme Nov 2nd-4th when it was probably taken by a Sparrowhawk (GFH PSa *et al*). The ninth record for the county and the first since 1997.

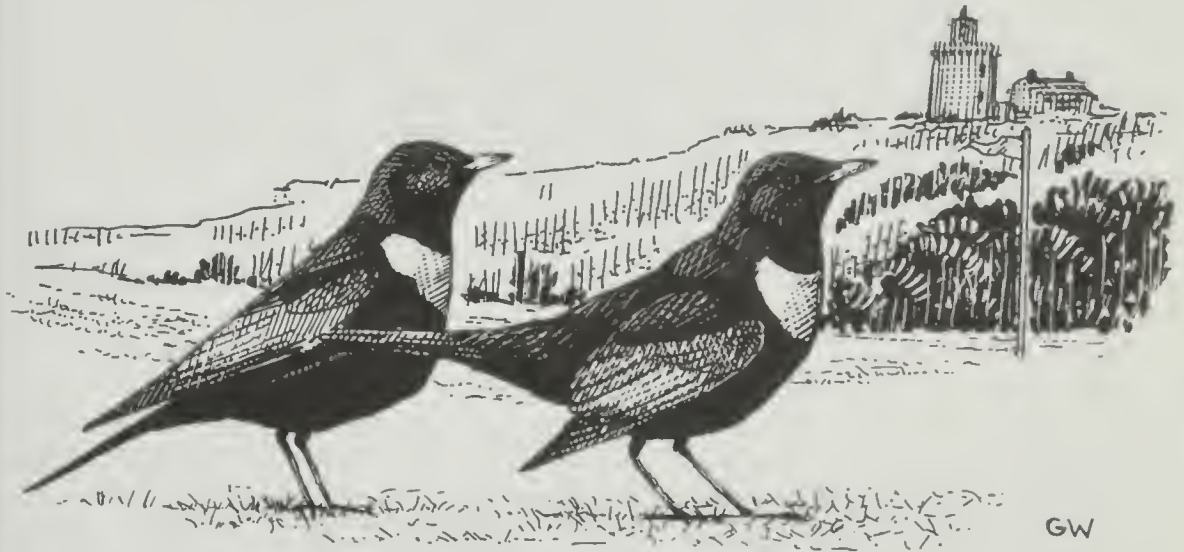
Ring Ouzel

Turdus torquatus

Passage migrant in fluctuating numbers; exceptional in winter

First of spring Sheringham Park March 18th followed by further singles Cley/Wiveton 21st, North Heacham 22nd and Cley 24th. Recorded almost daily during first half of April with 1-2 at 22 mainly coastal sites although singles inland at East Ruston, Felbrigg Park, Lingwood, Pentney GP and Stanford TA. Main passage during latter half of month peaking 19th-24th when 13+ Cley Hangs 21st, 9 Holme 24th, 7 Winterton 21st and 6 Horsey 22nd. In May, 1-3 at 8 coastal and 3 inland sites between 1st-14th with no more recorded until the last of spring Holme June 5th.

First of autumn Cley Aug 26th followed by just 4 Sept records: Winterton 16th, Wells 24th, Sheringham 27th and Titchwell 30th. Small-scale movement through Oct with 1-3 at 17 sites, including inland singles East Ruston and Repps-with-Bastwick, with 7 in off sea Wells 22nd. Unusual numbers in early Nov being recorded at 15 localities with exceptional counts 6th when 15 Holme and 9 Stiffkey. An adult male ringed Wells 14th was followed by single Cley Hangs 15th, with latest Horsey 19th.



Ring Ouzels (Gary Wright)

Blackbird

Turdus merula

Common resident, passage migrant and winter visitor

Evidence of small-scale cold weather movement during Jan/Feb with 1-4 Scolt Head on several dates while a garden at Little London hosted 28 Jan 10th. Little evidence of return movement, peak counts being 119 south-east Cromer March 17th and 100+ Martham April 4th, with 1-3 Scolt Head during April/May.

Breeding records included 12 singing males UEA and 26 Welney, a significant increase from the 18 territories recorded at latter site in 1999. NBA results showed the species was present in 95% of tetrads covered in breeding season with an average of 27.5 pairs per occupied tetrad. In Diss area, where recorded in all 20 tetrads, total of 425 pairs.

First movement of autumn 41 Titchwell Sept 26th, but little evidence of further movement until Oct 21st when steady passage noted Horning with 100+ Cromer following day. Main movement Nov 3rd-9th: peak counts 650+ Holme and 400+ Scolt Head 6th, 750+ Paston,

300 Waxham and 200 Winterton 8th, with 300 Stiffkey/Warham Greens and 'large arrival' Wells 9th. Further wave of migrants Nov 15th when 320 Blakeney Point and 81 west in 20 mins Holme. Small numbers continued to move in Dec highest count being 60 in off sea Sheringham 20th.

Unusual behaviour noted at Old Catton and Holt where peanuts and fat regularly taken from tit feeders, while a bird was seen taking a snail at Cley. Albinos noted Attleborough March 1st and another Happisburgh June-Nov.

Fieldfare

Turdus pilaris

Common passage migrant and winter visitor

During Jan main concentrations in west of county, highest counts 500 Saddlebow and 430 Denver both 15th, 400 Wiggenhall St Peter 9th and 400 Pentney GP 20th, with three-figure counts from a further 12 widely scattered inland sites during month. In Feb highest counts 650 Felbrigg Park 16th, 500 Sustead 25th and 348 Snetterton 19th; no other count exceeded 300. Evidence of movement in first half of March when 150 north-west Northrepps 8th. Felbrigg Park, always a traditional site prior to return movement, continued to hold good numbers with 450 8th, while in west counts included 600 Necton 17th and 400 West Acre 21st; also 400 Easton 29th. Smaller numbers recorded in east of county peaking at 100 Buckenham 7th and 300 Cantley 11th although good numbers remained well into April including 275 Martham 21st and 100 Ormesby Broad 22nd. Surprisingly widespread through first half of May being recorded at 16 sites, peak being 100 Snettisham 3rd-8th with last two of spring Berney 22nd and Northrepps 29th.

An intriguing record of a single Pentney GP on the unusual date of July 3rd. Although not unprecedented, was this a very early returning bird or one that had over-summered in the county undetected?

No further records until Sept when singles Holme 10th and Northrepps 20th. Compared to 1999, little evidence of movement during Oct, highest count being just 220 south-west over Welney 28th while at Frettenham 25 same day were the latest arrival there since 1996. Main movement Nov 6th when 2200 west Lynn Point (0710-0740) and 1600 Holme, with steady passage over Watton the following day. Small-scale movement continued to 10th with 200 Brancaster 7th and 180 west Hellesdon 8th. Build-up of numbers during Dec at a number of inland sites peaking at 536 Welney 18th, 350 Felbrigg Park and 1500 Rockland St Mary 28th, and 400 Kerdiston 29th. Evidence of small influx on 31st when 250 Snettisham.

Song Thrush

Turdus philomelos

Common resident and passage migrant; recently decreasing

As in 1999, return movement in spring very light with peak counts 16 Scolt Head April 3rd and 20 Sidestrand April 9th, with the final migrants departing Holme and Scolt Head May 13th.

Early breeding season activity Old Catton Feb 7th when 9 singing males with at least 14 territories there in April/May. Breeding records included 15 singing males Merton and 12 Thorpe St Andrew, but at East Harling a continued decline noted. NBA results showed the species was present in 83% of tetrads covered in breeding season with an average of 4.3 pairs per occupied tetrad.

First autumn migrants Sept 16th when 15 Blakeney Point and single Scolt Head. Biggest movement of month along north coast 26th with peak counts 250 Wells East Hills and 100 Holkham Mcals, and double-figure counts from a further 8 sites. In Oct, peak counts mid-

month with 100+ west Holme, 40 Stiffkey and 40 Holkham Meals 13th, while inland light passage noted Watton 13th and 14th. Largest movement of autumn Nov 6th when 'huge numbers' grounded Holkham Meals, 1400+ Holme, 990 Wells East Hills (including flocks of up to 40 in off sea), 700+ Scolt Head and 100+ West Runton. These quickly dispersed although hundreds still Holme and 120 Sidestrand the following day.

Redwing

Turdus iliacus

Common passage migrant and winter visitor

In Jan flocks noted at 11 inland sites, peak counts 140 Cantley 8th, 100 Pentney GP 20th and 200 Felbrigg Park 25th. Reduced numbers through Feb with only three-figure count 100 Calthorpe 23rd, but increase through March when 220 Felbrigg Park 8th, 250 Earsham 11th and 100 West Acre 21st. Apart from 200 Felbrigg Park April 2nd, a rapid reduction in numbers throughout month with stragglers noted early May at 5 sites, the last Holme 9th.

First of autumn Sept 17th with 3 Stiffkey and single Sidestrand, and small numbers at a further 11 mainly coastal sites during month. First major movement Oct 7th/8th with passage noted as far inland as Griston and Watton; peak count 500 south at Northrepps in just one hour. Further influxes from mid-month when 200+ Ormesby Broad 16th, with large movement 21st including 500+ west Holme, 300 Sheringham, 250 Blakeney Point and 212 Scolt Head. Highest counts of autumn in early Nov with 300 south Northrepps 3rd, 600 west in just 30 mins at Lynn Point and 250+ Martham 4th, 2000+ Holme, 500+ Scolt Head and 250 Sheringham 6th, 200 Brancaster 7th and 400+ Paston 8th. Only other movement of note Nov 14th when 300 south-west Snettisham. However, as usual most moved on and only three-figure counts to year end 100 Felbrigg Park Dec 28th and 135 Whitlingham Lane GP 31st.

1999 Correction: Latest in spring at East Ruston not East Runton.

Mistle Thrush

Turdus viscivorus

Common resident and partial migrant

In April migrants noted Scolt Head 3rd and 16th.

NBA results showed the species was present in 79% of tetrads covered in breeding season with an average of 4.1 pairs per occupied tetrad, an interesting comparison with Song Thrush.

The following post breeding flocks noted: *June* 33 Hunworth 12th, 21 Beeston Regis 21st, 30 Holme and 21 Horsey 24th, and 24 Hanworth 26th; *July* 15 Potter Heigham and 25 Weeting Heath 15th, 26 Sustead 19th, 30 East Tuddenham 22nd (for 2 weeks), 62 Salthouse Heath (Loves Farm) 29th; *Aug* 70 Thompson Water 5th, 17 Frettenham 13th, 30 Flordon 17th, 25+ Hunstanton 27th; *Sept* 35 Hopton Point 5th.

First of autumn single south Beeston Bump 20th with 2 east Overstrand 25th, and 25 overhead calling Holkham Meals and 8 east Cromer 30th. Main movement mid-Oct when 6 east Sheringham 13th, 40 Sidestrand and 5 west Beeston Bump 14th, 50 south Hunstanton Cliffs and 25 Holme 15th, with 22 there 17th; only evidence of further movement 4 Sheringham Dec 6th. Singing males noted Fleggburgh and Horning Waterworks Nov 28th during mild conditions.

Cetti's Warbler

Cettia cetti

Broads breeding population established since 1974

The bird recorded Welney at end of 1999 again noted Feb 15th-April 6th.

This species continues to prosper, with county total of 135/6 territorial males. With much of R Bure and R Waveney under-recorded true total is certainly higher. Singing males recorded at following localities: *R Yare* Buckenham 2, Cantley 7, Claxton, Rockland Broad 6, Strumpshaw 26, Surlingham Broad 4, Surlingham Church Marsh 2, Wheatfen 23, Whitlingham Lane GP 2, Whitlingham Marsh (Thorpe St Andrew) 2-3; *R Bure* Cockshoot Broad 3, Horning Ferry, Horning Marsh Farm, Horning Waterworks, Horning Hall Marshes, Ranworth Broad 3, Wroxham Broad; *R Ant* Ant Mouth, Barton Broad 2, Barton Turf Pools Fen, Catfield Fen, Hall Fen (Irstead) 2, How Hill Crome's Broad, Mown Fen (East Ruston), How Hill Reedham Water 6, Sutton High Fen, The Hulver Ground (Horning Upper St) 2; *R Thurne* Heigham Sound/Duck Broad 4, Hickling Broad 6, Horsey Mere, Martham Broad, Martham Ferry 3; *R Waveney* Burgh Castle, Burgh St Peter, Dunburgh Hill (Geldeston) 2, Stanley and Alder Carrs 2; *Elsewhere in Broads*: Filby Broad, Burgh Common 3, Upton Fen 2, Hardley Flood.

Some indication that this species may finally be moving out from Broads with singles Colney GP April 3rd, Lakenham (Cooper Lane) April 14th, and Costessey (Gunton Lane) April 30th and June 6th.

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Singing males	28	22	24-27	51	56	27-29	59-61	89-91	135-6

Feasibly same individual Sheringham Sept 25th/26th and Cley Sept 29th presumably indicative of autumn dispersal.

1999 Additions: Single trapped at private inland site in north-west Sept 17th/18th, with second bird trapped there 18th.

1999 Corrections: Site details should read: *R Bure* Horning Marsh Farm 2, Horning Hall Marshes; *R Ant* The Hulver Ground (Horning Upper St) 2, Hall Fen (Irstead), Smallburgh Staithe (Wayford Bridge).

1998 Correction: The record published for Lopham Fen refers to 1984 (not 1998).

Grasshopper Warbler

Locustella naevia

Summer visitor and scarce passage migrant

An early arrival Eccles April 9th, with singles Beeston Bump 13th and Surlingham Marsh 14th. Several reports mid-April with 2 Holme 16th, singles Brancaster, Cley and Hickling Broad 18th, Paston and Thetford Warren 19th. Peak counts for April included 6 Holme and 6 Snettisham CP 22nd, 3 Thetford 23rd, and 3 Rockland Broad 28th.

During breeding season, singing males reported as follows: 4 Barton Turf Fen, Beeston Common, Buckenham, Cantley, 4 Cley, Cranwich GP, East Ruston, Guist Common, 2 Heacham, 5 Hickling Broad, 4 Holkham Meals, 6 Holme, 1-2 Horning Hall Marshes, 3 Horsey, 4 Lopham Fen, 2 Old Costessey, 4 Reedham Marshes (How Hill), Sheringham BO, Snettisham CP, 2 Stanford TA, 5 Strumpshaw, Thetford Heath, Thetford Nunnery Lakes, 3 Titchwell, Waxham, 4 Wheatfen, Whitlingham Marsh (Thorpe St Andrew).

Very few passage migrants in autumn (all singles): *Aug* Happisburgh 22nd and Scolt Head 28th; *Sept* Scolt Head 2nd and 30th, Blakeney Point 3rd and 20th, Salthouse 19th and Winterton 20th.

1994 addition: A bird trapped at Holme Sept 2nd (JM *et al*) was identified as an eastern sub-species *straminea*. This constitutes the first county record, only other one trapped at Sheringham BO Sept 20th 1998.



Blue-winged Teal – seen at Titchwell in July this eclipse male was both obliging and instructive (*Julian Bhalerao*).

Purple Heron – this juvenile at Cley / Salthouse showed well in roadside ditches (*Julian Bhalerao*).





Garganey – a juvenile at Cley (*Julian Bhalerao*).

Stock Dove – a beautiful bird which is sometimes overlooked (*Neil Bowman*).





Lesser Black-backed Gull – raising a family on a Yarmouth roof top (*Ian Mills*).

Black-tailed Godwit – large numbers seen on passage, but a rare breeding bird (*Alan Tate*).





Lapwing – another declining breeding species (*Tony Howes*).

Common Buzzard – more commonly seen in the county (*Tony Howes*).



Savi's Warbler

Locustella luscinioides

Rare migrant and summer visitor

1999 Correction: Date for second bird Hickling Broad should read April 19th-May 22nd (not April 29th).

Sedge Warbler

Acrocephalus schoenobaenus

Summer breeder and passage migrant

Early arrivals in March Buckenham 24th (the second earliest record), and Hickling Broad 26th and 31st. During April, a steady trickle of migrants through to mid-month with a subsequent major influx of 30 Snettisham CP 20th, a 'large' arrival Holme 22nd and 22 Brancaster 23rd. Obvious migrants: Scolt Head April 27th-May 12th mainly singles but 6 May 9th; Beeston Bump total of 7 April 25th-May 13th.

Another good breeding season with best singing male counts of 34 Gillingham Marsh, 57 Holme, 30 Pensthorpe, 19 UEA Broad, 60 Welney, 39 Wheatfen, and Weybourne noting a 'good' breeding season. NBA results showed the species was present in 39% of tetrads covered in breeding season with an average of 5.9 pairs per occupied tetrad.

The onset of migration noted at Scolt Head with 2 Aug 25th/26th. Few records in Sept with singles Scolt Head 2nd, Welney 18th and Titchwell 30th. Last record Berney Oct 1st.



Sedge Warbler (*John Williamson*)

Marsh Warbler*Acrocephalus palustris***Rare in late spring and autumn**

A disappointing year with just one record, Rollesby July 1st-8th (DP). Unfortunately none returned to the 1999 breeding site.

Reed Warbler*Acrocephalus scirpaceus***Summer breeder and passage migrant**

Earliest on typical April dates at Hickling Broad 18th and Cley 19th. A 'major' influx in May at Wheatfen 14th and also 2 unusual records in month, male in song Northumberland St, Norwich 9th and in adjacent Nelson St next day, and male in song in roadside hedge Reepham 30th. Evidence of continuing passage in June with 2 Blakeney Point 2nd/3rd and one 4th, Winterton 8th, 2 Scolt Head 9th, Paston 19th and Beeston Bump 19th/20th. Also singing male in roadside hedge Pulham Market 10th.

An average year for breeding reports with singing male counts 24 Gillingham Marshes, 39 Holme, 10 Middleton GP, 33 Pensthorpe, 68 Welney and 21 Wheatfen. NBA results showed the species was present in 30% of tetrads covered in breeding season with an average of 6.6 pairs per occupied tetrad.

Migration noted from early Aug with singles Sheringham from 9th. In Sept, 1-2 at 6 coastal sites with peaks of 5 Holkham Meals 20th, 3 Scolt Head 24th, 5 Titchwell and 4 Blakeney Point 30th. In Oct, singles at 6 coastal sites with a very late migrant Holkham Meals Nov 7th.

Dartford Warbler*Sylvia undata***Vagrant from southern England and the Continent**

Only one record, Winterton May 9th (INS). Was this the bird there in Oct/Nov 1999?

Barred Warbler*Sylvia nisoria***Scarce autumn migrant recorded only once in spring**

A more encouraging year following 5 bleak years with records from Barrow Common Aug 17th, Horsey/Winterton Aug 25th and Holme Aug 27th/28th. Sept sightings of a second Holme 2nd, Blakeney Point 3rd, Holkham Meals 18th, Weybourne 19th and one ringed Wells North Point 20th.

1999 Addition: Three individuals trapped at a private inland ringing site in north-west Norfolk on Aug 24th, Sept 11th and Sept 24th only hint at the numbers overlooked away from well-watched coastal sites.

Lesser Whitethroat*Sylvia curruca***Summer breeder and passage migrant**

First reports from Hickling Broad April 16th and Holme 19th. Spring passage appears to have followed a recent trend, peaking in late April, with 7 Holme 22nd and 26th, 6 Scolt Head 26th, with 7 there 27th and 29th, when also 3 Blakeney Point and 10 Sheringham. With the exception of 3 Scolt Head 8th records of coastal migrants in May confined to 1-2 with latest 2 Beeston Bump 15th.

NBA results showed the species was present in 38% of tetrads covered in breeding season with an average of 2.1 pairs per occupied tetrad.

Autumn passage of 1-2 noted mainly north coast sites from Aug 13th with peaks of 10 Holme Aug 27th and 15 there Sept 11th; no other site recorded more than 3 birds. Only three records in Oct with 3 Scolt Head 1st and one 3rd, and single Holkham Meals 3rd.

Whitethroat

Sylvia communis

Summer breeder and passage migrant

Earliest arrivals at Welney April 10th, Yarmouth Cemetery 12th and Pentney GP 14th. A major influx began a week later at north coast sites with best counts of 50 Holme, 23 Scolt Head and 12 Kelling WM all 22nd, 15 Blakeney Point and 10 Beeston Regis 24th, 20 Waxham 25th, 16 Scolt Head 27th and 30 Sheringham 29th. Migration continued apace until mid-May with coastal max 11 Scolt Head 8th.

Counts of singing males in breeding season included 9 Beeston Common, 15 Colney GP, 20 Merton, 8 Salthouse Heath, 14 Thompson, 11 Welney, 7 UEA and 7 Wheatfen. NBA results showed the species was present in 90% of tetrads covered in breeding season with an average of 9.5 pairs per occupied tetrad.

Return migration underway in Aug with max 25 Sheringham 12th, 8 Holme 26th and 7 Scolt Head 28th. 16 juvs were ringed at Sheringham BO Aug 9th-20th. Best counts at north coast sites in Sept of 26 Scolt Head and 15 Blakeney Point 24th, and 33 Holme 25th. Last reports in Oct from Scolt Head 2nd, Waxham 3rd and Holme 4th.

Garden Warbler

Sylvia borin

Summer breeder and passage migrant

Spring arrivals at scattered sites in April, with singles Blakeney Point, Guist and Hanworth Common 21st, Holme 22nd, Beeston Common and Blackborough End 23rd, Burnham Norton, 2 Holt CP, Sparham Pools and Waxham 24th, and 2 Langham 25th. Only isolated coastal migrants late April to mid-May.

During breeding season, best singing male counts of 3 Crostwick Common, 3 East Ruston Common, 4 Kettlestone Common, 6 Lenwade Common, 4 Lyng-Easthaugh GP, 8 Merton, 8 Pensthorpe, 4 Sennowc Park, 5 Snetterton GP and 7 Thompson; these numbers hint at a continued recovery. NBA results showed the species was present in 47% of tetrads covered in breeding season with an average of 2.4 pairs per occupied tetrad.

Autumn passage during Aug noted at coastal sites including singles Sea Palling 19th, Sidestrand 21st, 2 Happisburgh, 1-2 Holme and 2 Scolt Head 22nd, and 3 Blakeney Point 26th. Best Sept counts 8 Scolt Head 2nd and 6 Beeston Bump 4th. Last records from Sheringham Oct 17th and Holme 22nd.

Blackcap

Sylvia atricapilla

Summer breeder and passage migrant; winters in small numbers

During first winter period, 19 birds reported from 16 widespread localities comparing favourably with 17 birds at 13 sites in 1999. A bird at Hilborough March 19th may have been an early migrant. Arrivals noted from late March with singles Holkham, Holme, Merton, Titchwell, Watton and West Runton from 22nd-30th. Continued steady movement into April until an unprecedented north coast 'fall' on 22nd with 135+ Holme, 56 Scolt Head and 6 Blakeney Point, with 15 Sheringham next day.

Counts of singing males during breeding season included: 10 Holkham Meals, 6 Kettlestone Common, 12 Lynford Hall, 14 Sheringham Park, 12 UEA 5 Wayland Wood, 8 Welney, 9 Wheatfen, and 10 Wootton Carr. NBA results showed the species was present in 83% of tetrads covered in breeding season with an average of 8.2 pairs per occupied tetrad.

Counts in Aug included 10 Sheringham 9th and 50 Holkham Meals 11th. Numbers generally low in Sept with max 8 Barrow Common 9th, 12 Holme 18th, 9 Blakeney Point 24th, and 8 Sheringham 25th. Even lower numbers in Oct with peak counts of 4 Scolt Head 1st, Holkham Meals 8th and Sheringham 15th. Four lingering migrants Holkham Meals Nov 7th-9th. During second winter period ones and twos reported at 13 sites.

Greenish Warbler*Phylloscopus trochiloides****Vagrant from north-east Europe***

A poor year with just a single record on a typical date Aug 26th at Blakeney Point, a county hot spot for this species (JVB BAEM RFP *et al*).

Pallas's Warbler*Phylloscopus proregulus****Rare autumn migrant from Siberia***

An average year with 2 Scolt Head (NML *et al*) Oct 1st the earliest county record. Four other records of singles, Winterton Nov 5th (KJB), Sheringham (trapped) Nov 6th/7th and same 11th (DHS MAWa *et al*), Titchwell Nov 14th (PKn *et al*) and Holkham Meals Nov 16th/17th (JBK *et al*).

Yellow browed Warbler*Phylloscopus inornatus****Scarce autumn migrant from Siberia***

An early arrival Stiffkey Sept 17th, with another 26th, followed by Holkham Meals 19th/20th and 24th/25th, continuing a trend of progressively earlier arrival dates beginning in the 1960's. Other Sept reports from exclusively coastal sites included Winterton 25th, Yarmouth Cemetery 28th, Titchwell also 28th with 2 there by 30th, and Holme, Holkham Meals (2), Cley and Waxham all 30th. In Oct, best counts up to 4 Holkham Meals 1st, 2 Sheringham 1st/2nd, 2 Yarmouth Cemetery 1st and singles at 9 other coastal sites. Nov sightings included singles Beeston Regis 7th, Holkham Meals 8th, Martham 9th, with last record Felbrigg Park 12th.

Radde's Warbler*Phylloscopus schwarzi****Vagrant from central Asia***

A good year with three early north coast records at Blakeney Point Sept 30th (SCJ AMS *et al*), Holkham Meals (BHi *et al*) and Scolt Head (NML *et al*) both Oct 1st.

Dusky Warbler*Phylloscopus fuscatus****Vagrant from northern and central Asia***

Another better than average showing with the second earliest county arrival on Scolt Head Sept 30th/Oct 1st (NML *et al*), Blakeney Point Oct 16th (SCJ AMS) and a late bird Yarmouth Cemetery Nov 21st (BHi *et al*).

Wood Warbler*Phylloscopus sibilatrix****Passage migrant and rare breeder***

Two early records from Titchwell and Salthouse Heath April 19th. Other arrivals during month 2 Holme 22nd and one 27th, Gunton Park 26th, Kelling Triangle 27th with 2 there 29th, Waxham 27th and Scolt Head 29th. In May Waxham 1st and 7th, a very obliging bird at Sheringham Pretty Corner 6th-11th with 2 present 7th, Brancaster 8th/9th, Sheringham Park 12th and 14th, Sandringham 19th and 21st, and Kelling Heath 21st. Although one remained in song at Sandringham June 1st, there was no evidence of confirmed breeding in county for sixth consecutive year.

A very light autumn passage with just singles Holkham Meals Sept 20th, and Holme and Warham Greens Sept 24th.

Chiffchaff

Phylloscopus collybita

Common summer breeder, passage migrant and scarce winter visitor

During first winter period 1-2 reported from 14 sites, representing a further fall from a peak in 1998 (at 38 sites). First obvious migrants Hellesdon and King's Lynn March 9th, Costessey, Norwich and Strumpshaw 10th, Cringleford 11th, with subsequent peaks of 5 Sheringham 12th, 6 Holme 22nd, 22 Holkham Meals 24th and 20 Titchwell 30th. In April, best counts from coastal sites included 13 Scolt Head 3rd, 16 Holkham Meals 5th, 20 Brancaster 17th and 10 Holme 22nd.

Best breeding season counts of pairs/singing males 11 Ling Common, 6 Salthouse Heath, 8 UEA and 9 Wootton Carr. NBA results showed the species was present in 78% of tetrads covered in breeding season with an average of 7.7 pairs per occupied tetrad.

Well reported in Sept with best counts 10 Sidestrand 1st, 12 Titchwell 9th, 39 Holme 24th and 40 Holkham Meals 25th. In Oct peak counts on 1st when 8 Scolt Head and 6 Wells; in Nov still 6 Holkham Meals 7th. During second winter period, 1-2 reported at 4 other sites in Nov and 1-2 at 21 sites in Dec.

Sightings of race *abietinus* included singles in Oct at Sheringham 12th, Hempstead 15th and Cromer 22nd.

Only one record of race *tristis* Blakeney Point Oct 16th (AMS).

1999 Correction: One of race *tristis* Holkham Meals Nov 20th (also AL).

Willow Warbler

Phylloscopus trochilus

Common summer breeder and passage migrant

One Weybourne March 14th was second earliest county record. With the exception of 3 Norwich, singles at mainly coastal sites 21st-30th. Best April counts included 10 Snetterton GP 12th, 40 Hickling Broad 16th, 10 Salthouse 19th with significant falls of 125 Holme and 55 Scolt Head both 22nd, and 26 Blakeney Point 26th.

Breeding season reports included singing male counts of 9 Ling Common, 28 Thompson parish, 14 UEA and 34 Wheatfen. NBA results showed the species was present in 84% of tetrads covered in breeding season with an average of 6.4 pairs per occupied tetrad.

An early movement of 4 Blakeney Point July 26th, but autumn passage more typically underway mid-Aug when 7 Scolt Head 12th with 14 there 26th. Best Sept counts all from north coast included 35 Blakeney Point 20th, 31 Scolt Head 24th and 80 Holkham Meals in the 'Dell' area 25th. With the exception of 6 Scolt Head Oct 1st, elsewhere 1-2 at 6 north and east coast sites until 8th. An 'influx' of sightings in Nov with singles Holme 6th, Stiffkey 7th-9th, and 2 separate birds Holkham Meals 7th and 14th, the second latest county record.

Goldcrest

Regulus regulus

Resident breeder and passage migrant

Evidence of small-scale movement in late March with max 20 Paston 23rd and 29 Holme 24th. Only other notable counts in early April when 50 Scolt Head 3rd and 23 still present 5th. Latest spring migrant Holme May 10th.

In breeding season records of pairs/singing males from Merton (16), Thompson (8), Ling Common (9), Holme Village (5), Corpusty parish (4) and Thurning (3). NBA results showed the species was present in 64% of tetrads covered in breeding season with an average of 3.9 pairs per occupied tetrad.

First autumn migrant Scolt Head Sept 3rd but little evidence of movement in first half of month. In second half double-figure counts from 7 sites with peak 30th when 100+ Holkham Meals. Movement continued into Oct with 50+ Titchwell 4th, 25+ Yarmouth

Cemetery 5th and 100+ Holme 6th. Second peak from mid-month when 50+ Winterton 15th, and 200+ Holme and 50+ Sandringham 22nd. Further peak Nov 7th when 100+ Holme, 60 Sidestrand, 40 Stiffkey and 20 Yarmouth Cemetery. In Dec a notable count of 100+ Sandringham 15th.

Firecrest

Regulus ignicapillus

Spring and autumn passage migrant; scarce in winter; occasional breeder

In Jan single Sheringham Pretty Corner 1st followed by 1-2 Yarmouth Cemetery Jan 8th to month end, with 1-2 there intermittently throughout Feb. Passage commenced March 14th with singles Holkham Meals and Caister and then noted at a further 8 coastal sites between Holme and Yarmouth to month end, peak counts being 3 Holkham Meals and 3 Holme, both 22nd. Inland Gissing 18th. Recorded most dates in April from 13 coastal sites, including 3 Scolt Head 30th, and 6 inland sites including a singing male Stanford TA. Further single coastal migrants at 6 localities in May with latest Holme 30th.

In May/June singing males noted at a further 6 sites including 4 at one locality where pair seen carrying nesting material in late May.

An intriguing record of one Cantley village Aug 19th but first coastal migrants not until Sept 20th when singles Holkham Meals and Waxham followed by singles Holme, Scolt Head, Warham Greens and Sea Palling, and inland at Pensthorpe and Pentney Heath. In Oct recorded at 10 sites including inland at Dilham, Lynford Arboretum, Pensthorpe and Sandringham. Main autumn movement Nov 6th/7th when 1-2 Holme, Holkham Meals, Stiffkey, Sheringham, Sidestrand, Waxham, Martham, Yarmouth Cemetery (where 3 on 9th) and Gorleston. However, these birds quickly moved on and latest migrant Weybourne Nov 21st.

One Dec record: Stanford TA 27th.

Spotted Flycatcher

Muscicapa striata

Declining migratory breeder and passage migrant

Earliest Titchwell May 5th with further singles Scolt Head and Beeston Bump 8th. During remainder of month 1-5 noted at a further 5 coastal and 11 inland sites, peak count 4 Weeting Heath May 20th. Coastal passage continued to mid-June with latest Holme and Titchwell 16th.

Reported breeding numbers down on last year at just 51 sites, compared to 60 in 1999, with traditional sites at Garboldisham, Marlingford Church, West Walton and Yarmouth Cemetery among those deserted. Mainly 1-2 pairs but 5 Holkham Park, 4 Cley village and 3 Long Stratton, while at both Briston and Earsham second broods were noted. In the centre of Norwich 2 pairs bred Chapelfield Gardens and a pair were nest building near Norwich Cathedral in roses above Ethelbert's Gate on early date of May 13th. NBA results showed the species was present in 41% of tetrads covered in breeding season with an average of 1.6 pairs per occupied tetrad.

In July and early Aug recorded from 13 inland sites different from those where pairs were confirmed and it is likely that breeding went undetected at some of these localities.

First autumn coastal migrant Winterton Aug 19th, followed by 6 Snettisham following day with singles at a further 9 sites by month end. Small numbers recorded at coastal localities throughout Sept peaking 24th when 13 Scolt Head and 1-4 Holme, Titchwell, Burnham Overy Dunes, Stiffkey, Blakency Point, Sidestrand and Trimingham. Small numbers still present early Oct when 4 Scolt Head and singles Sea Palling and Yarmouth Cemetery 1st, Stiffkey 2nd and last of year Hanworth Common 7th.

Red-breasted Flycatcher

Ficedula parva

Scarce autumn migrant; rare in spring

Only one record, Holkham Meals Sept 24th-26th.

Pied Flycatcher

Ficedula hypoleuca

Passage migrant, scarce in spring, abundant at times in autumn; has bred

First of spring Yarmouth Cemetery April 13th with 1-2 present until 18th, followed by 1-3 at a further 5 sites to month end including a singing male at Stanford TA 27th. In May noted at just 8 sites, all singles except 2 Scolt Head 8th.

An early returning migrant Caister July 26th was seen feeding on sandhoppers on the beach. No further records until Aug 9th when singles Sheringham and Yarmouth Cemetery. Protracted movement throughout Aug with noticeable peak 26th when 9 Holme, 10 Scolt Head, 8 Blakeney Point and 20 Weybourne. During Sept 1-3 reported almost daily at many coastal localities with max 24th when 10 Holme, 11 Scolt Head and 6 Blakeney Point. Small numbers into Oct with singles Scolt Head, Holkham Meals, Stiffkey and Sea Palling 1st, and Holkham Meals 3rd and 28th. A very late bird Holme Nov 7th was third latest ever being exceeded only by those at Horsey Nov 17th 1957 and Waxham Nov 10th 1983.



Pied Flycatcher (Chris Lansdell)

Bearded Tit

Panurus biarmicus

Declining resident and partial migrant; periodic influxes from Low Countries

Recorded in early part of year in small numbers at Blakeney GM, Hickling Broad Horsey Mere and Titchwell (where max 40).

Breeding data received as follows: *north coast* Cley (2+ pairs), Salthouse (5), Titchwell (16); *Broads* Belton (R Waveney) (2), Breydon (1), Burgh Castle (1), Cantley (2-4), Hickling Broad complex (32), How Hill (2), Strumpshaw (5-10), Surlingham Broad (1-2) and Wheatfen (1).

In Sept 11 erupted to 150 feet Strumpshaw 14th; at Stiffkey 5 in hedgerow then east 23rd and 2 high north-west 28th; on 30th flocks of 7, 5 and 7 erupted Titchwell and then high to west and also 7 at Scolt Head. In Oct 9 erupted from reedbed Burnham Overy and 12 north Winterton 1st; at Holme 2 west 3rd and 3 west 20th; on 9th one west Sheringham GC.

flock calling (but unseen) overhead Sidstrand and 10 west Horning Waterworks; on 15th 40 flew into reeds Cley and 40+ seen departing from Strumpshaw.

At Haddiscoe 45 ringed Aug/Sept and max 70+ Nov 4th. Other counts in second winter period of 10-20 from Berney, Buckenham, Dilham, Horning Hall Marshes, Horning Upper St, Irstead Hall Fen and Martham Broad; at Titchwell max 26 Sept and 28 Oct.



Bearded Tit (John Geeson)

Long-tailed Tit

Aegithalos caudatus

Common resident breeder; Scandinavian white-headed race very rare in autumn

Notable flocks in first part of year were 15 Beeston Regis, 33 East Tuddenham, 39 Felbrigg, 20 Ranworth Broad and 30 West Harling.

NBA results showed the species was present in 79% of tetrads covered in breeding season with an average of 3.9 pairs per occupied tetrad.

Coastal migration: 13 (in high from north) Beeston Bump Oct 17th, 50 south in one flock Hunstanton Cliffs Oct 19th and 27 west Paston Nov 4th.

Flocks later in year included 32 Beeston Regis Common Sept 7th, with 75+ in 4 flocks (largest 30+) Beeston Regis/West Runton Heath Nov 21st, 85 Burgh Common Oct 25th, 50+ Holkham Meals Sept 30th, 40 Horning Waterworks Oct 19th, 31 Long Stratton Oct 8th, 32 Ouse Washes Dec 18th, 30 Repps-with-Bastwick Oct 23rd, 40 Titchwell Nov 14th and 60 Winterton Nov 5th.

The pale headed bird showing characteristics of an intergrade between *europaeus/caudatus* which appeared at Wiverton in 1999 remained until March 12th; it or another reappeared there Dec 16th. Another pale headed bird seen at Scarning during Jan.

Marsh Tit

Parus palustris

Breeding resident

NBA results showed the species was present in 26% of tetrads covered in breeding season with an average of 1.9 pairs per occupied tetrad.

At Garboldisham 17 ringed in year, highest number since 1990 (previous best total 12).

Willow Tit*Parus montanus***Breeding resident in decline**

Recorded from 65 localities, of which 26 were new since the 1997 appeal, these at R Babingley, Bacton Wood, East Ruston (King's Fen), Gooderstone, Grimston Heath, Holt CP, Litcham Common, Mundford, Narford Lake, North Tuddenham, Oxburgh, Raveningham, Repps-with-Bastwick, Riddlesworth, Ridlington, Roydon Common, Shadwell, Shereford, Sporle, Stoke Ferry, Titchwell (Gypsy Lane), Walsingham Abbey, Watlington, West Acre, Wisington BF and Wootton Carr.

Coal Tit*Parus ater***Breeding resident and passage migrant**

NBA results showed the species was present in 56% of tetrads covered in breeding season with an average of 4.9 pairs per occupied tetrad.

Despite last year's good showing there were no records this year of the continental race.

Blue Tit*Parus caeruleus***Common breeding resident and passage migrant**

Breeding season records included 7 pairs at Welney and 22 territories at Wheatfen. NBA results showed the species was present in 93% of tetrads covered in breeding season with an average of 15.3 pairs per occupied tetrad.

Beeston Bump provided only autumn record of migrants when 8 flew high to east Sept 21st. Largest flocks during second winter period included 20 Titchwell Nov 9th and 21 Thorpe St Andrew Dec 16th.

Great Tit*Parus major***Common breeding resident and passage migrant**

During first winter period largest flocks 45 Buckenham Tofts Jan 30th and 25 Stanford Wood Jan 22nd. The only spring migrants noted were 2 east Paston March 7th and 7 west Weybourne March 13th. One at Holme March 22nd/23rd had very cold grey upperparts and cream underparts without a trace of yellow.

Breeding season records included 7 pairs Welney and 25 territories at Wheatfen. NBA results showed the species was present in 91% of tetrads covered in breeding season with an average of 12.6 pairs per occupied tetrad. At Cromer in May young in nestbox observed being fed by a Wren as well as by parents.

The only flocks of note during second winter period were 17 Thorpe St Andrew Dec 16th and 25 Stanford Rectory Dec 31st.

Nuthatch*Sitta europaea***Breeding resident, possibly in decline**

NBA results showed the species was present in 27% of tetrads covered in breeding season with an average of 2.3 pairs per occupied tetrad. Wandering birds noted Holme Aug 5th, Titchwell Aug 6th and Sheringham BO Oct 1st (the first there since 1996).

Treecreeper*Certhia familiaris***Widespread woodland resident**

One Yarmouth Cemetery Feb possibly of continental origin.

NBA results showed the species was present in 41% of tetrads covered in breeding season with an average of 2.1 pairs per occupied tetrad.

Penduline Tit

Remiz pendulinus

Vagrant and potential breeder

Again only one record, a male Titchwell April 8th/9th (R&JE *et al*).



Penduline Tit (*Phil Jones*)

Golden Oriole

Oriolus oriolus

Scarce migratory breeder and passage migrant in small numbers

A typical series of spring migrants: in May Cringleford (Keswick Close) 8th, male Holme 14th, west West Runton 16th, imm male Hickling Broad 19th, at least one there 22nd and imm male and female 29th, Sheringham Park 21st, Leziate 22nd, male and female Mundesley also 22nd, and a male West Walton 27th. During June female Holkham GM and Park 6th, and male Coltishall 22nd.

Breeding: again a poor season with only 3 pairs. One pair fledged 2+ young, another seen carrying food but success unknown, third pair failed. A fourth pair probably bred with another male singing at a regular site on one occasion only (information from Golden Oriole Group).

Red-backed Shrike

Lanius collurio

Passage migrant in small numbers; last bred 1989

First of spring male in song Winterton South Dunes May 28th/29th, quickly followed by female Walsey Hills May 31st, male West Somerton June 3rd and female Holme June 4th-6th. Only other spring record female Hickling Broad June 22nd.

After last year's poor showing a marked improvement with 11 autumn occurrences (juvs unless otherwise stated): in Aug Cley 23rd-25th and Winterton 27th; in Sept 2 Scolt Head 2nd, Blakeney Point 3rd, Beeston Bump 4th, Blakeney Point 16th-21st, Sheringham 19th-23rd, adult male Warham Greens 20th-25th, Gramborough Hill (Salhouse) 20th-22nd, and Yarmouth South Denes 27th-Oct 2nd.

Great Grey Shrike

Lanius excubitor

Scarce passage migrant and declining winter visitor

In first winter period, what was probably the same bird seen at a number of sites in and around Stanford TA including Stanford Rectory Jan 9th, Langford Jan 16th, Little Cressingham Feb 10th, Roudham Heath Feb 12th and Hilborough next day, before eventually settling at Bodney Camp April 16th-21st. Just two other spring records: Little London (Saxthorpe) March 5th and Sheringham April 10th. No autumn records and just a single winter occurrence in a fortunate observer's garden Hilborough Dec 15th.

Woodchat Shrike

Lanius senator

Vagrant from southern Europe, mostly in spring

Two classic late spring overshoots after a blank year in 1999: West Somerton June 3rd (RCMe *et al*) and a female Holme June 4th (GFH *et al*).

Jay

Garrulus glandarius

Common resident; periodic influxes from the Continent following failure of acorn crop

Very few records received. Up to 10 in single flock Beeston Common in first winter period and 9 in mile stretch Lenwade Dec. Highest breeding season count 8 pairs Wootton Carr. NBA results showed the species was present in 66% of tetrads covered in breeding season with an average of 2.4 pairs per occupied tetrad.

Albino New Costessey Dec 28th. No reports of birds on migration.

Magpie

Pica pica

Common resident forming winter roosts

Highest roost counts 37 UEA Jan 17th, 33 Horsey Jan 19th and 122 Roydon Common Feb 20th; in second winter period 91 flying to fen roost Harling Dec 29th. Other notable counts 18 Lopham Fen Jan 15th, 22 Horsford Oct 15th, 18 Colney Marsh Oct 22nd, 26 Saddlebow Nov 22nd and 28 Langford Dec 31st.

Spring migration along north coast March 21st-April 27th: counts of 3 or more (all west except as stated): 11 Holme March 12th and 15 25th, 5 Beeston Bump March 21st and 9 25th, Paston (all east) 19 March 21st, 8 25th, 3 April 20th and 3 27th. Also present at Holme 22 March 4th and 12 April 8th; up to 2 Scolt Head four dates April 1st-27th.

NBA results showed the species was present in 84% of tetrads covered in breeding season with an average of 4.8 pairs per occupied tetrad.

In autumn only indication of possible migration, 2 Scolt Head Oct 12th and max of 18 in Eccles garden Oct 22nd.

Jackdaw

Corvus monedula

Common resident, passage migrant and winter visitor

Notable winter gatherings 1000 Edgefield early Jan, 330 Saxlingham Jan 7th, 1150 Fransgreen (East Tuddenham) Jan 19th, 350 Weston Longville Jan 26th, 500 Fakenham Jan 27th, 1500 Earsham Feb 13th and 420 Bittering Dec 3rd.

Spring passage noted around coast Feb 24th-May 6th, with peak in last 10 days of March, when unusually large numbers at Paston and Horsey. Max counts at main sites: Beeston Bump 21 east 12 west March 21st: Paston (all moving east) 82 March 12th, 172 21st, 175 25th, 76 April 2nd and 64 8th; Waxham 50 south (0620-0900) April 21st: Winterton 100 May 6th.

NBA results showed the species was present in 85% of tetrads covered in breeding season with an average of 13.7 pairs per occupied tetrad.

An impressive post breeding gathering of 1000 at Brinton roost mid-July.

Only evidence of autumn passage 30 south Hunstanton Oct 15th.

Only two individuals showing characteristics of the continental/eastern forms at Saxlingham Sept 10th and Dec 2nd, and Hunworth Dec 9th.

Rook

Corvus frugilegus

Common resident, passage migrant and winter visitor

Flocks in excess of 1000 reported in first winter period: 1500 East Harling, 4000 Edgefield, 3100 Fransgreen (East Tuddenham), 1500 Freethorpe, 2000 Scole, 2000 Shereford and 6000 Weston Longville; and in second winter period: 3100 Attlebridge, 3400 Bittering and 1500 East Harling.

Largest rookeries reported: 600 nests Docking and 519 at 2 sites Larling. NBA results showed the species was present in 63% of tetrads covered in breeding season with an average of 51.9 pairs per occupied tetrad.

Spring passage March 12th-April 24th; as with Jackdaw peak counts last 10 days of March. Max at main sites: Holme 39 west March 7th and 40 west 12th; Beeston Bump 15 east 7 west March 21st and 21 west 5 east 25th; Paston (all moving east) 163 March 25th, 45 26th and 45 April 19th; Waxham 50 south (0620-0900) April 21st.

The only autumn migrants were 15 south Hunstanton Oct 15th and 7 west Wells Oct 17th.

An abnormally-plumaged bird with black-brown belly and flanks, and rest of plumage faded brown, Briston May 1st-13th; probably same bird also noted at Swanton Novers.

Carrion/Hooded Crow

Corvus corone

Carrion Crow *C (c) corone*

Increasing resident forming winter roosts; also a passage migrant

Largest winter counts: 320 Attlebridge Jan 19th, 125 Roydon Common roost Feb 20th, 75 Saddlebow March 11th and 63 Dec 23rd, and 45 Thetford Nunnery Stud Nov 15th.

Spring passage March 1st-May 31st, peaking second half of April. Max counts at main sites: Scolt Head (all west) 28 April 17th, 28 19th, 35 21st and 39 24th; Beeston Bump 8 west 5 east March 21st, 11 west one east 26th, and 17 east 8 west April 18th; Inceborough Hill 100 west April 24th; Cromer 35 east April 1st and 40 west 12th; Sidstrand 19 west April 8th; Paston 17 east March 25th, 38 west April 17th, 48 east 18th and 30 east 23rd; Horsey 18 north March 25th, 19 south 8 north April 1st, 15 south 14 north 8th, and 8 south 7 north May 6th. Also 80 present at Bramble Hill, Horsey April 21st, 100 24th and 50 May 6th.

NBA results showed the species was present in 90% of tetrads covered in breeding season with an average of 4.9 pairs per occupied tetrad.

Hooded Crow *C (c) cornix*

Very scarce passage migrant and winter visitor, formerly fairly common

Up to 3 Jan-April in Horsey/West Somerton/Waxham area, where last recorded May 1st. Elsewhere in first winter period singles more widespread than in recent years, with records from 10 well-scattered localities with 2 at Brancaster/Docking, Cockley Cley and Roydon Common.

Heavier spring passage than usual March 12th-May 17th with singles at many coastal sites. Max counts 7 west Scolt Head April 19th, 5 east Paston March 26th with 6 east April 8th and 5 east 18th, 4 Sea Palling April 18th, 4 in off sea then north Horsey March 25th and 8 north there April 8th.

In autumn, Breydon Aug 6th-Sept 2nd (but may refer to local hybrid), Holme Sept 21st, 2 Winterton Oct 13th, Horsey Oct 15th and 28th, east Salthouse Oct 29th and East Ruston Nov 9th.

A hybrid remained at Burgh Castle, where it bred with a Carrion Crow, rearing 2 young. Other hybrids Waxham April 21st, Horsey May 6th and West Runton Oct 4th.

Starling

Sturnus vulgaris

Common resident, passage migrant and winter visitor



Hooded Crow (*Andy Benson*)

Largest roosts reported in early part of year: 10,000 King's Lynn Jan, 18,000 Hickling Jan and 15,000 Rackheath Feb.

Minimal spring passage in March, only notable counts 1200 Holme GM March 17th/18th and 2000 east Paston March 19th.

Breeding: comment that is now a scarce breeder at Strumpshaw. Additionally, a startling decline or absence has been noted in Broads, where virtually no late summer flocks of juvs on harvested fields. NBA results showed the species was present in 92% of tetrads covered in breeding season with an average of 18.9 pairs per occupied tetrad.

Typical midsummer westerly passage from June 2nd, with peak of 1200 Scolt Head July 12th and 28th. Up to 5100 feeding on saltmarsh at Scolt Head/Brancaster Hbr late Aug.

Main westerly autumn passage Oct 3rd-Nov 14th, max counts Oct 21st with 70,000 Holme (48,745 1715-1745, remainder 1745-dusk), 88,600 Scolt Head, 40,000 Sheringham, 18,000 Beeston Bump (0820-1030) and 50-60,000 (all day count), and 35,000 Paston (dawn-1030). On the following day 113,000 south Hunstanton (0710-0910 with 103,470 in first 30 mins).

Largest autumn roost counts: 9000 Titchwell Oct, 10,000 Hempstead Marshes Oct 23rd, 25,000 Turf Fen (How Hill) Oct 26th/27th, 10,000 Ranworth Oct 29th and 30,000 Nov 3rd, 10,000 Holme Nov 6th, 60,000 Horning Hall Marshes Nov 7th/8th and 75,000 20th.

Two leucistic birds Breydon July 1st and one 17th.

House Sparrow

Passer domesticus

Common but declining resident

The request in the last Report for observers to submit all records of this species has resulted in a confusing picture! Conflicting results and comments have been received, often from adjoining areas. In north of county, for example, the population at Cley has been described as 'healthy' and up to 60 were present in one garden in Dec, whereas a Blakeney garden is now devoid of House Sparrows where up to 20 were present 10 years ago. Similarly at Edgefield Green, the roof of a house held no breeding pairs, for the first time in 25 years, and yet at Little London, there has been a marked increase since 1999. Similar varying reports have been received from well-scattered parts of the county. Also see article on page 289 concerning a survey undertaken in Norwich.

NBA results showed the species was present in 90% of tetrads covered in breeding season with an average of 19.8 pairs per occupied tetrad. The highest concentrations were found in small villages, with nesting pairs breeding particularly under Norfolk pantiles.

Outside the breeding season, flocks of 50 or more were reported as follows: 70 Pentney July 3rd, 160 West Runton July 22nd and 150 Aug, 70 Saham Toney and 50 Wereham Aug, 120 Southrepps Aug 25th-31st, 60 Sheringham BO Sept 23rd, 60 Marham Oct 4th and 75 Blakeney Quay Oct 23rd.

The only report of birds on passage were 8 south Hunstanton Cliffs Oct 15th.

Tree Sparrow

Passer montanus

Scarce resident; passage migrant and winter visitor

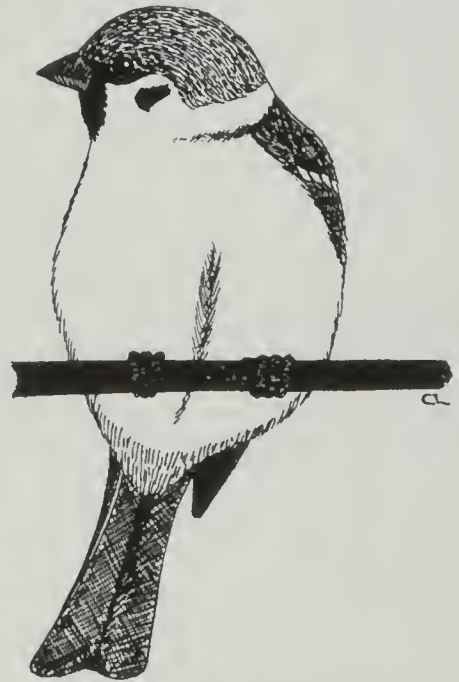
Following the decline of a resident species such as Tree Sparrow, the recovery process is slow and often takes many years. Although some encouraging winter flocks have been located in the last year or two, only local dispersal will occur in the spring and all available nesting sites may soon be occupied. However, there are some early indications that the decline in the Norfolk population of this attractive sparrow may have been reversed. At the present time, the county's population appears to be centred in five areas.

North-west: Largest winter flocks 75 West Raynham Jan 16th, 10 West Barsham Feb 5th and 10 Kipton Ash March, with 25 South Creake April 5th. Breeding season reports all concerned single pairs.

North: Largest winter flocks 10 Edgefield Street Jan 10th, 23 Saxthorpe Jan, 25 Brinton Jan and Dec, 16 Stody and 12 Hunworth Feb 9th, and 12 Baconsthorpe March 26th. Apart from single breeding pairs, 3 Little Barningham, 6 Stody and 21 Fulmodeston in nest boxes, where 16 pairs in 1999. The only notable post breeding flock reported in county 40 Baconsthorpe Sept 9th.

Central: Winter flocks of 11 East Tuddenham Feb 14th and 35 Lyng Dec 30th. Only notable breeding season record 19 North Tuddenham April 23rd.

Brecks: The largest winter flocks in county at Illington peaking at 115 Feb 20th and 80 Great



Tree Sparrow (Chris Lansdell)

Cressingham Feb 13th; elsewhere 10 Swaffham Dec 25th and 20-30 Gooderstone during winter. Only breeding season reports other than single pairs were 4 East Harling and several Stanford TA.

Fens: 10 Ashill Feb 3rd, where 20+ July around breeding colony in farm roof.

Norfolk Bird Atlas results showed the species was present in 11% of tetrads covered in breeding season with an average of 3.8 pairs per occupied tetrad.

Few records of birds on presumed spring migration 2 west Holme March 12th, 4 west 24th and 2 west 25th, Blakeney Point April 8th and May 6th/7th, and 3 Scolt Head May 8th. In autumn Scolt Head Sept 19th/20th, 6 west Holme Oct 8th, 3 south-east Sheringham Oct 9th and south Hunstanton Cliffs Oct 19th.

Two hybrids reported during year: Binham several dates in Feb and March 13th/14th and Cley Feb 21st.

Chaffinch

Fringilla coelebs

Common resident; also passage migrant and winter visitor in varying numbers

In first winter period flock in excess of 100 as follows: *Jan* 180+ South Creake, 150 Thrextan STW, 113 Tatterford, 100+ at both Grimston and Barrow Common; *Feb* 215 Didlington, 200 Illington; *March* 200 Grimes Graves.

Coastal movements began early with Feb records from Holme where 40 17th and 62 west 20th. In March max 120 east Paston 25th; elsewhere (all west) 18 Holme 4th with 20 there 7th and 13 12th, and 10 Sidestrand 5th. In April max counts again Paston where 85 east 17th and 375 east next day. Latest, one east Becston Bump May 7th.

Breeding season data received from Welney where 31 singing males, Wheatfen 6+ territories and UEA 8 singing males. NBA results showed the species was present in 93% of tetrads covered in breeding season with an average of 26.2 pairs per occupied tetrad.

Visible migration in autumn from Sept 17th when 10 Beeston Bump followed by 20 east there 20th and smaller numbers 21st and 23rd. More widespread immigration during Oct with good series of counts from Hunstanton Cliffs where (all south) 205 9th, 302 13th, 710 15th, 2129 19th, 1149 22nd, 5027 23rd and 196 24th, and from Becston Bump with 173 west 6 east Oct 19th, 791 west 30 east 20th (1200-1400), 910 west 250 east 21st (0750-1030) and 515 west 23rd (0745-0845). Elsewhere 1000+ west West Runton Oct 3rd, 1200 west Paston 21st, 301 south Waxham also 21st (2 hrs), 210 east Paston 22nd and 240 west Lynn Point 26th.

In Nov highest counts again from Hunstanton Cliffs where southerly movements of 320 11th and 663 13th. Elsewhere 250+ west Brancaster Nov 1st, 40 west Holme 4th and 80 west Sheringham 9th. Also 60 Hilborough Nov 8th (20 trapped and ringed) and 92 Snettisham 20th.

Only 3 flocks over 50 reported in Dec: 70 at roost Overstrand from 22nd to year end, 55 Strumpshaw 27th and 70 Hilborough 28th.

Brambling

Fringilla montifringilla

Passage migrant and winter visitor in variable numbers

Widespread in Jan with large concentration at Barrow Common where max 500 Jan 15th. Notable flocks elsewhere in Jan included 50+ Waxham 6th, 300 Babingley and 72 Hilborough 15th, 55 Glandford 16th, 60 South Pickenham 22nd, 50 Bodney from 22nd and 150 Thurlton 27th. Numbers much reduced in Feb with max 69 Wootton Carr 5th, 120 Stanford TA 7th, 40 West Tofts 15th and 60 Little Cressingham 18th. Even fewer in March with only notable counts of 95+ Merton 2nd and 50+ Grimes Graves 31st.

Coastal movement in spring slight, with max April 21st when 20 over Winterton and 20 east Paston. Elsewhere small flocks of presumably Scandinavian bound migrants began appearing at coastal sites with max 20 Sheringham April 11th and 15 still there 13th. Elsewhere a scattering of records with latest Holme and Weybourne May 2nd, East Ruston 3rd, and Stalham Green and Yarmouth Cemetery 4th.

Recorded in autumn from Sept 24th (Scolt Head and Holkham Meals) but numbers disappointingly low. In Oct/Nov only a scattering of coastal migrants with only double-figure counts (all west): 12 Lynn Point Oct 15th with 19+ there 26th, 10 Sheringham Oct 9th with 15 21st, and at Hunstanton Cliffs where (to south) 32 Oct 15th and 28 Nov 13th, and 24 north-east Nov 11th.

Wintering flocks in Nov/Dec also in short supply with only flocks (above 25) of 100 Thetford Castle Dec 4th and 150 Santon Downham 12th.

Serín

Serinus serinus

Vagrant from continental Europe

Only 2 records both in April and both typically short-stayers, male Sheringham Cemetery April 1st (DHR) and female Salthouse April 29th (SPH).

Greenfinch

Carduelis chloris

Common resident and passage migrant

Highest counts Jan-March much lower than in 1999 and unlike that year no substantial counts from Fens. In Jan max 150+ Waxham 6th, 125 Stiffkey FM 15th and 70 Barrow Common 25th. In Feb highest count 50 Winfarthing 27th plus 40 Holme, where also max March count of 60.

Also at Holme a series of westerly movements during March saw commencement of spring migration with total of 266 passing on 5 dates with max 78 on both 7th and 25th. Only single-figure counts of visible migration noted in April except 63 east Paston 17th. Latest movement in May 10 east Beeston Bump 7th.

NBA results showed the species was present in 90% of tetrads covered in breeding season with an average of 12.1 pairs per occupied tetrad. Post breeding flocks at Beacheamwell where up to 50 July and at Lynn Point where 80 Aug 27th. Max counts in Sept included 100 Sparham all month and 100 Snettisham 17th.

Autumn passage from Sept 30th when 46 east Cromer with main passage during Oct, the most productive sites being Hunstanton Cliffs where 722 9th, 187 13th, 840 15th and 816 19th (all south); Holme where 250 14th, 300+ 19th, 300+ 20th and 100+ 21st-23rd (all west); Scolt Head where 125 west 19th with 33 in off sea next day; Sheringham where 70 west 7th, 80 west 9th and 70 west 35 east 12th. At Beeston Bump birds moving west on many dates with max 134 on 17th (0730-0900).

Substantial flocks also gathered in Oct with 500 Langford (Stanford TA) 6th, 400 Repps-with-Bastwick (on sunflowers) 10th, and 800 Garboldisham 17th (at sunflower harvest) most remaining for a month. At latter site 959 ringed in year, a 23% increase on 1999. Towards end of year other notable counts of 250 Cockthorpe Nov 17th, 120 Welney Nov 12th (on linseed) and 100 Hilborough Dec 28th. Roost counts in Dec of 97 Ketteringham 9th and 100 Bacton Gas Site 20th.

Goldfinch

Carduelis carduelis

Common resident, passage migrant and summer visitor

Largest flocks in first winter period: Jan 50+ UEA 16th, 50 Welney 18th, 60 Hill Harling

23rd, 55 Ormsey Little Broad 28th; *Feb* 135 Didlington 6th with 200 there 15th, 100 Illington 16th, 80+ Santon Downham 26th, 75 Welney 27th, max 80 Blakeney GM Feb 11th; *March* 63 Welney 9th (at feeding station), 200+ Garboldisham 14th, 130 Buckenham Tofts 29th-31st.

Spring migration noted from April 1st at Seolt Head where total of 561 west during month with highest counts 223 21st and 195 24th. Elsewhere in April 60 east Cromer 21st with 70 west 23rd, 446 west Paston 24th with 200 east next day, and 55 west Sheringham 29th. Movement continued well into May with 100 south Horsey 6th, 50 east Cromer 7th and 50 east there 15th, and 150/hr east Paston (0630-0930) 13th.

NBA results showed the species was present in 82% of tetrads covered in breeding season with an average of 6 pairs per occupied tetrad. A few post breeding flocks noted with 60 Salthouse Aug 13th, 120 Berney Aug 24th and 65 present all month at Snettisham. Numbers increased gradually during autumn with highest counts in Sept of 110 Snettisham 17th, 100 Salthouse 19th/20th and 100 Cley 29th.

Visible autumn migration noted at only 2 sites with 39 south Hunstanton Cliffs Oct 15th and 26 south there 19th, and 50+ west Holme 20th. Elsewhere during Oct 110 Beeston Regis/West Runton 5th, max 100 Titchwell, 62 Cranwich 22nd and 60 Cley 28th.

In Nov/Dec max 200 Holkham Bay and 165 Holme; also 135 Snettisham Nov 20th and 100 Burnham Overy Dunes Dec 14th.

Siskin

Carduelis spinus

Passage migrant and winter visitor in fluctuating numbers; small numbers breed

Considered scarce by several observers although widespread records of flocks of 10-30 in first winter period. Highest counts: *Jan* 150 Bintree Mill, 50 Buckenham, 50 Buxton Heath, 100 Garboldisham, 150 Lynford Arboretum, 69 Snetterton GP, 50 Thetford Nuns' Bridges, 50 Tottington, 50 West Acre; *Feb* 80 Pensthorpe, 50 Santon Downham, 100 Thetford Warren. At Garboldisham just 88 ringed by mid-April (58% male, with 4.5 juvs to one adult).

Generally poor, though protracted, coastal passage through until mid-May. Best counts: *March* 47 west and 25 present Holme plus 15 Sheringham 12th, 26 west Titchwell 13th and 18 there 16th, 21 west Holme 19th and 50 next day, 30 Holkham Meals 21st, 20 Holme 21st/22nd and 15 west 25th; *April* 20 south Hunstanton and 90 east Sidestrand 8th, 17 Titchwell 13th. Highest inland counts during this time: *March* 250 Thetford Nuns' Bridges 2nd, 20 Honing Lock 4th, 25 Sheringham Park and 50 West Acre 17th, 25+ Ranworth Broad and 45 Sturston Hall 31st; *April* 20 East Tuddenham 3rd; *May* 25 Babingley 24th.

Breeding records from Aylmerton (pair with young in May), Beeston Regis (family party June 18th) and Weybourne (up to 5 adults in May, with 2 newly fledged young 6th and 4 by 9th). Away from above breeding sites June-Aug records from Cromer, Holkham Meals, Holme, Lakenheath Washes, Paston (4 east June 19th), Santon Downham, Snettisham and Titchwell.

First autumn migrants 2 inland at Honing Lock Sept 8th where 3 9th, followed by 5 east Holme 16th. Another disappointing autumn passage with very few double-figure counts. Highest totals: *Sept* 20 Holkham Meals 17th, at Holme (all west) 17 23rd, 15 25th, 17 26th, 17 27th; *Oct* 20 Holkham Meals 7th, 62 west Holme 14th, 24 south Hunstanton 15th, 81 south Hunstanton, 38 west Holme and 41 west Sheringham 23rd; *Nov* 20 west Sheringham 5th, 25 Sea Palling 14th.

Numbers low during second winter period with best counts in Dec of 21 Beeston Regis Common, 60+ Bradfield, 30 Bridgham, 27 Swanton Novers, 60 Thetford Nunnery Lakes and 20 Whitlingham Lane GP.

Linnet

Carduelis cannabina

Common resident and passage migrant

A reasonable number of good-sized flocks located around county in first winter period, with triple-figure counts: *Jan* 300+ Barrow Common/Docking, 100 Edgefield Street, 300 Grimston, 250 Lynn Point (in kale), 200 Sheringham, 250 Shouldham Warren, 150 Tatterford, 100 Wolferton; *Feb* 100 East Harling, 100 East Ruston, 500 Grimston Heath, 200 Illington; *March* 115 Scolt Head. Passage noted from early March, peaking in late April. Highest counts: *March* 246 west Holme 25th; *April* 300 Holme 2nd, 475 west Scolt Head, 359 west Sheringham (90 mins), 200 Sidestrand and 1000 east Paston all 16th, 345 west Scolt Head and 1450 east Paston 17th, 2000 east Paston and 600 south Waxham-Winterton (3 hrs) 18th, 290 west Scolt Head 19th, 275 west Scolt Head and 200 south and 130 present Waxham (0620-0900) 21st, 235 west Scolt Head 22nd, 1285 west Paston 24th; *May* 540 east Paston (0630-0930) 13th and 660 east there (0630-0930) 14th.

Breeding data (pairs) from Blakeney Point (15), Scolt Head (35), Sparham (6 in 850 acres), and Welney (3). NBA results showed the species was present in 83% of tetrads covered in breeding season with an average of 6.7 pairs per occupied tetrad.

Late summer/autumn build-up around coast less apparent than usual, with best counts: *July* 170 Snettisham/Wolferton; *Aug* 100 Breydon, 200 Cley (on linseed), 150 Holme, 200 Scolt Head; *Sept* 130 Beeston Regis, 230 Blakeney Point, 270 Holkham Bay, 150 Salthouse, 550 Scolt Head, 200 Sheringham, 100 Snettisham, 100 Titchwell, 150 Weybourne; *Oct* 300 Holme, 200 Salthouse, 160 Sheringham. Inland in Sept/Oct 100 Berney, 150 East Harling and 100 Smugglers Road (Stanford TA).

Few observations of visible autumn migration, with best counts in Sept of 200+ south Yarmouth 13th and 60 east Sheringham 29th.

Fewer flocks located during second winter period with highest concentrations: *Nov* 220 Holme, 150 Kelling WM, 150 Scolt Head, 100 Sparham; *Dec* 100 Cockley Cley, 100 Kelling WM, 100 Sparham.

Twite

Carduelis flavirostris

Declining local winter visitor

Last recorded April 5th at Breydon and from Sept 29th at Titchwell. Max counts at main resorts:

	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Wash	60	10	18	3	20	45
Holme	-	30	41	20	2	4
Thornham-Titchwell	65	7	-	30	1	50
Scolt Head/Brancaster Hbr	115	20	70	75	70	230
Holkham Bay	120	100	80	10	76	67

National importance (winter): 50

Elsewhere: 18 Burnham Ovcry Hbr Nov and 35 Dec, and 9 Wells Hbr Dec (all WeBS counts), 5 Stiffkey Jan 2nd; 6 Morston Jan 6th, 14 10th, 5 Dec 11th, one 22nd; 20 Blakeney Point Jan 2nd and 17 west Nov 15th; 6 Salthouse Oct 15th, 5 Nov 1st, 22 4th, one Dec 1st; West Runton Oct 4th with 2 15th; 10 Happisburgh Oct 16th rising to 14 Nov 12th, last reported 12 Nov 19th; Sea Palling Nov 15th; Eccles Oct 23rd; 20 Horsey Oct 23rd; 6 Breydon

Oct 19th-22nd, 14 Nov 10th. After last year's absence, regularly found in Wash again but in small numbers and worryingly few at oncc-favoured haunts at Holme and all sites to east of Wells. Westwards spring passage noted in March at Holme where 3 5th, 2 7th, 21 13th, 11 22nd, 12 25th, 4 26th, and Scolt Head where 2 on 31st. Autumn passage noted Oet at Sheringham where 5 east 7th, west 8th, 5 9th/10th, 10 11th, 7 west 14th and 11 15th.

Lesser Redpoll

Carduelis cabaret

Passage migrant, winter visitor and declining resident

Scattering of generally single-figure records, principally from Broads, in first winter period. Highest counts: *Jan* 32 Horning Marsh Farm, 20 Horning Waterworks, 30 Lynford Arboretum; *Feb* 37 Wootton Carr; *March* 30 Pensthorpe, 40 Thetford Nunnery Lakes, 40 Wroxham Broad; *April* 100 Santon Warren, 30 Warren Wood; *April/May* 20 Pensthorpe.

Very light return passage with only few coastal records of 1-3 March 22nd to mid-May, with highest counts a paltry 6 Brancaster April 25th and 6 Holme May 5th.

Singing males or pairs noted during summer at Fakenham (3 males), Holkham Meals, Holt, Pensthorpe (adult and juv July), Salthouse Heath (pair), Sutton High Fen (2 pairs), Syderstone (pair bred) and Winterton Dunes. Other summer records of 1-4 from Barton Turf Staithe, Hellesdon, Honing Lock, Mallow Marsh (Barton Turf), Norwich (Cathedral Close, Coslany St, Duke St, Heigham St and Surrey Street). Reepham and Trowse.

Light autumn passage from late Sept (Holme 20th) until mid-Nov with largely single-figure numbers noted around coast. Only double-figure counts 20 Holkham Meals Sept 30th, 12 east Holme Oet 9th, 6 east 5 west plus 6 present Holkham Meals Oet 13th and 10 Titchwell Oct 23rd. At Hunstanton Cliffs autumn total of a mere 7 south.

Yet again scarce in second winter period, with few records received. Max counts: *Oct* 15 East Ruston, 40 How Hill, 17 Pensthorpe; *Nov* 27 Horning Waterworks, 20 Pensthorpe; *Dec* 35 Catfield Fen, 70 Croxton, 20 Hickling Broad, 22 Pensthorpe, 40+ Sandringham, 80 Stanford Church.

Common (ie Mealy) Redpoll

Carduelis flammea

Scarce winter visitor

Only observations 2+ Costessey Pits March 19th and single Holkham Meals Oet 17th.

Arctic Redpoll

Carduelis hornemanni

Winter vagrant from Scandinavia

1996 Addition: Four (male and 3 others) Belvoir St, Norwich March 11th (AMS *et al*).

Crossbill

Loxia curvirostra

Breeding resident in fluctuating numbers with Thetford Forest the stronghold; immigrants arrive most years in late summer and autumn; major irruptions at irregular intervals

Scattering of mainly single-figure records from Brecks, though almost exclusively from first half of year presumably when more site coverage. Highest counts at Santon Downham where 16 Feb, 30 March and 15 May, and Lynford Arboretum where 50 March. Away from Brecks max: Babingley Wood (20 June), Brancaster (4 May), Felbrigg Park (2 Sept), Holkham Meals (9 Feb, one March, 3 May), Holt (5 May), Holt Lowes/CP (7 April, 3 May), Horsford (3 Jan, 20 May, 4 Oct), Kelling (8 April, 11 June, 6 July), Ormesby Little Broad (one Feb), Roydon Common (2 April), Sandringham (one Feb, 41 Nov), Sheringham (7 Feb, 9 March), Sheringham Park (regular Feb-June with max 36 May), Wolferton (2 Feb, 31 June).

Presumed breeding with records of family groups March-May from Holt, Horsford (pair fledged 3 young), Lynford, Lynford Arboretum and Thetford Warren.

Minor spring return passage with first obvious migrant Holme Feb 6th followed by March records of 6 west Sheringham 11th, 2 Holme 12th and 3 there 20th, Beeston Regis 22nd, 4 Holme 23rd and Cley 24th. Summer/autumn movements of 6 Holme and 5 west Holkham Meals June 4th, 2 Holme June 11th and 3 there July 4th, Beeston Regis July 20th, 2 west Holme Aug 19th and 10 there Aug 30th, single east Mundesley Sept 24th and finally east Stiffkey Nov 16th.

Common Rosefinch

Carpodacus erythrinus

Rare passage migrant; potential colonist

Sole spring record 1st-summer male in song Old Hunstanton June 18th (JVB *et al*), with autumn records Waxham Sept 1st/2nd (RCMc SJS *et al*) and Holkham Meals Sept 20th (JRMc) and 23rd (AMc).

Bullfinch

Pyrrhula pyrrhula

Resident and occasional immigrant

Details from over 70 localities though few confirmed breeding records. NBA results showed the species was present in 44% of tetrads covered in breeding season with an average of 1.7



Bullfinch (*Phil Jones*)

pairs per occupied tetrad. Max counts: 10 Langford and 18 in two 2 km tetrads around Feltwell Jan; 8 Titchwell Feb; 9 Titchwell (Gypsy Lane) Sept; 10 Thompson Water and 8 Burgh Common Nov; 13 Swanton Novers Dec.

Autumn passage records of single east Paston Oct 14th, 5 Cromer GC Oct 22nd, 2 west Yarmouth ASDA site Nov 5th, 3 Beeston Bump Nov 6th, small influx Sheringham early Nov and 2 considered *pyrrhula* race Holme Nov 5th with single there 9th.

Hawfinch

Coccothraustes coccothraustes

Evasive and very local resident; scarce migrant

The fortunes of this species continue to give cause for concern, with even fewer records and a marked paucity of sightings after the spring, though hopefully this reflects birdwatchers patterns of activity rather than its true status. Lynford Arboretum sole locality with regular series of records and then only until April. Continued dearth of records from Barnhamcross Common, Santon Downham (where only record 4 Feb 26th) and Holkham Park. Monthly max are tabulated below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Barnhamcross Common	-	-	1	-	-	-	-	-	-	-	-	3
Lynford Arboretum	6	1	6	5	-	-	-	-	-	-	-	-
Sandringham	1	1	2	-	-	-	-	-	-	-	-	-
Holkham park	-	1	-	-	1	-	-	-	-	-	-	-

All records from other sites: Stanford TA 8 Feb 6th, 5 Feb 7th and single March 2nd and 13th, Thetford Nunnery Lakes March 23rd, early spring migrant west Titchwell March 25th with single there April 9th, Ormesby St Margaret ringed at garden feeder May 12th. Swanton Novers July 13th, Kilverstone July 18th, autumn migrants Snettisham CP ringed Nov 5th and Holme Nov 6th, 1-2 roosting at traditional Wensum valley site Dec and Gooderstone (two sightings during year).

No records suggestive of breeding received.

Lapland Bunting

Calcaeus lapponicus

Regular but usually scarce passage migrant and winter visitor

In first winter period very few records, with birds reported only at Cley, Stiffkey Fen (up to 3 at each site) and singles at Lynn Point and Burnham Norton. One well inland feeding on stubble at Aylmerton Jan 30th.

April migrants at Holkham GM and Breydon 5th, Eccles 27th and Horsey 29th, with a final bird Scolt Head May 1st.

Autumn passage commenced Sept 9th with one at Blakeney Point. Movement then continued until well into Nov with birds recorded at many localities round coast: Hunstanton, Holme, Titchwell, Scolt Head, Burnham Norton, Holkham, Blakeney Point, Cley, Salthouse, Kelling, Weybourne, Sheringham, West Runton, Mundesley, Paston, Happisburgh, Walcott, Sea Palling, Waxham, Horsey and Winterton. Most sightings related to one or two individuals but day counts of 8 at Sheringham Oct 8th, Holme Oct 15th and Happisburgh Nov 5th. Inland, singles Ringstead Oct 28th and Hickling Broad Nov 12th.

In Dec singles Bure Loop, Yarmouth 3rd and Winterton 6th.

Snow Bunting

Plectrophenax nivalis

Winter visitor in declining numbers

Monthly max at most regularly counted sites:

	Jan	Feb	Mar	Oct	Nov	Dec
Snettisham/Heacham	60	35	9	-	13	55
Holme	29	5	2	1	25	20
Thornham/Titchwell	45	50	1	-	50	70
Scolt Head	45	35	15	3	70	80
Burnham Overy	40	24	-	-	1	-
Holkham Bay	50	48	-	-	60	25
Blakeney Point	105	50	-	2	95	45
Cley/Salthouse	80	67	30	4	60	45
Walcott/Bacton/Paston	18	28	-	-	70	30
Happisburgh/Eccles	40	-	-	1	4	3
Yarmouth	108	70	27	-	7	-
Breydon/Berney	19	12	8	-	-	-

Other winter concentrations in early part of year included up to 75 West Runton and up to 42 inland East Ruston. Others noted at Heacham, Hunstanton, Sheringham, Mundesley, Paston, Sea Palling and Caister; elsewhere inland 19 Barrow Common Jan 25th and one Cantley BF Jan 9th. Only April records Scolt Head where single intermittently until 18th, with 2 on 12th.

Sept records commenced 9th when single Mundesley and further individuals during month at Holme, Blakeney Point, Cley, Winterton and inland at Berney. Coastal passage records were also widespread during Oct/Nov with an inland bird at East Bilney Nov 10th.



Snow Bunting (*John Geeson*)

Yellowhammer

Emberiza citrinella

Once common resident, currently in decline

Early year flocks included: *Jan* 41 Grimston Heath, 40 Hindolveston, 65 Marham Fen, 60 Stiffkey; *Jan/Feb* 40 Aylmerton; *Feb* 100 Cley, 55 Beachamwell, 70 Choseley Barns, 40 Martham; *April* 120 Cley 25th.

Very light coastal spring passage detected at Holme and Scolt Head March/April.

Breeding: 14 singing males recorded in one and a half miles of hedgerow at Guist. NBA results showed the species was present in 82% of tetrads covered in breeding season with an average of 7.4 pairs per occupied tetrad.

Light westerly autumn passage noted at Hunstanton and Beeston Bump in Oct/early Nov.

End year flocks included: *Nov* 45 Happisburgh Common, 80 Cockthorpe; *Dec* 50 Bradfield, 60 Great Cressingham, 40 Reepham, 200 Southrepps.

Ortolan Bunting

Emberiza hortulana

Rare passage migrant

A spring bird at Waxham April 26th/27th (RC&SMc TCN *et al*).

In autumn total of 5 migrants in Sept, Blakeney Point 2nd with 2 there 20th (GED SCJ AMS), Sheringham 23rd (GED) and Stiffkey 30th (AMc).

Number of records per season/year during past decade:

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Spring	-	1	2	2	-	-	1	2	2	1
Autumn	2	4	8	3	4	2	3	3	2	5
Total	2	5	10	5	4	2	4	5	4	6

Rustic Bunting

Emberiza rustica

Vagrant from northern Europe

A 1st-winter remained in Stiffkey Woods Oct 1st-9th (DN *et al*).

Reed Bunting

Emberiza schoeniclus

Resident and passage migrant

In first winter period counts included: *Jan* 49 Blakeney Point, 34 Holme, 47 Scolt Head/Brancaster Hbr; *Feb* 22 Alderfen Broad, 100 Martham, 32 Potter Heigham, 41 Warham Greens.

A light spring passage recorded at Holme and Scolt Head March/April.

Breeding reports included 21 pairs at Blakeney Point, 20 Hickling Broad, 45 Holkham NNR, 85 Scolt Head and 15 Welney. NBA results showed the species was present in 37% of tetrads covered in breeding season with an average of 4.1 pairs per occupied tetrad.

Westerly autumn passage noted especially Scolt Head where in Sept 11 on 9th, 7 10th and 10 11th; in Oct 18 1st, 13 12th, 24 19th and 15 22nd. At Hunstanton Cliffs 40 south Oct 15th with 16 also south 19th.

Counts in second winter period included 55 Scolt Head/Brancaster Hbr Sept/Oct, 52 Nov and 28 Dec; also 41 Titchwell Nov.

Corn Bunting

Miliaria calandra

Local and declining resident

Largest flocks in early months of year included: *Jan* 24 Barrow Common/Docking, 63 Feltwell Common, 42 Lynn Point; *Feb* 10 East Ruston; *March* 45 Choseley Barns. Other winter records from Aylmerton, Shouldham, Snettisham/Wolferton and Stiffkey Fen.

Breeding season reports from Barton Bendish, Choseley, Cley, East Ruston, Feltwell, Happisburgh, Hempstead, High Kelling, Hilgay, Horsey, Ormesby, Paston, Repps-with-Bastwick, Ringstead, Salthouse, Scratby, Sheringham GC, Trunch, Welney/Ten Mile Bank (a notable count of 46 May 12th), Wereham, West Somerton, West Walton, Weybourne, Winterton and Wolferton. Unfortunately reports did not always indicate whether singing males were involved, but min of 17 singing males at 12 sites, although actual total must have been significantly higher.

In Nov/Dec counts of up to 24 Lynn Point and 12 at Happisburgh with notably 60 Southrepps Dec 29th; elsewhere records from Horsey, Magdalen Cut and Snettisham.

Introductions, Escapes, Ferals and Hybrids

Appendix I - Categories A, B and C

Escapes or feral birds of species on the British List

Category A Species

Night Heron

Nycticorax nycticorax

Free-flying colony at Great Witchingham

A juv (taken into care) Briston July 4th, an adult Lyng Nov 10th and a smattering of records throughout year from Sparham Pools.

Lesser White-fronted Goose

Anser erythropus

Northern Eurasia; winters southern Europe, India and China

Pentney GP Jan 8th and 15th/16th, and Tottenhill GP Jan 28th.

Snow Goose

Anser caerulescens

North-east Siberia and North America; winters to Mexico

4 Burnham Norton Jan 10th and 4 Snettisham Feb 12th.

Category B/C Species

Ruddy Shelduck

Tadorna ferruginea

Asia and North Africa

Bayfield Lake April 10th-12th; pair all year Holkham; Horning area Sept 18th-30th and Oct 19th/20th; pair How Hill Sept 2nd; 2 Lakenheath Washes April 2nd; Pentney GP May 14th; Salthouse Aug 13th; pair with well-grown young Sennowe Park July 12th and 27th; Titchwell Aug 31st; 2 Thornage Jan 20th and 2 Feb 7th; 2 Welmore (Ouse Washes) June 3rd; 4 Welney March 19th, and one 20th and 26th, May 12th intermittently to 29th, and 2 June 14th and July 30th.

Also one west with flock of Shelduck Sheringham, Blakeney Point, Scott Head and Holme Sept 17th.

Appendix II - Category D

Species that would otherwise appear on the British List except that there is reasonable doubt that they have ever occurred in a natural state

Marbled Duck

Marmaronetta angustirostris

Canary Islands, Mediterranean basin to south-west Asia

Kelling WM April 23rd.

Hooded Merganser

Lophodytes cucullatus

North America, winters to Mexico and West Indies

Salthouse June 22nd-25th.

Appendix III - Category E

Escapes or feral birds of species not on the British List

Sacred Ibis

Threskiornis aethiopicus

Africa south of Sahara to Iran, Madagascar

Buckenham June 26th, July 12th/13th, 22nd/23rd and Dec 6th, Cantley June 26th and July 12th, and Cley Sept 9th and 16th.

Fulvous Whistling-duck

Dendrocygna bicolor

Southern United States to Argentina, East Africa, Madagascar and southern Asia

2 Brundall Aug 11th, 2 Buckenham July 25th, 2 Cantley BF Aug 8th and 31st, Horning Oct 22nd, 2 Lingwood Aug 1st/2nd, Ranworth May 19th and 31st, and 2 Welney April 18th with one there May 19th.

Argentine Bluebill

Oxyura vittata

Southern Argentina and Chile, winters southern Brazil and Paraguay

Male Welney April 24th/25th and female there Nov 10th-12th.

Black Swan

Cygnus atratus

Australia and Tasmania

3 Blakeney GM March 28th; 3 Blakeney Hbr June 4th/5th; 7 Breydon March 5th and 2 Dec 12th and 27th; Buckenham May 21st and 30th, 6 June 10th/11th and one Dec 2nd; 2 Cley Aug 5th-Sept 1st; Horning Old Staithe Jan 7th and 24th; pair Salhouse May 20th; Salhouse Sept 23rd; 3 west Scolt Head June 15th; Stanford Water Jan 29th; 2 Titchwell Aug 17th and Oct 14th; Welney Oct 19th-23rd, Dec 18th and 31st; one on sea Yarmouth July 19th.

Bar-headed Goose

Anser indicus

Central Asia; winter in India and Burma

Baconsthorpe March 23rd-April 1st, Bayfield Lake April 10th-12th, Hunworth May 2nd, 2 Potter Heigham May 17th with 5 there June 2nd.

Emperor Goose

Anser canagica

North-east Siberia to western Alaska; winters southern Alaska to northern California

Thetford Nunnery Lakes Dec 2nd.

Muscovy Duck

Cairina moschata

Southern Mexico to Argentina and Brazil

Snetterton April 4th and May 21st.

Ringed Teal

Callonetta leucophrys

Southern Brazil to Bolivia, Paraguay, Uruguay and north-east Argentina

Cantley BF Aug 22nd.

Wood Duck

Aix sponsa

Canada to northern Mexico; Cuba and Bahamas

Cantley BF Aug 7th, Sparham Pools March-May and Yarmouth (Bure Park) April 26th.

- Chiloe Wigeon** *Anas sibilatrix*
Southern South America
 Berney March 19th-April 29th and May 14th, Kelling WM March 25th-30th and April 11th-18th, Whitlingham Lane GP Dec 19th and Wissington BF Jan 25th.
- Speckled Teal** *Anas flavirostris*
Andes of Venezuela to Tierra del Fuego
 Horsey Mere Dec 16th with 2 there Dec 28th.
- White-cheeked Pintail** *Anas bahamensis*
South America, West Indies and Galapagos
 Titchwell Aug 31st and 2 Yarmouth (Bure Park) Dec 24th.
- Cinnamon Teal** *Anas cyanoptera*
Western North America (southern Canada) to Tierra del Fuego and Falklands
 Cantley BF Aug 1st-16th, Pensthorpe Oct 18th-28th, and Dec 21st and 31st, Pentney GP March 27th and April 3rd.
- Australian Shoveler** *Anas rhynchos*
Australia, Tasmania and New Zealand
 Titchwell April 14th and May 2nd-4th.
- Red-tailed Hawk** *Buteo jamaicensis*
North and Central America and West Indies
 Bayfield Dec 2nd; Cockley Cley Feb 13th, 17th-26th, March 5th-24th, May 21st, June 10th and Sept 24th; East Harling April 3rd; Hingham and Wymondham April 27th.
- Harris Hawk** *Parabuteo unicinctus*
South-west North America to Argentina, Chile and Brazil
 Surlingham Church Marsh Jan 16th.
- Helmeted Guineafowl** *Numida meleagris*
Africa south of Sahara and extreme southern Arabia
 3 Stanford Water all year.
- Reeves's Pheasant** *Syrnaticus reevesii*
North-central China
 Stanford TA: Dean Drive June 2nd, Great Wood May 21st, Lance Hills April 9th and 16th, Park Pond Covert Oct 20th and West Tofts May 1st.
- Green Pheasant** *Phasianus versicolor*
Japan
 In Ingham/Stalham/Sutton area max 6 (inc 5 males) Jan-April and Sept-Nov.
- Laughing Dove** *Streptopelia senegalensis*
Africa and Middle East to India
 Hethersett March-July 20th.

Cockatiel

Interior of Australia

Winterton June 10th.

Nymphicus hollandicus

White-cheeked Starling

North-east Asia, winters southern China and Philippines

Titchwell April 26th-May 30th and Aug 31st.

Sturnus cineraceus

Common Waxbill

Africa south of Sahara

Breydon Aug 31st and Scolt Head (in off sea) Sept 11th.

Estrilda astrild

Red-billed Quelea

Africa south of Sahara

Cley Sept 29th, Walcott Aug 23rd-28th and Welney Oct 14th.

Quelea quelea

Red Bishop

Eastern and southern Africa

Mundesley Aug 15th-20th and Walcott Aug 22nd-25th.

Euplectes orix

Grey-headed (Bevan's) Bullfinch

North-east India to Tibet, western China and Taiwan

Weybourne June 19th-27th.

Pyrrhula erythaca

Yellow-billed (Chinese) Grosbeak

East-central Asia

Happisburgh May 6th.

Eophona migratoria

Japanese Grosbeak

North-east Asia, winters to southern China and Taiwan

Repps-with-Bastwick 4 days in mid-June.

Eophona personata

Siberian Meadow Bunting *Emberiza cioides*

Eastern Palearctic

Old Hunstanton Feb 6th-March 5th.



Siberian Meadow Bunting (Vince Hanlon)

Appendix IV - Hybrids

Greylag Goose x Canada Goose

How Hill April 26th.

Pink-footed Goose x Lesser White-fronted Goose

Ringstead Dec 26th.

Barnacle Goose x Lesser White-fronted Goose

Tottenham GP Jan 8th

Barnacle Goose x Pink-footed Goose

Holkham Dec 14th.

Wigeon x Teal

Salthouse Dec 27th.

Wigeon x American Wigeon

Blakeney Hbr Sept 23rd.

Blue-winged Teal x Shoveler

Titchwell Dec 4th-31st.

Gadwall x Mallard

Kelling WM Oct 5th.

Tufted Duck x Red-crested Pochard

Stourbridge Jan 12th.

Tufted Duck x Pochard

Lynford Arboretum March 12th, Strumpshaw Feb 24th-26th and March 11th, and Welney Feb 27th and Oct 18th.

Aythya hybrid, Lesser Scaup type

Wiggenhall St Germans Dec 12th.

Falcon sp, probably Saker x Peregrine

Lakenheath Sept 9th.

Mediterranean Gull x Black-headed Gull

Welney Oct 7th.

Earliest and Latest Dates of Summer Migrants

(excludes occasional winter records)

	<i>Arrivals</i>		<i>Departures</i>	
Manx Shearwater	May 3rd	Holme	Nov 7th	Hunstanton
Garganey	Feb 28th	Holme	Nov 4th	Cley
Honey Buzzard	Apr 30th	Sheringham Park	Oct 1st	3 sites
Montagu's Harrier	Apr 17th	Cley	Sept 22nd	Cley
Osprey	Mar 27th	Hunworth	Nov 24th	Fritcham
Hobby	Apr 12th	Yarmouth	Oct 28th	Holme
Quail	Apr 22nd	Scolt Head	Sept 22nd	Scolt Head
Stone Curlew	Mar 19th	Cockley Cley	Mid-Dec	Brecks
Little-ringed Plover	Mar 7th	Buckenham	Sept 28th	Titchwell
Dotterel	Apr 22nd	Choseley	Sept 28th	Titchwell
Little Stint	Mar 11th	Blakeney GM	Dec 29th	Titchwell
Temminck's Stint	May 5th	Cley	Sept 10th	King's Lynn BF
Curlew Sandpiper	Apr 26th	Cley	Nov 14th	Cley
Whimbrel	Mar 27th	Breydon	Nov 18th	Breydon
Wood Sandpiper	Apr 22nd	Buckenham	Oct 4th	Welney
Common Sandpiper	Apr 7th	Titchwell	Oct 29th	Lynn Point
Sandwich Tern	Mar 13th	Titchwell	Dec 15th	Shringham, Weybourne
Roseate Tern	May 14th	Scolt Head	Sept 9th	Yarmouth
Common Tern	Mar 25th	Wroxham	Nov 13th	Sheringham
Arctic Tern	Apr 10th	Welney	Nov 4th	Holkham Bay
Little Tern	Apr 16th	Breydon	Sept 22nd	Scolt Head
Black Tern	Apr 19th	Welney	Nov 7th	Cley
Turtle Dove	Mar 24th	Felbrigg	Oct 5th	Holme
Cuckoo	Apr 10th	Stanford Rectory	Oct 1st	Halvergate
Nightjar	May 12th	Central Norfolk	Sept 8th	Holme
Swift	Apr 19th	Scolt Head	Dec 4th	Brancaster Staithe
Wryneck	Apr 19th	Salthouse	Sept 26th	Burnham Overy
Sand Martin	Mar 5th	Wymondham	Nov 17th	Holkham
Swallow	Apr 1st	Holme, Waxham	Dec 14th	Cromer
House Martin	Feb 29th	W Runton, Mundesley	Dec 14th	Cromer, Mundesley
Tree Pipit	Apr 3rd	Winterton	Nov 6th	Wells East Hills
Yellow Wagtail	Apr 1st	Holme	Oct 23rd	Cley
White Wagtail	Mar 5th	Winterton	Nov 5th	Yarmouth
Nightingale	Apr 18th	4 sites	Aug 27th	Holme
Redstart	Mar 25th	Stanford TA	Nov 8th	Winterton
Whinchat	Apr 19th	Holme, Scolt Head	Nov 6th	Stiffkey
Wheatear	Feb 27th	Holkham	Dec 11th	Dickleburgh
Ring Ouzel	Mar 18th	Sheringham Park	Nov 19th	Horsey
Grasshopper Warbler	Apr 9th	Eccles	Sept 30th	Scolt Head
Sedge Warbler	Mar 24th	Buckenham	Oct 1st	Berney
Reed Warbler	Apr 18th	Hickling Broad	Nov 7th	Holkham Meals
Lesser Whitethroat	Apr 16th	Hickling Broad	Oct 3rd	Scolt Head, Holkham
Whitethroat	Apr 10th	Welney	Oct 4th	Holme
Garden Warbler	Apr 21st	3 sites	Oct 22nd	Holme
Wood Warbler	Apr 19th	Titchwell, Salthouse	Sept 24th	Holme, Warham Greens
Willow Warbler	Mar 14th	Weybourne	Nov 14th	Holkham Meals
Spotted Flycatcher	May 5th	Titchwell	Oct 7th	Hanworth Common
Pied Flycatcher	Apr 13th	Yarmouth Cemetry	Nov 7th	Holme
Red-backed Shrike	May 28th	Winterton	Oct 2nd	Yarmouth

Latest and Earliest Dates of Winter Migrants

(excludes occasional summer records)

	<i>Departures</i>		<i>Arrivals</i>	
Black-throated Diver	Mar 20th	Winterton	Sept 3rd	Holme, Cromer
Great Northern Diver	Apr 18th	Holme	Sept 16th	Cley
Red-necked Grebe	Apr 13th	Hunstanton	Aug 6th	Cromer
Slavonian Grebe	Apr 19th	Titchwell	July 17th	Titchwell
Shag	Apr 12th	Beeston Bump	July 30th	Winterton
Bewick's Swan	Apr 10th	Welney	Oct 8th	Welney
Whooper Swan	May 1st	West Somerton	Oct 5th	Welney
Taiga Bean Goose	Jan 16th	Cantley	Nov 9th	Cantley
Tundra Bean Goose	Mar 26th	Snettisham	Dec 17th	Holkham
Pink-footed Goose	May 14th	Snettisham	Sept 18th	Scolt Head
White-fronted Goose	Mar 21st	Heigham Holmes	Oct 23rd	Waxham
Long-tailed Duck	June 5th	Yarmouth	Oct 16th	Scolt Head
Goldeneye	June 2nd	Roydon	Sept 29th	Titchwell
Smew	Apr 2nd	Tottenhill GP	Oct 28th	Cley
Goosander	June 3rd	Burnham Overy	Sept 30th	Titchwell
Hen Harrier	June 18th	Blakeney Point	Sept 24th	Warham Greens
Rough-legged Buzzard	Feb 27th	Holme	Sept 20th	Burnham Overy
Merlin	Apr 30th	Waxham	July 31st	Scolt Head
Purple Sandpiper	May 7th	Titchwell	July 22nd	Titchwell
Jack Snipe	May 7th	NE Norfolk	Sept 20th	Sheringham
Shore Lark	May 16th	4 sites	Oct 9th	Scolt Head
Rock Pipit	May 15th	Scolt Head	Sept 12th	Happisburgh
Water Pipit	Apr 28th	Waxham	Oct 15th	Holme, Titchwell
Fieldfare	May 29th	Northrepps	Sept 10th	Holme
Redwing	May 9th	Holme	Sept 17th	Stiffkey, Sidestrand
Great Grey Shrike	Apr 21st	Bodney Camp	Dec 15th	Hilborough
Brambling	May 4th	Stalham, Yarmouth	Sept 24th	Scolt Head, Holkham
Twite	Apr 5th	Breydon	Sept 29th	Titchwell
Lapland Bunting	May 1st	Scolt Head	Sept 9th	Blakeney Point
Snow Bunting	Apr 18th	Scolt Head	Sept 9th	Mundesley



Thrushes (Pete Sewell)

Non-accepted Records

The following refer to records where a written description has not been accepted by either the British Birds Rarities Committee or County Records Committee.

1997

Little Bittern - White House Common May 31st.

1998

Alpine Swift - Weybourne May 12th.

1999

Pied Wheatear - Happisburgh Oct 2nd.

2000

Storm Petrel - Bacton July 15th; Purple Heron - Hickling Broad Aug 14th and Sept 17th, and Cley Sept 6th; Greenland White-fronted Goose - Egmore 4 Dec 26th and 2 Dec 29th; Black Kite - Weybourne April 8th; Red-footed Falcon - Weybourne Sept 21st; Caspian Gull - Sea Palling Jan 16th; Gull-billed Tern - Holme Sept 1st and Weybourne Oct 26th; Whiskered Tern - Burgh Castle May 7th; Siberian Stonechat - Lyng-Eastaugh GP April 13th; Black-eared Wheatear - Blakeney Point Sept 9th; Marsh Warbler - Diddington Lakes May 7th; Dartford Warbler - Winterton Jan 30th; Greenish Warbler - Syderstone July 30th and Holkham Meals Aug 31st; Raven - Yarmouth Cemetery Oct 1st; Serin - Hickling Oct 6th; Ortolan Bunting - Holme Aug 22nd.

Non-submitted Records

The following records have been reported to either the National or East Anglian Birdlines but to date no details have been received. Descriptions of any of these records would be welcomed (for consideration either by the British Birds Rarities Committee or County Records Committee) so that hopefully they can be published as accepted records in due course.

Cory's Shearwater	Titchwell	Nov 4th
Balearic Shearwater (2)	Sea Palling	Sept 3rd
Purple Heron	Wymondham	April 19th
	Woodbastwick	May 12th/13th
	Cley	May 20th-25th
	Titchwell	June 9th-14th
Black Stork	Sculthorpe	May 7th
Red-footed Falcon	Holme	July 8th
Black-winged Stilt	Breydon	Aug 5th
Slender-billed Gull	Holme	Aug 10th
Sabine's Gull	Holme	Aug 30th and Sept 2nd
	Sea Palling	Nov 7th
Tawny Pipit	Titchwell	Aug 30th
Penduline Tit	Titchwell	June 26th
Rose-coloured Starling	Walcott	June 30th
Common Rosefinch	Holkham Meals	June 18th
Ortolan Bunting	Holme	Aug 26th

List of Contributors to Systematic List

S Abbott	Jon Brown	D Dorling	S P Harris
M Abdulla	R Brownsword (RBr)	G P Douglas	S R Harris
A J Allan	S Bryan	K Douglas	A Harriss
P R Allard	A L & R M Bull	J Dove	P Hayman
N Allen	R J Burrough	C Dunlop	C R Heath
J Andrews	Dr I Burrows (IBu)	G E Dunmore	P J Heath
M Andrews	N Burton	K R Dye	A & E Hedges
D Anning	J F Butcher	A Eadson	I G Henderson
A Aplin	Buxton Heath Wildlife	S Eagle	D Hennessy
D P Appleton	Group	J Eaton	K J Herber
G F Appleton	C J Cadbury	K & S Edwards	Dr R Heselden (RHe)
A Armitage	S Cale	M I Eldridge	G F Hibberd
S J Aspinall	R Canes	S Ellis	B Hieks (Bhi)
P W Atkinson	A Cannon	N Elms	C Hill
J K Baker	P Carr	R & J Elvin	G Hiscock
M F B Baker	D & G Carter	P Etherington	R Hoblyn
V G Balfour	P Cawley (PCa)	C M A & F J L Farrow	M Hoit
L Ballard	A G Channer	P C Feakes	S J Holloway
D E Balmer	P J Charles	J Filowiat	D J Holman
K Bamford	M A Chipperfield	P Finden	Holme Bird
T M Bantock	R H Chittenden	V Fish	Observatory
T Barker	N A & J A Clark	D Fitches	P Holness
R I Bashford	S Clark	M D Fiszer	A Horsefield
P E Beard	M R & P Clarke	R N Flowers	M Hosier (MHo)
D Bednall	P Clement	G W Follows	S Howell
A P Benson	Cley Bird Club	R A Foyster	M Hughes
R A Benson	J Clifton	S N Frecman	B Hulme
L G Bentley	R Cobbold	A C Frost	A W Humphrey
S Betts (SBe)	M Cocker	D J Fuller	R A Image
J V Bhalerao	A Cohen	J E D Furse	A Jackson
Birdline East Anglia	A D Collins	J Gaffncy	C A Jacobs
J Birkett	M Colman	S J M Gantlett	J & B Jarvis
J Bishop (JBi)	G Conway	D Garner	P & S Jeffery
I Black	R A F Cox	R W H & H K Garner	A P Jenson
A I Bloomfield	A Crawford	P L Garvey	I G & K Johnson
A D Boote	H P Crawley	J D & J E Geeson	S & M E Johnson
N B Bowman	G Cresswell	J A Gill	E W P Jones
P Bradley	M D Crewe	S Gillings	G N Jones
S P Bramham-Jones	J Cricket	P Gluth	R F Jones
K J Brett	M C R Cripps	J G Goldsmith	M Jowett
D & J Bridges (D&JBr)	D G Darrell-Lambert	A Goodall	S C Joyner
P Bright-Thomas	T C Davies	S J Gough	A J Kanc
G N Brind	A Davidson	C Gregory	G I Kelly
R S Broke	P Davidson	D Griffiths	J B Kcmp
G J Brooking	B Dawson	A Hale	J Kctchen
D Brooks	V & R Dawson	J Hampshire	R Key
R Brooks	T R & J Dean	V J Hanlon	I F & J Keymer
A M Broome	P J Dolton	B Harding	A King
A F Brown	P J Donald	R I Harold	C A E Kirtland
H Brown	C Donner (CDo)	J C Harris	P Kitchener

A Knapp	D Mower	J Rogers	R D Thomas
P Knapp (PKn)	D & L Mullard	R Rolfe	A M Thompson
DR Knight	H F Murland	T Rollins	C Thompson
T Knight	B J Murphy	M E S Rooney	M Toms
C R Knights	N Murphy	F & M Rowe	V Turner
M Knights	P Murphy	J R Rowe	UEA Bird Club
J Koziol	A J Musgrove	S Rowland	H Venebles
F J Lambert	R Musgrove	RSPB	R Viccars
J Lansdell (JLa)	J Nairn	D H Russell	A E Vine
P Laurie (PLa)	NARVOS	D Ruthven	S C Votier
N M Lawton	P Newport	D H Sadler	C Wade
R M Leaney	M Newton	B Sage	G L Walford
M P Lee	B Nichols	R St John	M Walford
R Lee (RLe)	T C Nicholson	P Sands (PSa)	M A Ward (MAWa)
A Lees	P C Noakes	K G Saul	E E Warminger
D P Lester	D J Norgate	D & M J Saunt	J W Watson
J Lines (JLi)	NOA	C Sayer	M A Webster
P W Littler	North West Ringing	J Scott	S C West
P Lockwood	Group	R E Scott	Mr & Mrs D White
A J Loring	D Nurney	P Sewell (PSe)	J R Whitelegg
M & K Lovatt	G R Oxborough	C Shaw	S Whittley
J Lovett	N Packer	K B Shepherd	A Whybrow
T C Lowe	J Parry	J Shepperd	N Williams
R Lueking	D Parsons	Sheringham Bird	J R Williamson
D Machin	S Paston	Observatory	A M Wilson
J D Magee	A & G Paterson	A Sillett	J Wilson
A Mansfield (AMa)	C Penning	M & S Simmons	P M Wilson
R C Mansfield	C W Penny	G M Siriwardena	M J Wood
J H Marchant	R Penson	R Q Skeen	M Woodcock
M R & O R Marks	T & V Pinlon	C J Small	G Woods (GWo)
B A E Marr	B Pleasance	D Smalley	P J Woolnough
D Mayes	N Pomiankowski	A J L Smith	G Wright
A Maynard	R F Porter	D Smith	S A Wright
J R McCallum	D Powell (DPo)	M H Smith	T Wright
A McElwee	I Prentice	I N Smith	
R C & S McIntyre	M Preston	M Smith	
C J Mead	S Prowse	S Smith (SSm)	
N Meade	M Pugh	S South	
N Mears	B & B Pummell	S Spalding	
K Melarup	M H Rains	J Spooner	
J Middleton	H R Ramsay	S J Spooner	
D Miller	M Raven	E M P Stanford	
R G Millington	N D Rawlings	Stanta Bird Club	
C Mills	J Reed	D Stevens (DSt)	
T Miteham	J M Reed	A M Stoddart	
C Mitchell	M M Rehtisch	M Stoney	
S Money	N A Rich	T Strudwick	
P A Monsey	D I & R M Richmond	J Taylor	
B Moore (BMo)	S Rix	M P Taylor	
DR Moore	R Robinson	P Taylor	
P A J Morris	A Rogers	R Thewlis	
B Morrison	E Rogers	D Thomas	

Ringling Report

Allan Hale

The year 2000 was another lean one for Norfolk ringers. The total of 36,736 birds ringed was broadly similar to the previous year (which was itself the lowest since 1993) and the species count of 125 was the lowest for over a decade. The only rarities handled were a Pallas's Warbler at Sheringham and a Radde's Warbler at Holme.

Again, late-winter Siskins were largely absent. The total of 327 ringed was even lower than the 542 of the previous year, and compared extremely poorly with the 4,853 ringed during 1998. Ringing numbers for most farmland species was disappointing, whilst Willow Tits dropped to a mere 17 birds (as recently as 1993 the Willow Tit total was 129)

The recoveries, however, contained as much of interest as ever. This report details birds moving to, or from, 18 different countries. A Turnstone to Canada, a Swallow to South Africa and a Bewick's Swan from the Pechora Delta in Russia remind us that movements that at first glance seem spectacular, are in fact the norm for these species. A Greylag Goose from Poland was much less expected.

Once again, thanks to all Norfolk ringers for access to their data and special thanks to Steve and Alison Wakeham for the Wash Wader Ringing Group recoveries and their interpretation.

SELECTED NORFOLK RECOVERIES NOTIFIED DURING 2000

Ringing details are shown on the first line whilst recovery information is on the second.

Age when ringed

- 1 Pullus (= nestling)
- 2 Fully grown, year of hatching unknown
- 3 Hatched during calendar year of ringing
- 4 Hatched before calendar year of ringing, but exact year unknown
- 5 Hatched during previous calendar year
- 6 Hatched before previous calendar year, but exact year unknown
- 7 Definitely hatched two calendar years before ringing
- 8 Hatched more than two calendar years before year of ringing

M = Male

F = Female

Condition at Recovery

- X Found dead
- XF Found freshly dead or dying
- XL Found long dead
- + Shot or intentionally killed by man
- +F Shot or intentionally killed by man - fresh

- +L Shot or intentionally killed by man - not recent
- V Alive and probably healthy. Caught and released by a non-ringer
- R Caught and released by ringer
- RR Ring or colour marks read in the field
- BB Ring or colour marks read in the field - nesting

Mute Swan

- 5 28.05.91 Warkworth, Northumberland
- RR 05.12.99 Reedham Marshes, How Hill, Ludham 354km SE

There are few records of long distance movements concerning Mute Swans

Whooper Swan

- 1F 26.08.96 Ylojavi, Finland
- RR 13.12.96 Ylojavi, Finland
- RR 20.12.96 Catfield/Ludham, Norfolk (until 28.02.97)
- RR 10.03.97 Norkoping, Gotland, Sweden
- RR 11.03.97 Ylojavi, Finland (until 13.11.97)
- RR 27.01.98 Catfield, Norfolk until 13.02.98)
- RR 3&4.04.98 Aland (a Baltic Sea island), Finland
- RR 20.04.98 Hameenkyro, Finland (until 16.11.98)
- RR 24.12.98 Sutton Hall/Catfield, Norfolk
- RR 17.11.99 Southern Sweden (no further details)
- RR 19.01.00 Potter Heigham, Norfolk

A wonderfully complete history of this bird. Note that it regularly lingers in its natal area (once until mid-December) thus missing the main exodus south. For Finnish birds this is mid-October. A mass of sightings have been omitted so as to highlight the more important ones.

Bewick's Swan

An adult female (in a moulting flock) was neck-ringed 14th August 1994 somewhere within the Pechora Delta in Northern Russia. It was seen again at Catfield during the latter days of 2000. This represented a displacement of approximately 3,200 km in a WSW direction.

Pink-footed Goose

A total of 25 birds, ringed in Central and Northern Iceland, were reported from North Norfolk, mostly in the Holkham area. The birds were a mixture of adults and juveniles when ringed.

Greylag Goose

Although lacking the detail for publication in the traditional manner, there was a fascinating recovery of an eastern race bird shot at Berney 5th January 1998. It had been ringed in Poland 29th May 1993, thus proving that we get truly wild Greylags in the county.

Hen Harrier

A female ringed as a nestling 14th June 1999 at a confidential site in Lancashire was sighted several times in North Norfolk between 28th November 1999 and 1st February 2000. The bird was individually identified as a result of its wing tag.

Oystercatcher

8	25.06.94	Heacham, Hunstanton	
R	25.09.98	Jarholen, Ha, Rogaland, Norway	712 km NNE
5	11.03.89	Terrington Bund	
X	06.07.00	River Transforelva, Finnmark, Norway	2,254 km NNE

The first shows a bird remaining on The Wash during the summer of 1994, possibly as a result of poor condition. It was however, subsequently re-caught on the Norwegian breeding grounds. The second was the most distant Oystercatcher movement notified during the year.

Avocet

A bird ringed at a confidential site in Norfolk 12th July 1998, was sighted in Poole Harbour, Dorset 14th October 1999. By the following March it had returned to Norfolk and was sighted at both Titchwell and Snettisham.

Ringed Plover

6F	16.07.98	Snettisham	
RR	19.08.00	Sandymount Strand, Dublin, Eire	434 km W

This is the 4th recovery from Eire resulting from the study of Wash breeding birds. Several additional recoveries suggest that pressures from tourism in the Snettisham to Holme area are responsible for birds relocating to less disturbed areas further east along the Norfolk coast. There were also two records of nestlings from the area being noted in the north of England (Cumbria and Northumberland respectively).

Grey Plover

6	31.01.87	Snettisham	
+	15.02.99	Brevands, Manche, France	408 km SSW

The only Grey Plover recovery of the year, the 15th to France from The Wash, and yet again the victim of a shotgun.

Knot

4	30.08.99	Terrington Marsh	
R	05.01.00	Dornoch, Highland Region, Scotland	628 km NNW
4	16.10.93	Holme-next-the-Sea, Hunstanton	
XF	12.05.00	Skateraw Harbour, Lothian, Scotland	384 km NNW

Post-moult onward movement and inter-estuarine movements during the winter months are fairly well documented. However, such a large displacement northwards in the same season

as shown by the first shown above is unusual. The second bird will have been on return passage when it met its demise in the talons of a Peregrine.

A further bird, ringed at Snettisham, was recovered 18 years later in Lincolnshire. The national longevity record for this species, held by a Wash-ringed bird, is 24 years.

Sanderling

5	02.01.99	Heacham, Hunstanton	
R	17.07.99	Raasio, Siilinjarvi, Kuopio, Finland	1,955 km NE

Only the second British-ringed Sanderling to be found in Finland, and the first from The Wash. Two races of Sanderling occur on The Wash; the Greenland population occurs on passage, whilst those from the Siberian population stay for the winter. Like the first Polish example highlighted in the 1998 *Norfolk Bird Report*, this bird will have been on passage back towards Britain when it was controlled.

Dunlin

3	23.10.99	Terrington	
R	04.08.00	Rusnes Sala, Silute, Lithuania	1,397 km ENE

The first Wash-ringed Dunlin to be recovered in Lithuania, and only the eighth from Britain. Whilst almost certainly of the race *alpina*, it is not clear whether this bird was from the relatively small Baltic population, or caught whilst on passage from northwest Russia.

Black-tailed Godwit

4	15.08.95	Terrington	
RR	28.02.98	Dollart, Weser-Ems, Germany	462 km E
6	02.08.96	Terrington	
RR	20.10.98	Les Portes, Ile de Re, Charente-Maritime, France	739 km S
6	08.08.98	Terrington	
RR	19.11.98	Ennis, Clare, Eire	627 km W
6	08.08.98	Terrington	
RR	06.01.99	Badajoz, Spain	1,645 km SSW
6	02.08.96	Terrington	
RR	04.05.99	Akureyri, Eyjafjardar, Iceland	1,758 km NW

Some results from the colour-ringing study of "Blackwits" on The Wash. Over 20 have now been located on the Icelandic breeding grounds, yet prior to 1993 only five British-ringed birds had ever been found in Iceland. This suggests that The Wash is important to the rapidly increasing Icelandic population.

Curlew

4	27.08.99	Terrington	
R	20.12.99	Llanfairfechan, Gwynedd	294 km W

Only the second Wash-ringed Curlew to be found in Gwynedd

Redshank

3	22.08.89	Terrington	
R	22.11.99	Rumney Estuary, Cardiff, Glamorgan	272 km SW

Only the second Wash-ringed Redshank to be found in Glamorgan

Greenshank

4	23.07.91	Castricum Duinen, Noord-Holland, The Netherlands	
R	28.08.99	Terrington	293 km W

Prior to 1999, the WWRG had only ever caught 96 Greenshank. The catch of 36 at Terrington in August 1999 was unprecedented and included this control. Only the second Dutch-ringed Greenshank to be found in Britain, it is likely to have come from the Fenno-Scandian population and will have been on passage on both captures, en-route to wintering grounds in Southern Europe or Africa.

Turnstone

4	26.02.00	Port Sutton Bridge, Lincolnshire	
BB	22.06.00	Alert, Nunavut, Canada	3,829 km NW
BB	20.07.00	Alert, Nunavut, Canada	
RR	10.10.00	Hunstanton	3,813 km SE

This Turnstone was colour-ringed as part of a winter feeding behaviour study within The Wash. It was subsequently observed on its breeding grounds in Arctic Canada. Incredibly it was then re-sighted on its return to The Wash in the late autumn.

Mediterranean Gull

A nestling ringed 10th July 1998 from a site near Antwerpen, Belgium, was reported from Great Yarmouth on 15 occasions between 15th November 1998 and 7th March 1999. It returned to Great Yarmouth on 3rd October 1999, being reported a further six times until 27th February 2000. It then spent a third successive winter at Great Yarmouth, being reported on a further six occasions between 3rd December 2000 and 3rd March 2001.

A further nestling, plus an adult, both ringed during June 1999 near Antwerpen, spent the following two winters at Great Yarmouth.

Common Gull

An adult (over three years old) was ringed during April 1990 near Brøndby, Sjaelland, Denmark, and then seen on three occasions at Catfield, near Stalham, during January 2000.

Lesser Black-backed Gull

1	13.07.96	Orfordness, Suffolk	
RR	26.11.96	Matosinhos, Douro Litoral, Portugal	
RR	30.07.99	Whitlingham Lane G.P., Trowse, Norwich	

8	19.02.93	East Winch, King's Lynn	
RR	20.04.00	Maasvlakte, Zuid-Holland, The Netherlands	256 km WSW

The first shows a Suffolk-ringed nestling spending its first winter in Portugal, and then returning to East Anglia during a subsequent summer. The second was first ringed after a spell in care at the RSPCA Wildlife Hospital.

Herring Gull

1	11.07.97	Kuopio, Finland	
RR	17.03.01	King's Lynn Fisher Fleet	1,950 km NE

This Finnish nestling was identified as a result of its colour-ring combination.

Common Tern

1	04.07.00	Breydon Water, Great Yarmouth	
R	26.08.00	Marismas del Odiel, Huelva, Spain	1835 km SSW
1	04.08.99	Breydon Water, Great Yarmouth	
RR	10.10.99	Pas-de Calais, France	211 km S
1	20.07.99	Breydon Water, Great Yarmouth	
R	04.09.99	Seal Sands, Teesmouth, Cleveland	292 km NW

Interesting that the first Breydon nestling was in Southern Spain by late August, yet the second was still only just the other side of the English Channel by mid-October. There were an additional two Breydon birds caught by Spanish ringers at Huelva during the autumn migration of 2000. The third seems to have started its migration by going in the wrong direction!

Little Tern

1	05.07.93	Great Yarmouth North Beach	
XF	03.09.99	Wadkant Hoorn, Terschelling, The Netherlands	256 km NE
1	06.07.94	Great Yarmouth North Beach	
R	21.04.00	Zeebrugge, West-Vlaanderen, Belgium	176km SE

A brace of reports from the Great Yarmouth breeding colony. Little Terns often leave their natal colony to breed elsewhere. Regrettably, more Norfolk-bred birds have been shown to join colonies elsewhere, rather than travelling in the opposite direction.

Shore Lark

2M	31.12.98	Holkham Beach, Wells	
RR	21.02.00	St Peter-Bohl, Schleswig-Holstein, Germany	535 km ENE

Only around 160 Shore Lark have ever been ringed in Britain and the North West Norfolk R.G. have been responsible for ringed over a third of these during the last three years. The

colour-ringing of this individual enabled it to be identified by a ringer near his study area in Northern Germany.

Swallow

I	27.08.99	Great Yarmouth	
R	06.10.99	Icklesham, Sussex	
R	29.02.00	Bloemfontein, Orange Free State, South Africa	9,388 km SSE

It was many years ago when ringing demonstrated that our Swallows winter in South Africa. Nevertheless the report of a Norfolk-ringed nestling being trapped en-route in Sussex and then caught again by a ringer in South Africa reminds us of the extraordinary distances that these birds travel. The displacement of 9,388 km is by far the longest of any bird in this report.

Robin

3	01.10.98	Sheringham	
XF	07.07.00	Bryrup, Jylland, Denmark	640 km NE

This was one of the 500 Robins ringed at this site during the huge "fall" of October 1998. Remarkably, the Robin ringed immediately prior to this one was found dead in Algeria, five weeks after ringing.

Blackbird

4F	16.10.99	East Somerton, Great Yarmouth	
X	17.02.00	Llangollen, Clwyd, Wales	326 km W
4	02.11.98	Weybourne	
X	23.10.99	Pandrup, Jylland, Denmark	721 km NW
6M	21.02.00	Shimpling, Diss	
XF	18.03.00	Wieringerwaard, Noord-Holland, The Netherlands	255km E

A trio of normal Blackbird movements. The first is a Continental bird still on its way westward. The third made an early start to the journey back towards its breeding area.

Sedge Warbler

3	26.07.98	Shereford, Fakenham	
R	17.08.98	Trunvel, Treogat, Finistere, France	653 km SW
3J	16.07.99	River Burn, Burnham Market	
R	25.08.99	Floirac, Charente-Maritime, France	838 km S
3	19.08.98	Saint-Vigor-d'Ymonville, Seine Maritime, France	
R	13.06.99	Snettisham Coastal Park	376 km N

Three examples showing the typical route taken by our Sedge Warblers. Interesting that the third shown, ringed as a juvenile during migration southward, was almost certainly a Snettisham breeding bird the following year.

Reed Warbler

3	08.09.91	Wissant, Pas de Calais, France	
R	24.07.95	near Weybourne	231 km N

Was this a Norfolk breeding bird, or a Continental one? On ringing it could have chosen a short channel crossing from England, or it could have been a more northern bird, caught in Norfolk on its way southward.

Chiffchaff

4	07.04.99	Zwin, West-Vlaanderen, Belgium	
R	17.04.99	Kettlestone, Fakenham	233 km NW

This represents only the sixth foreign recovery from a Norfolk Chiffchaff. Remarkably a Kettlestone Chiffchaff has appeared in this report in three out of the last four years.

Long-tailed Tit

3	09.09.99	River Burn, Burnham Market	
R	13.03.00	Languarde Point, Felixstowe, Suffolk	161 km SSE

For a species which is normally thought of as being sedentary, some surprisingly distant movements have resulted.

Blue Tit

3	26.08.98	Weybourne	
X	30.03.00	Carlton, Pontefract, West Yorkshire	181 km WNW

The longest distance travelled by a Norfolk-ringed Blue Tit ever. Less than 1% of all British Blue Tit movements concern distances in excess of 100 km.

Starling

3	15.07.99	Ventes Ragas, Silute, Lithuania	
R	18.01.00	Burnham Market	1,360 km W
3M	03.11.97	Westduinen, Zuid-Holland, The Netherlands	
R	05.02.00	King's Lynn	267 km WNW

Many Baltic and Russian Starlings are ringed at Ventes Ragas. Despite the second bird shown having a Dutch ring, it may have come from the same area as the first.

Chaffinch

6M	05.03.98	Garboldisham, Diss	
V	07.12.99	Merelbeke, Oost-Vlaanderen, Belgium	247 km SW
R	31.03.00	Olsene, Oost Vlaanderen, Belgium	

This bird was found caged on 7th December 1999 and released. A little over three months later it was trapped and released by a Belgian ringer.

Brambling

4F	29.10.99	Klepp, Rogaland, Norway	
R	11.02.00	Brancaster Staithe	716 km SSW

Ringling has demonstrated that the majority of Brambling wintering in Norfolk originate from Norway.

Greenfinch

3J	18.06.99	Ormesby, Great Yarmouth	
R	01.04.00	Middelkerke, West-Vlaanderen, Belgium	182 km SSW

It is remarkable that a Norfolk-bred bird should move to Belgium. Foreign recoveries of Greenfinches are invariably wintering in Norfolk.

Goldfinch

6	21.04.99	Ormesby, Great Yarmouth	
V	15.06.99	Oostende, West-Vlaanderen, Belgium	181 km SSE

This Goldfinch was found being kept illegally, as many are in Belgium. It was released some three weeks later.

Siskin

5F	20.03.99	Garboldisham, Diss	
R	24.04.00	Kitte, Bergsjö, Gavleborg, Sweden	1,432 km NNE

The longest movement of the year. Another bird, ringed at Sheringham during March 1999, was reported from Belgium almost exactly a year later.

Snow Bunting

5F	23.01.00	Salthouse	
RR	12.03.00	Coldingham, Borders Region, Scotland	

The most distant recovery of the year; a bird presumably putting on more weight before the long haul to the north.

Reed Bunting

5M	24.04.99	Skrangstasjon, Vasternorrland, Sweden	
R	12.03.00	Martham	1,415 km SW

The first Reed Bunting movement outside of the U.K. concerning Norfolk, although it is known that very small numbers of Scandinavian birds do occasionally winter in Britain.

Norfolk Ringing Totals – 2000

Mute Swan	22	Turtle Dove	5	Lesser Whitethroat	77
Pink-footed Goose	2	Cuckoo	6	Whitethroat	370
Egyptian Goose	5	Barn Owl	84	Garden Warbler	121
Shelduck	11	Tawny Owl	1	Blackcap	1441
Teal	3	Long-eared Owl	1	Pallas's Warbler	1
Mallard	5	Nightjar	7	Radde's Warbler*	1
Tufted Duck	9	Swift	5	Chiffchaff	679
Marsh Harrier	4	Kingfisher	26	Willow Warbler	522
Sparrowhawk	29	Wryneck	1	Golderest	854
Kestrel	32	Green Woodpecker	27	Firecrest	7
Water Rail	18	Great Sp Woodpecker	98	Spotted Flycatcher	37
Moorhen	8	Woodlark	74	Pied Flycatcher	24
Coot	2	Skylark	33	Bearded Tit	46
Oystercatcher	146	Sand Martin	285	Long-tailed Tit	917
Avocet	10	Swallow	1065	Marsh Tit	91
Ringed Plover	95	House Martin	52	Willow Tit	17
Golden Plover	15	Meadow Pipit	140	Coal Tit	324
Grey Plover	17	Rock Pipit	1	Blue Tit	2829
Lapwing	99	Water Pipit	1	Great Tit	2013
Knot	148	Yellow Wagtail	20	Nuthatch	15
Sanderling	22	Grey Wagtail	1	Treecreeper	89
Curlew Sandpiper	7	Pied Wagtail	176	Jay	23
Purple Sandpiper	1	Wren	1123	Magpie	8
Dunlin	420	Dunnock	978	Jackdaw	21
Common Snipe	7	Robin	1131	Rook	11
Woodcock	3	Nightingale	20	Carrion Crow	1
Black-tailed Godwit	22	Black Redstart	21	Starling	821
Bar-tailed Godwit	9	Redstart	25	House Sparrow	524
Whimbrel	2	Whinchat	18	Tree Sparrow	27
Curlew	146	Stonechat	11	Chaffinch	2129
Redshank	236	Wheatear	252	Brambling	1025
Greenshank	26	Ring Ouzel	1	Greenfinch	6712
Green Sandpiper	2	Blackbird	2288	Goldfinch	537
Common Sandpiper	5	Fieldfare	24	Siskin	329
Turnstone	24	Song Thrush	330	Linnet	243
Black-headed Gull	10	Redwing	394	Redpoll	16
Herring Gull	4	Mistle Thrush	90	Bullfinch	225
Common Tern	272	Cetti's Warbler	12	Hawfinch	2
Little Tern	175	Grasshopper Warbler	8	Snow Bunting	80
Stock Dove	25	Sedge Warbler	586	Yellowhammer	90
Woodpigeon	65	Reed Warbler	1414	Reed Bunting	406
Collared Dove	102	Barred Warbler	2	Total Ringed	36736

* Subject to acceptance by British Birds Rarities Committee

Seventy-five years ago – anecdotes from Norfolk birdwatchers in 1925

Don Dorling

Ernest Daniels, the longest serving member of the Society, was already bird watching in 1925. He writes:

“In 1925 field birdwatchers were thin on the ground although there was much interest in birds among sporting landowners. The modern conservation movement was started by influential people who acquired important sites and set these aside. There was a sympathetic awareness of nature among ordinary people which resulted in frequent newspaper articles by Society members, notably A H Patterson and our then Honorary Secretary, Dr Sydney Long, who always wrote early in the year reporting on the first spring migrants to arrive in Breckland. In Norwich, Gunn’s naturalists shop was a famous Norwich feature and the fact that it was commercially successful for two generations speaks for itself.*

Norwich was nicely compact and open countryside could be reached in a 20-minute cycle ride from the city centre where I then lived. There were a large number of undeveloped tracts of land, mostly used as allotments, which provided much and abundant wildlife. There were two rookeries in the built up city centre, one of them in trees on Prince of Wales Road opposite the cinemas. Both colonies continued into the fifties when they were deserted due, it is believed, to the birds having to fly too far to forage. Little Owls could regularly be heard at night close to the city centre in Chapel Field and on the Castle Mound whereas the large wooded gardens of the wealthy in Ipswich and Newmarket Roads had Red Squirrels and Hawfinches.”

To supplement Ernest’s recollections I have dipped into the archives. Dr Long saw a Gull-billed Tern feeding at Langmere on 17th May and also reported that Wood Larks had been found breeding at Drayton just four miles from Norwich while at the same time a colony of breeding Wood Warblers was at Blicking. An Aquatic Warbler was killed at Blakeney in September with a Red-breasted Flycatcher being ‘obtained’ there in October.

Two other people very active in the field at that time were Emma Turner and the legendary Jim Vincent at Hickling. Scolt Head was presented to the National Trust by the Society in June 1923 and Miss Emma Turner had volunteered to act as the first watcher, spending many months in both 1924 and 1925 on the island. She recorded many of her observations in her book *Bird Watching on Scolt Head* and in the Society’s *Transactions*, from which the following notes on migration have been taken:

In 1925 autumn migration began with Starlings on 10th June, she noted Teal arriving in early September and these were soon followed by many species of waders. On 14th September she noted a Redstart flying into the hut at dawn and by late afternoon that day the island was alive with Swallows and Black-headed Gulls. Throughout September vast numbers of Skylarks passed west with finches, buntings and Tree Sparrows flying by in hordes. “Snow Buntings were late arriving, the first flock alighted on the bight on 31st October. The Shore Larks, already in possession since 7th October, resented their intrusion and several of them

* *Arthur H Patterson, celebrated Yarmouth Naturalist and Author*

rushed at the Snow Buntings with angry gestures, puffing out the so-called 'horns' over the eyes and raising the feathers of the crown."

Miss Turner recorded Grey Geese from 25th September with hundreds being seen and heard daily. On 27th with a north wind, there was a heavy passage of Arctic Skuas with one 'Pomatorhine' (*Pomarine Skua*) and on 2nd October she "saw what were undoubtedly 7 Surf Scoters, the white patch on the neck being plainly visible". Her "most impressive sight however was the passing of Hooded Crows. Countless hordes moved from east to west and numbers came in from the sea. Apparently the number of Hooded Crows passing during the autumn of 1925 were unprecedented within the memory of the oldest inhabitant of Brancaster."

Jim Vincent heard his first Bittern "grunting away" at Hickling on 4th February and by 26th six were booming. On 18th March he recorded that Peewits (Lapwings) "are a great feature by the thousands that are here now" nearly all using land which 25 years earlier "was noted for its great flocks of Peewits and Golden Plovers". Three Canada Geese were



Montagu's Harriers (*John Wright*)

worthy of mention on 30th March and in mid-April he flushed a Spotted Crake, again at Hickling.

On 6th May "Lady Lucas, Miss Richardson and Jim Vincent placed 8 Reeves eggs received via Dr Sydney Long from Holland in the nests of 4 Redshanks. We hope that the experiment will eventually be a success for the regaining of Ruffs back as a breeding species". By 28th May he recorded that 7 of the 8 eggs had hatched. Black Terns were noted passing through and he continued to find the nests of Bitterns and Montagu's Harriers with totals of 11 and 6 respectively by mid-June. June also brought a Marsh Sandpiper and Temminck's Stint with a Black-necked Grebe on the Broad in July. Two Corncrakes were flushed from a nearby barley field on 17th August.

From this collection of poignant anecdotes it is interesting to note the differing fortunes of our familiar birds in the ensuing seventy five years. As observation, land use and climate continue to evolve the next seventy five years seem certain to bring further considerable change.

THE NORFOLK & NORWICH NATURALISTS' SOCIETY

(Reg Charity No 291604)

Patron: Her Majesty the Queen

The county's senior natural history society. It has for its principal objectives the practical study of natural science, the conservation of wildlife, the publication of papers on natural history, especially those relating to the county of Norfolk, arranging lectures and meetings and the promotion of active field work. Specialist groups cover most aspects of the county's flora and fauna.

Annual Subscription Rate:

Individual/Family £12

Affiliated Groups £15

Overseas Members £18.50

Publications:

Transactions

Bird & Mammal Report

Quarterly newsletter "Natterjack"

Secretary:

Dr A R Leach

3 Eccles Road

Holt

NR25 6HJ

Membership Secretary:

S M Livermore

70 Naseby Way

Dussindale

Norwich NR7 0TP

Norfolk Birdwatching in 1950 Remembered

Justin Lansdell and John Williamson



White-tailed Eagle (*Norman Arlott*)

Just fifty years ago birdwatching in Norfolk was very different, literature was almost non-existent and active fieldworkers few and far between. However many of those named below were prominent in shaping ornithology in our county today and will be familiar to readers with an interest in the annals of Norfolk's ornithological history.

The year began with repairs to the now famous 'East Bank' at Cley following the destructive storms of the previous year, a poignant reminder that such 'disasters' are not a recent phenomena. A White-tailed Eagle wandered the north coast during the early months but 9 Short-eared Owls flushed from Scolt Head dunes by the warden's dog on 11th January and a remarkable 56 Hooded Crows watched resting on ice beside a frozen Ranworth Broad by Paul Kirby tell more of the changing patterns of birds in our county.

By late March 4 pairs of Garganey were to be found on Cley 'big pool', three of which warden Billy Bishop noted as staying to breed on the reserve. An early Hoopoe at Hickling on 20th/21st April was followed just a few days later by three inches of snow as winter reluctantly withdrew; the Hoopoe apparently surviving the cold snap to be relocated by Whiteslea Lodge assistant keeper George Bishop on the penultimate day of the month.

May, such a varied and exciting month in modern times produced few rarities, presumably a reflection of the number of observers. A Little Ringed Plover, still a major county and national rarity, was identified at Cley by Richard Richardson and Mrs R Meiklejohn on 2nd May and later up to 3 White-winged Black Terns were discovered in the Blakeney/Morston area.

It is, however, in the breeding data recorded for the year that many clues to changes in distribution and numbers of species are to be found. Blakeney Point warden Ted Eales noted 2122 Common, 194 Sandwich, 95 Little and one Arctic Tern nests but in East Norfolk

the picture was very different. Here prominent local ornithologist R H Harrison recorded 170 Common, 158 Sandwich and 15 Little Tern nests during a boat trip to the low lying sandbanks off Scroby Sands offshore from Great Yarmouth. Sadly all were lost with many un-named 'gull' nests as raging summer storms washed away the ternery already at risk following severe weather a year earlier.

At the Horsey estate, Major Aubrey Buxton reported 3 Montagu's Harrier nests but 'just one prized pair of Marsh Harrier' and nearby, Ted Piggin found nests of 17 Bearded Tits and 3 Bitterns at Hickling. Black Redstarts were already utilising uncleared World War II bomb-sites by this time and in Great Yarmouth at least three pairs were noted breeding.

In north Norfolk the 'watchers cottage' at Cley hosted 53 House Martin nests in June and 5 breeding Bitterns were found on the adjacent marshes, three of which were sadly 'snowed out' during April's icy blast, causing the loss of both chicks and eggs. Nearby over 20 pairs of Woodlarks were in the Salthouse Heath/Cley Hall Farms area and a remarkable 20-25 pairs of Red-backed Shrikes were present within a three-mile radius of Cley Marsh, doubtless responsible for an amazing congregation of around 20, mostly juveniles, at Cley Hall Farms on 20th July.

Established by Richard Richardson in 1949, just a year after his arrival in Norfolk, Cley Bird Observatory completed its first year of operation in September, based around an empty military look-out tower and derelict gun emplacements immediately behind the beach. A total of 1252 birds of 60 species had been rung in the year with the aid of Heligoland traps, clap nets and a variety of homemade spring and maze-traps. It is a credit to the ingenuity of the legendary warden that over 100 Snow Buntings were trapped by means of a clap net; it was to be forty years before similar numbers were ringed again in Norfolk in a single year. In September the Bird Observatories' Committee of the BTO visited and recognising its significance installed Cley as Britain's ninth Bird Observatory.

The autumn was overshadowed by the unfortunate death of Charles Chestney, longstanding warden of Scolt Head, who was succeeded by his son Robert. Alongside David Jenkins he was to find a 'Red-breasted Snipe' there just days later, although the bird is now accepted as Dowitcher sp, a legacy from an era when literature to assist identification was sparse, misleading or absent. Others which proved too difficult a puzzle include what may well have been Norfolk's first Terek Sandpiper watched on the Horsey estate by George Crcs and J Lockett, and 6 'unidentified pipits of greenish colour' on Arnold's Marsh, Cley in October.

Another Little Ringed Plover was clinched at Cley by Major A Daukes and on 3rd October Billy Bishop flushed some 20 Jack Snipe from Cley Marsh, further evidence, if any were needed, that much has changed in Norfolk birdwatching during the past fifty years.



Little Ringed Plovers (*Richard Richardson*)



Kingfisher – a spectacular resident (*Tony Howes*).

Spotted Crake – this bird made a protracted stay at Titchwell (*Julian Bhalerao*).





Greenish Warbler – Blakeney Point in August - an expected bird on a typical date in a classic place (*Julian Bhalerao*).

Red-backed Shrike – a well-watched immature at Salthouse (*Bill Baston*); Rustic Bunting – a popular bird at Stiffkey for a few days in October (*Iain Leach*).





Desert Wheatear – an obliging female at Holme in November - the tenth county record (*Julian Bhalerao*).

Waxwing – one of many frequenting a supermarket car park in Cromer at the end of the year; Glaucous Gull – this bird appears to have taken permanent residence at King's Lynn Docks (*Julian Bhalerao*).





House Sparrow - this often neglected species is in serious decline (*Julian Bhalerao*).



Twenty-five years ago – Memories of 1975

Giles Dunmore

Having moved to Norfolk three years previously 1975 is indelibly printed in my memory. The year saw the establishment of the County Rarities Committee and coincidentally the year seemed to be full of rarities with 5 additions to the County list. Most memorable, however, was the month of October with the isobars on the television weather forecast extending eastwards off the map (presumably from Siberia!) night after night.

In early January I counted 1250 Bramblings flying out of beech woodland near County Hall and later found 500 feeding at Mousehold Heath. Numerous other flocks were found in the Norwich area including many flying over my offices along Thorpe Road. A colleague calculated, by plotting the direction of departing birds in late afternoon, that they were roosting at Brooke Wood, 6 miles to the south of the city. There on 26th January a total of 7600 birds flew into the wood from the north - excluding small number of other finches and Tree Sparrows I counted some 6500-7000 Bramblings. An amazing spectacle in itself, we never ascertained how many were arriving from the east, south or west!

The highlight of February was a Two-barred Crossbill at Sandringham on one day only and seen by two observers. March was fairly uneventful but the major excitement for me in April was seeing three 'continental' long-tailed Tits (all with white heads) at Winterton, one without a tail! (Such birds seem extremely scarce to this day). Winterton also produced exceptional numbers of Rough-legged Buzzards in April and May (up to 12) attracted, no doubt, by the vast number of rabbits.

The only major rarity in May was a Black-eared Wheatear at Cley but this was followed by another which stayed for 20 days at Holme in June. Despite its prolonged stay this was often a very difficult bird to find; I took 3 hours before seeing it! Peter Allard found a Terek Sandpiper (a county 'first') at Breydon on June 1st and another appeared at Cley in early July. A Wilson's Phalarope also present at Wisbech SF for 5 days in early June completed the mid-summer rarities.

August and September saw occasional falls of passerines and seabird movements but the major excitement of this period was another county first, a Greater Yellowlegs at Breydon, again found by Peter Allard. When I arrived to see this bird it was asleep on the 'lumps' at high tide; I remember clearly watching for well over half an hour in total frustration before it moved revealing its salient features!

Following a prolonged spell of south-westerlies, the wind changed to north-easterly on October 9th as an anti-cyclone became established over the Baltic. This weather system remained for most of the month and the continual easterly airstream resulted in what seemed at the time to be an incredible number of Asiatic vagrants. As I said in the 1975 Annual Report this period will long be remembered in the annals of Norfolk ornithology!

On the 9th I recall looking out of my office in Thorpe St Andrew and seeing a continual stream of Redwings, Skylarks and Starlings moving between west and north-west. Next day Goldcrests appeared in large numbers on the north and west coasts; in a quick visit to Yarmouth Cemetery (the trees were not as tall in those days!) I saw both Yellow-browed Warbler and Red-breasted Flycatcher. That evening Steve Joyner phoned about an unusual pipit he had found on Blakeney Point with Norman Williams. Although a poorly documented species at the time, it was identified as an Olive-backed Pipit, then known as Indian Tree Pipit (the third addition to the Norfolk list). On the 11th a Pallas's Warbler (an exceptional rarity in 1975) was found near the western end of Holkham Meads and by the 12th at least

15 Yellow-browed Warblers were present in the Meals. In the dunes just to the west an Isabelline Shrike was seen by a few lucky observers - the second county record but at the time only regarded as an eastern race of Red-backed Shrike.

A Dusky Warbler was found near the boating lake at Wells on the 14th and next day 2 Pallas's Warblers were seen together to the west in the Meals. The 17th delivered further Pallas's to Scolt Head and Happisburgh while a Radde's Warbler was found at Brancaster. The next day along Blakeney Point I found a Dusky Warbler on the path just beyond the Hood. It quickly flew into the adjoining strip of suaeda where a Goldcrest was also present; whilst standing in the saltings trying to obtain further views of the warbler a Sparrowhawk crashed into the suaeda and flew off with a small passerine. Fortunately it was the Goldcrest and not the Dusky which remained viewable to other observers later in the day, and some who braved the walk were lucky enough to find a Rustic Bunting. In the afternoon I visited Holkham to 'spread the word' of the Dusky Warbler, only to also have superb views of a Radde's Warbler found earlier in the day. On the 19th, October brought a sting in the tail as another county first, a Yellow-browed Bunting near Wells boating lake, was seen by precious few (not including myself!). This far eastern vagrant, found by Dave Holman, John Kemp and Mike Parker, was eventually accepted as an addition to the British list.



Yellow-browed Bunting (*John Kemp*)

By now having had several days holiday work beckoned, not least to have a rest! My next visit to Holkham was on the 22nd to see another new bird for the county, a Black-throated Thrush found the previous day. Three days later (also at Holkham) was yet another quality bird lost in the excitement, another Radde's Warbler. No wonder in the report on Rare Birds in Great Britain 1975 in 'British Birds' it stated "... with the beautiful woods at Holkham in Norfolk providing the best ever mainland rarity watching".

Towards the end of an amazing spell, which had also seen the arrival of huge numbers of winter visitors including at least 60 Long-eared Owls, Holme also attracted two further rarities - Lesser Grey Shrike and Short-toed Lark. After a breathless month almost inevitably the rest of the year seemed somewhat uneventful!

Looking back how things have changed: 25 years ago 569 Turtle Doves flew north at Winterton on June 1st, where the largest flock of Hooded Crows reached 45! The county still boasted 13 breeding pairs of Red-backed Shrike but by contrast there were only 2 Long-tailed Skuas, 5 records of Mediterranean Gull and the largest count of Little Gull was 16.

Breydon Water and its Birdlife

Peter Allard

Breydon Water and its vast surrounding fresh marshes, especially those to the west and north-west of this relic inland estuary, are important in the annals of Norfolk's ornithological history. It is the most easterly estuary in the British Isles and for generations has been noted as a favoured resort for wildfowl and waders. 'It would be difficult to imagine' wrote the Paget brothers in 1834 'a spot more suitable to wildfowl and waders than Breydon affords consisting as it does of a sheet of water some miles in extent with shallow borders and mudflats and surrounded almost as far as the eye can reach by marshes. Even in the severest winters it is seldom completely frozen . . . and it is then that the greatest numbers of wildfowl are secured. Almost benumbed with cold they flock together and while they sit in a compact mass to prevent the warmth of their bodies escaping, the gunner may in his flat-bottomed boat approach closely and with a single discharge of his gun effect a most extraordinary slaughter'.

Breydon Water is approximately four miles long and nearly a mile wide at one point and consists of 1,200 acres of salt water at high tide, which as the tide recedes reveal extensive areas of mudflats with a well-marked navigational channel close to the south wall. Prior to the passing of the first Bird Protection Acts in 1880, it was an area where more rare wildfowl and waders had been collected than in any other locality in the British Isles. Amongst many claims to fame are the first British examples of Red-crested Pochard, Sharp-tailed Sandpiper, Pectoral Sandpiper, Broad-billed Sandpiper and Caspian Tern, together with a catalogue of additions to the Norfolk list, including Collared Pratincole, Gull-billed Tern and Sabine's Gull. The noted Yarmouth naturalist Arthur Patterson wrote many books relating to Breydon Water detailing its varied wildlife and unique character in the early years of the last century and these studies, especially the birdlife, were continued by Robin Harrison and later Michael Seago.

In 1888, a Breydon Wild Bird Protection Society was established, one of the first such organisations in the country and set the seal for further protection many years later. Eighty years on a great milestone in the protection of the estuary occurred in 1968 when it was declared a Local Nature Reserve following several years of discussions with the various councils concerned, local naturalists and wildfowling interests. Further recognition arrived in 1987 when the site was declared a Special Site of Scientific Interest. Although much altered since its early days through the silting up of the mudflats and constant draining of the extensive fresh marshes, the estuary still attracted a great wealth of birdlife.

Despite a great variety of wildfowl and waders, many species of birds were still declining in numbers and in 1986, the RSPB established a marshland reserve at the western end of the estuary called Berney Marshes and a year later the management of the greater part of the estuary was transferred to their control. This enabled large 'no-shooting' areas to be established and combined with their now extensive Berney reserve resulted in an exceptional increase in bird numbers using the site. In the last 15 years, numbers of Bewick's Swan, Pink-footed Geese, Wigeon, Teal, Shoveler and most species of wading birds have increased tremendously.

Bird watching increased here in the 1970s with the provision of hides and constant scanning of the wader assemblies at high tide. This resulted in a succession of rarities being found including two 'firsts' for Norfolk in 1975, a Greater Yellowlegs and a Terek Sandpiper.



Terck Sandpiper (*Norman Arlott*)

The following year another 'first' came in the form of an American Golden Plover. Subsequent rarities have included Night Heron, Purple Heron, Black Stork, American Wigeon, Ring-necked Duck, Greater Sandplover, Wilson's Phalarope, Whiskered Tern, White-winged Black Tern and a succession of Broad-billed and Pectoral Sandpipers. Breydon is the best location in the country to connect with both Kentish Plover and Caspian Tern in the summer months. Many other rarities have also been discovered and two recent Short-toed Larks testify that almost anything can be found at this major wetland site.

Further protection came in March 1994 when Breydon Water was declared a Special Protection Area and as a Ramsar Site two years later. Both these acknowledgements of the area's importance were extended in February 2000 to include vast areas of marshland west of the estuary. This protected area is in excess of 2,000 acres and is home to over 56,000 waterfowl in winter including internationally important numbers of Bewick's Swans, Pink-footed and White-fronted Geese, Lapwing and Black-tailed Godwit. In addition Cormorant, Wigeon, Gadwall, Shoveler, Avocet, Ringed Plover, Golden Plover, Dunlin and Ruff are present in nationally important numbers and those of Coot, Curlew and Redshank are very close to those thresholds and are expected to be included soon. The breeding colony of Common Terns at the eastern end of the estuary is also nationally important and is regularly the most successful in the country. Up to 199 pairs breed and since 1977 over 2,600 young have fledged from the platforms here. The careful management of water tables at Berney and the establishment of sanctuary areas on Breydon has been the key to success at what is now an internationally important wetland site. Indeed, the area now ranks amongst the top 20 sites in the British Isles for bird numbers.

The Breydon Year

January begins with vast assemblies of Wigeon on the estuary and it is not unusual to see in excess of 10,000 in a vast pack at the western end, feeding at Berney using Breydon to rest when disturbed on the marshes. Recent counts of up to 15,000 will place Wigeon amongst the internationally important species present here and the 15,700 present in January 2000 was the largest ever recorded in the county. Since 1979, detected amongst their vast ranks have been at least 6 drake American Wigeon; indeed it would be interesting to know how many female American Wigeon go undetected here.

With the rafts of Wigeon come large numbers of Shoveler, Pintail and Teal. Shoveler totals present at the end of 2000 were exceptional and a count of 620 made on 25th November is of international significance and reward for careful water table management. Likewise, Teal have also increased and approximately 2,000 is now the expected winter total whilst a count of 4,237 on 2nd December last year was the largest ever recorded in Norfolk. It is only in hard weather conditions that this species feeds regularly on the mudflats, preferring to enjoy the muddy fresh water pools on the other side of the estuary wall. Large numbers of diving ducks are scarce on Breydon, but small numbers of both Tufted Duck and Pochard are regular although Goldeneye - annual visitors until about 12 years ago - are now erratic and Scaup scarce. Hard weather fowl in Norfolk, such as Smew and Goosander, are both best looked for when the Broads begin to freeze over.

January is also the best month for seeing Pink-footed Geese flying over the estuary and marshes. These have increased considerably since 1996-97 and are now present in even greater numbers than those recorded prior to the second world war. Safe roosting sites and less disturbance on the protected marshes, combined with a large population increase and a southward shift in its wintering range, have meant that over 6,000 are present at peak times, although there is much interchange between this and other Broadland populations. White-fronted Geese are also frequent visitors in January in gaggles of up to 200, often staying for several weeks, but regular wintering is a thing of the past now. Tundra Bean Geese are occasionally seen whilst it is not unknown for the mid-Yare wintering Taiga Bean Geese to wander this far east from time to time. An adult Red-breasted Goose which accompanied White-fronted Geese in January 1962 was a 'first' for the county.

February traditionally sees high numbers of Bewick's Swans present in the area, most of which have roosted on the floods at Berney since 1988. Numbers peaked at Breydon between 1988 and 1996 when up to 750 were regularly being seen, but since then numbers have declined to approximately 200. It is only since the early 1960s that Bewick's Swans have regularly wintered here and feeding herds cover a wide area of marshland during the day, utilising both grass and winter wheat areas as well as occasional visits to uplands to 'beet top' fields. In contrast the Whooper Swan is rather surprisingly a scarce visitor with only the occasional passing herd being noted. Mute Swan numbers vary considerably, with often up to 250 are present in the area frequently favouring marshes growing oil seed rape, but unlike the Bewick's they choose to roost on Breydon itself.

In February 1979, during a severe spell of arctic weather, up to 8 Red-necked and 2 Slavonian were present amongst the Great Crested Grebes which can number up to 75, although on one occasion 108 were noted. A small population of Little Grebes breed in nearby dykes and resort to the estuary in winter. Among the rarer birds to be noted here in February was an immature White-tailed Eagle in 1990 which remained in the area for several weeks before flying out to sea on the morning of 15th March. Other raptors to be expected are both Peregrine and Merlin, whilst Marsh Harrier is more regularly seen at the western end of the estuary. In recent winters, up to 5 have been seen together including an individual which had been ringed as a nestling in eastern Scotland in 1993.

The last Norfolk record of Cirl Bunting was a male with Yellowhammers at what is now part of the RSPB Berney reserve on 23rd February 1969. Sadly, like elsewhere, the wintering Yellowhammers are now also only a memory.

March is traditionally the peak month for numbers of Shoveler, Gadwall and Teal as birds arrive from wintering grounds further south to join our wintering population which has yet to depart. Gadwall first nested at Breydon in 1963 and have increased annually since then, not so much as a breeding species, but as a passage bird. Peak numbers are present

between January and May with the highest count being 258 on 13th March 1999. Strangely this duck is almost absent here between late July and early November. Garganey usually arrive mid-March and up to 8 have passed through in recent springs, and this is a good time for locating Green-winged Teal with five records although we still await our first Blue-winged Teal.

Avocets increase early in the month and up to 150 can be present when a clear movement towards the western end of the estuary occurs nearer their breeding marshes. In addition Oystercatchers are traditionally at their peak numbers in March and in both 1991 and 1992 over 400 were present, though since then totals have declined by about a third. Other spring migrants in March have included Kentish Plover and an exceptionally early Broad-billed Sandpiper in 1991, but it is not until *April* that spring really gets going on the estuary and wader variety increases.

The first Whimbrel appear in the second week of April and build up towards the end of the month. A record 431 were counted coming in to roost on 24th April 1992, the largest one-day count ever made in Norfolk. Peak numbers continue into the first week of May and then rapidly decline. Both the first Common Sandpipers and Greenshank appear in mid-month and increases in numbers of Bar-tailed Godwits, Ringed Plover, Ruff and Dunlin are obvious. Spoonbills often arrive at this time whilst Little Egrets have become annual and can appear in any month with four the largest group to date.

Wildfowl numbers, and particularly Wigeon, decrease during April to perhaps several hundred but Teal gatherings remain high until the end of the month. Rarer visitors in April include Norfolk's first Greater Sand Plover in 1981, several Cranes and an early Caspian Tern in 1988. Early Sandwich Terns appear in the first week and are followed by the first Common and Little Terns in the third week prior to moving to their breeding sites either on the estuary or nearby beaches. The arrival in April 1967 of a pair of White Storks was totally unexpected and remarkably both birds remained until December when one was sadly killed, its mate continuing a lonely vigil until the following May. The origin of several White Storks since then are unknown complicated by the presence of at least one free-flying individual at the nearby Thrigby Wildlife Park.

The month of *May* is always exciting and rewarding at Breydon with Broad-billed Sandpipers to be looked for amongst perhaps as many as 2,000 Dunlin and Temminck's Stint making appearances on the marshes. This diminutive stint has now been annual in May since 1988 and up to 6 together have been recorded here. The once almost regular Broad-billed Sandpiper visits appear to have dried up despite increased watching and the last sighting was in 1996, although Breydon still boasts more records than any other locality in Britain.

Given favourable winds Bar-tailed Godwit numbers peak in the first week, but few stay long and flocks at this time appear to be from a different population than those which winter here. Arctic race *tundrea* Ringed Plover are a feature of the mudflats and totals peak in mid-month, often in nationally important numbers in excess of 300 individuals. Avocets cross the estuary wall to breed on the marshes and to join flocks of Ruff on the muddy pools, but few of these linger long, soon departing eastwards. The first week of May 1994 was exceptional for Ruff, with a record count of 190. Greenshank pass through in noisy groups and a peak of 54 on 6th May last year was another site record. Although Spotted Redshanks are scarcer and peak in late April, 19 in May 1990 has yet to be beaten.

Rarities feature highly in May and the list is lengthy and compares with some of the top spots in north Norfolk. Purple Heron, American Wigeon, Ring-necked Duck, Collared Pratincole, Black-winged Stilt, Pacific Golden Plover, Dowitcher, Greater Yellowlegs, Terek

Sandpiper, Sabine's Gull, Ring-billed Gull, Caspian Tern, Whiskered Tern, Alpine Swift, Great Reed Warbler, Red-throated Pipit and Red-headed Bunting have all made appearances during the month to the delight of regular observers.

June is a month of surprising variety around the estuary as the last of the spring waders depart and the first returning female Spotted Redshanks arrive by mid-month if not earlier. A few Whimbrel and Greenshank may linger with the more usual non-breeding gathering of up to 150 Curlew and a small flock of Dunlin to scan through. Rarer visitors in June in recent years have included Gull-billed, Whiskered and several Caspian Terns, Terek Sandpiper on two occasions and a Red-throated Pipit. This is also a month for real stars and American Golden Plover in 1975 and Franklin's Gull in 1991 were both additions to the county list.

Breeding birds on the estuary itself are few and perhaps the most important are the Common Terns that nest on the specially constructed platforms in the north-east corner opposite a conveniently positioned RSPB hide. These were pioneered in 1977 from a single floating raft which in its very first year attracted 17 pairs which raised 6 young. Fixed platforms were introduced the following year and 25 pairs nested on an area of only 100 square feet, and following a design changed to allow each pair its own partition, an improved total of 21 young successfully fledged. A second, slightly larger platform of approximately 145 square feet, was constructed in 1983 containing 49 individual squares and proved so successful that over the following years a total of 4 have been built in the same area. In 1990 the total number of breeding pairs exceeded 100 for the first time and by the 2000 breeding season 199 pairs were present, but this total included a few pairs nesting on the saltings at the eastern end of the estuary. The pairs nesting on the platforms raised a total of 254 young, approximately 1.3 per pair and the most rewarding breeding season for these birds which, since 1977, have raised a remarkable 2,629 chicks to the flying stage. All have been ringed, and winter recoveries have come from Sierra Leone, Guinea, Ghana, The Ivory Coast, Nigeria, Senegal and the Western Sahara.



Caspian and Common Terns (*Norman Arlott*)

Soon after fledging, a number of the Breydon birds move north and have been controlled by a ringing group on Teeside, whilst others at the same time have been controlled in Spain making a more predicted route to their wintering grounds. At least one Breydon bred individual has spent the last 4 summers at Seaforth near Liverpool, whilst a 1984 Welsh ringed bird was recovered on the Breydon platforms 10 years later. Another interesting feature of June is the appearance in recent years of up to 5 first-summer Common Terns at Breydon when normally these immature birds should idle the summer months away in warmer African waters.

With the increased areas now under protection and higher water tables in summer, the gradual decline in the numbers of breeding waders on the adjacent marshlands has been arrested and in 2000 the figures of 53 pairs of Avocet, 129 pairs of Lapwing and 82 pairs of Redshank were a noticeable achievement for conservation bodies. Occasionally the last few days of June sees the very early arrival of juvenile Sandwich Terns, although the first week of July is average. There is some speculation that these early individuals are birds that have been reared further south and moved north, a well known post-breeding migration pattern in immature terns.

July is one of the prime months for Spoonbills on the estuary and marshes and in recent years parties of up to 9 have been present, often lingering for several weeks; indeed a party of 3 stayed for some 13 weeks in midsummer 2000. As elsewhere, adult birds occur but immature Spoonbills predominate and singles wintered in 1960-61 and again in 1989-90. With the healthy state of large areas of fresh marsh, the heronry at Burgh Castle which became established in 1986 has grown to 24 nests in 15 years. Grey Herons are once again a familiar sight in the Breydon area and take great delight in searching out young Coot on the marshes in summer to supplement their fish diet. Groups of loafing Herons are not an unusual sight in July, but 42 together on 28th July 1999 and 46 three days later was quite exceptional.



Grey Heron (*Norman Arlott*)

July also sees the rapid build-up of Curlew, Black-tailed Godwit, Avocet and Dunlin numbers, the latter species seeing juveniles arriving as early as the first week. A build-up of terns at the eastern end of the estuary in the 'lumps' area is usual and always worth a scan for Roseate Tern which have become almost regular here in recent years. Most gatherings consist of Common and Sandwich Terns, with smaller numbers of Little Tern and the scarcer Arctic Tern always a possibility. Mediterranean and Little Gulls make up the typical late summer picture and July is the best month to look for Caspian Tern. On two occasions in

recent years, two have stayed for short periods and remained relatively easy to observe making this one of the better places to find this impressive Tern. Although Black Terns are more of a spring bird, larger numbers have appeared at Breydon in the autumn in the last three decades with 161 recorded in 1993.

Rarities are perhaps fewer in July, although this is the peak time to scan the Dunlin flocks for adult White-rumped Sandpipers and in 1996 an unprecedented arrival of up to 4 adults took place, remaining for nearly a month. Also of interest was an adult White-winged Black Tern which spent a few hours on the evening of 5th July 1999 feeding over the Berney floods before departing overnight to the disappointment of many. The month concludes with the first local juvenile Shelduck on the wing and adult Curlew Sandpipers on the mudflats.

August is an excellent wader month, especially for Avocet and Black-tailed Godwit which both reach peak numbers. The first sign of an increase in the Avocet population was in 1994 and the following year saw 66 present early in the month and this had spiralled to 163 by 16th August two years later. In 2000, the increase was phenomenal and all previous counts were eclipsed by 509 present on 12th August and 519 just two weeks later. Likewise, Black-tailed Godwit numbers suddenly increased in the early 1990s as prior to 1992 the highest estuary total had been a paltry 23. An unexplained sharp rise brought the maximum to 189 the following year, 205 in 1993, 657 in 1996, 729 in 1997 and an exceptional 1,387 were present in August 2000. Although late summer is the best period for Godwits, considerable numbers are often present at other times and there are four-figure counts now for September-November and in winter. Approximately 30 different colour-ringed individuals from the expanding Icelandic population, but ringed mainly on the Wash since 1993, have been identified at Breydon and there is now clear evidence of interchange between both passage and wintering sites throughout the year.

Adult Curlew Sandpipers also attain peak numbers in August, the highest total in recent years being 152 in 1992. Their numbers are soon swelled by juveniles as early as the 7th, surprisingly on the same day as the earliest ever juvenile Knot was seen in 1998. Rarities in August include Wilson's Phalarope, Night and Purple Heron, and the only other White-winged Black Tern in recent years in 1988. Yellow-legged Gull is often to be found amongst the congregations of larger gulls at this time of year and up to 5 have been identified together recently. The arrival of 3 White Pelicans on the last day of August 1971 caused quite a stir. Although others seen here were presumably escapes, the origin of these 3 fully-winged, unringed and wary individuals remains unknown, and for a predicted vagrant with a south-east European range Breydon is surely ideally positioned to receive Britain's first. The end of the month sees the first signs of winter with early arriving Wigeon and Pintail returning and on the few remaining floods on the marshes, Garganey are almost guaranteed amongst the increasing Teal hoards.

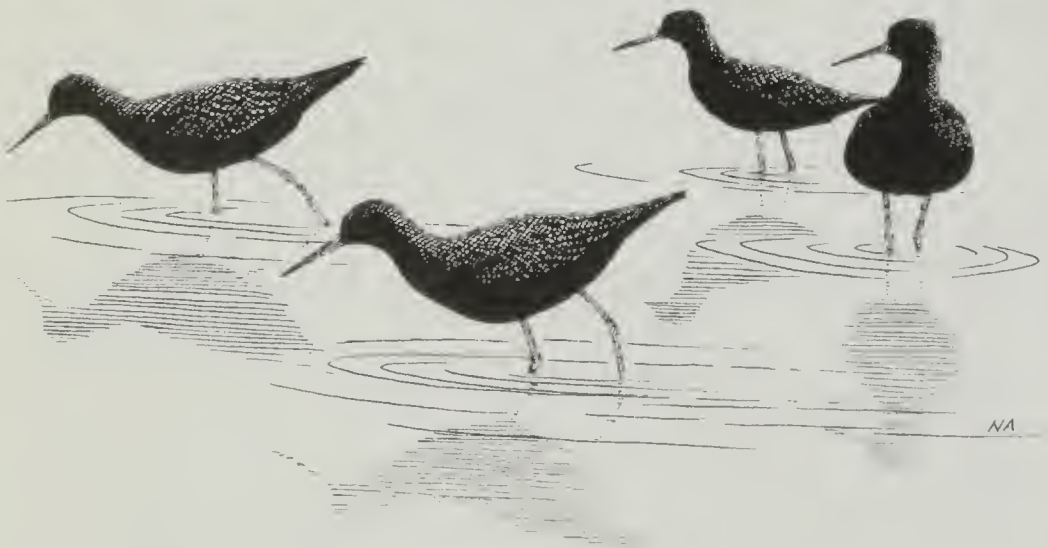
September's birdlife is varied, but towards the end of the month the first of the winters Pink-feet have generally arrived, together with the first post-moult Shelduck back in situ. Greylag and Canada Goose numbers are at their peak and in recent years up to 300 and 180 respectively have been counted. Thoughts of all the Greylags being local feral birds was proved incorrect last year when it was discovered a bird shot in 1998 had been ringed in Poland in 1993.

However, the main theme of the month is wading birds although numbers are lower than August in many cases, variety is at its best. Rare waders in September here include Greater Yellowlegs in 1975, juvenile Broad-billed Sandpiper in 1977, juvenile White-rumped Sandpiper in 1979, almost annual Pectoral Sandpipers since the establishment of Berney Marshes, including 3 together in 1999, and in the same autumn Buff-breasted and Baird's

Sandpiper. Several Red-necked Phalaropes and Temminck's Stints have been recorded and this is also the best period for Little Stints with over 80 in 1998. Returning Ringed Plovers also peak this month, with a massive 459 in 1990, and both Curlew and Redshank are usually in four-figure numbers on the mudflats. This is also a month when almost anything can turn up as in 1963 when on an almost windless day a Leach's Petrel spent the greater part of 21st September flying up and down the estuary with Dunlin and other waders. Passerines are certainly not to be neglected either and a Red-throated Pipit showed itself briefly to a lucky few in 1995. Towards the end of the month flooding of the Berney Marshes usually begins and with it come increasing numbers of wildfowl in the shape of Wigeon, Teal, Mallard and Shoveler.

October normally sees the first Bewick's Swans arrive and there is a gradual build-up of Pink-feet on the marshes, although at this time of year a great many prefer to feed on the arable uplands. A few Brent Geese also pass through pausing briefly on the flats and a late Garganey is always possible amongst the Teal flocks. Wigeon arrive in force and can approach 2,000 by the end of the month. Despite the presence of a resident population of Cranes in the Broads, they remain relatively scarce visitors to the Breydon scene and therefore 3 wandering the area in October-November 1998 was of great interest. Always clouded with uncertainty several Greater Flamingoes have been seen in recent decades, but one with the best credentials was an immature on the estuary 5th-6th October 1990 which was later seen in Suffolk and then further south.

Always difficult to observe, Jack Snipe arrive in October, but in very small numbers and 14 on 18th October 1999 is noteworthy for a species that has greatly declined in the area during the past 20 years. The best areas to look for this diminutive Snipe is on the saltings or on the rougher wet marshes. Spotted Redshanks now remain here throughout the winter and the last of the Greenshank usually depart late month, but following a spell of southerly winds last year, a large noisy group of 27 dropped in on the 21st and stayed a few hours. Most Curlew Sandpipers have usually departed by the second week, although one or two Little Stints may linger a little later. Short-eared Owls also arrive, but are always uncertain and numbers present depend greatly on the vole population with a downward trend in recent autumns. Rarities are surprisingly fewer in October and of those, two stand out, Tawny Pipit in 1985 and a Siberian Stonechat in 1991.



Spotted Redshanks (*Norman Arlott*)

As variety gives way to numbers in *November*, this is the best month to observe the massive build-up of Lapwings on the estuary which in recent years has been spectacular. On occasions over 30,000 have been estimated and it is in the last week that numbers usually peak, although the highest estimate of 41,000 was in early December 1992. The area's first Greenland White-fronted Goose was identified in November 1990 and stayed for at least a week. Since then the only record is of at least 4 in March 1999 with a huge mass of Pink-feet close to the estuary.

Exceptional occurrences in November in recent years have been few, perhaps the most noteworthy a Red-rumped Swallow south over the mudflats in 1997. Twice were formally a feature of this month, but have sadly become a great rarity here and typically the odd party now stay only a few days in late autumn. 20 years ago three-figure counts were a regular sight feeding on the estuary saltings and then flying off to drink at the nearest fresh water pool before returning later.

Concluding the Breydon year, the month of *December* is full of activity with huge numbers of wildfowl and waders everywhere and it is increasingly difficult to know where to look first. The area is perhaps at its best, with flooded marshes and wall-to-wall birds on the mudflats at low tide. There is always the possibility of the unexpected, as an elusive Penduline Tit proved in 1999 but by and large this is a month where numbers provide the spectacle. This is one of the best months for Golden Plover numbers, slightly later than October peak Lapwing numbers and a maximum of over 10,000 has been achieved on several occasions, which is also the single site maxima recorded in Norfolk. These are favourite prey for both Peregrine and Merlin, although sometimes locating these amongst thousands of waders fleeing for their lives is another matter. Dawn visits are often rewarding however, especially at periods of high tide at the eastern end of the estuary.

The most remarkable event in this month was in 1972 when on Christmas Eve, no less than 116 Short-eared Owls were disturbed on the adjacent marshlands and four fortunate observers were to witness the remarkable sight of at least 80 of these owls in the air at the same time. The reason - a plague of short-tailed field voles - found the marshes literally riddled with these mammals and they could be seen scurrying away in every direction as one walked through the grass. In contrast and displaying the erratic nature of the species no Short-eared Owls were seen the following December. This remains one of the most memorable events at Breydon Water in an ornithological history littered with drama and excitement.

**Prints of Photographs including those featured in this Report
may be obtained from:**

Bill Baston, 86 George Street, Hadleigh, Suffolk IP7 5BU

Julian Bhalerao, 18 Brook Road, Sheringham NR26 8QE

Neil Bowman, Clare Cottage, Eccles-on-Sea NR12 0SW

Robin Chittenden, 65 Sandringham Road, Norwich NR2 3RZ

Iain Leach, 26 Ashchurch Drive, Wollaton, Notts NG8 2RA

Ian Mills, 46 North Denes Road, Great Yarmouth NR30 4LU

Alan Tate, 55 Woodlands Way, Mildenhall, Suffolk IP28 7JA

Eleonora's Falcon at Hickling Broad, July 1987 – the first record for Norfolk

Pete Morris

Following our exams, warm sunny weather enticed a number of us from the UEA Bird Club out for the day on 6th July. Having secured the use of the union minibus we headed for Waxham for an afternoon of R&R on the beach. Stopping to pick up supplies in Wroxham we decided to call in at Hickling Broad to look for Swallowtail butterflies. So at around 11.45 am we parked at the end of Weaver's Way near Potter Heigham and began to walk along the raised bank. Almost immediately I noticed a dark falcon swoop low over the reeds and, upon seeing the dark moustachials, instinctively shouted out Hobby. However, as the bird turned and rose up, a distinctly rufous tone to the uppertail coverts and rump became apparent and on the basis of this feature Richard Thomas and Adrian Long both declared that the bird couldn't be a Hobby. At only about 100 metres range we had excellent views and as the bird climbed into the blue sky overhead, we were able to see it catching small insects in flight and on at least a couple of occasions eat them on the wing. After a few minutes the bird dived down low over the reeds again (possibly in pursuit of a dragonfly) and was lost to view, reappearing to circle above us for a further ten minutes or so before finally vanishing.

Although not seen alongside any other species, it gave the impression of being a medium to large falcon, though much longer and slimmer than a Peregrine showing noticeably long wings and a longish tail. Most noticeable, however, was the very slow and relaxed method of flight with distinctly slow, loose wingbeats. The upperparts were generally dark grey-brown, slightly darker on the crown though with a pale forehead, and a contrastingly pale sandy-rufous tone to the uppertail coverts and uppertail, the latter finely barred darker. The throat and cheeks were off-white contrasting with obvious dark moustachials. The rest of the underparts were off-white streaked with dark on the breast and upper belly. The undertail coverts were more or less unmarked thus appearing paler and the underside of the tail was finely barred. The underwing pattern was most striking with the underwing coverts being densely barred/spotted with blackish/brown and contrasting significantly with the paler, though still barred, primaries and secondaries.

Much debate then ensued as to the identity of the bird. Richard suggested Eleonora's Falcon but we were all convinced that the rufous tones on the rump and tail were wrong for that species. Aberrant Hobby and Red-footed Falcon were dismissed and we even began wondering about a Lanner or Saker though felt throughout that the shape and behaviour would surely eliminate these! We carried on to Waxham somewhat confused but itching to see some reference books.

Unfortunately time spent amidst literature just confirmed our suspicions at the time – the uppertail was completely wrong for Eleonora's. However, a look at a photo of a previous British record (a corpse at Patrington, Northumberland in October 1981) confirmed that Eleonora's Falcons can have barred tails and we submitted it as such, convinced, though admittedly somewhat anxious about that tail! That was the last we heard for eleven years as the assessment of the record seemed to have been forgotten! Although I had only seen one Eleonora's Falcon prior to this observation I have seen many more since, almost on an annual basis during my tour leading exploits in Madagascar, Morocco, Turkey and Cyprus. I often thought back to the Hickling bird knowing that the distinctive shape and flight of

that species is unmistakable, but had not managed to see another individual with the same tail pattern. In retrospect this can be explained by the fact that all but one of the 50 or so I have seen have been adults.

On 7th November 1998, feeling rather pleased having just found an American Wigeon at Leighton Moss, Lanes, I went into the shop to put out the news and started flicking through Dick Forsman's (at the time) new photographic book on raptors. My delight at finding the wigeon almost immediately vanished when I got to page 481 – there it was, an Eleonora's Falcon with a rufous tail. Annoyed at the fact that our record had lay dormant for 11 years I now felt that I had the final evidence required to get our bird accepted and wrote to Mike Rogers of the BBRC straight away. Indeed, not only did Forsman's book show the feature but even hints that it is a diagnostic feature of some first summer birds. That anomalous tail had now turned into the trump card and the bird has been accepted as the fourth record for the UK. In an era where the literature is so good for so many species, it is a mystery how the immature plumages of one of our most graceful raptors could have been so poorly portrayed for so long!

This is indeed the fourth British record following the first at Formby Point, Merseyside 8th/9th August 1977, the afore-mentioned Humberside individual and another on South Uist, Western Isles 14th June 1985. With the threat of global warming perhaps we should expect more in the future.

The following artists may be able to provide copies of their work or take commissions

Norman Arlott, Hill House, Station Rd, Tilney St Lawrence, King's Lynn
PE34 4RB

Andy Benson, Ciconia, The Close, Aylmerton, Norwich NR11 8PX

John Geeson, 22 Hillside, Barnham Broom NR9 4DF

Robert Gillmor, North Light, Hill Top, Cley, Holt NR25 7SE

Vince Hanlon, Owl Cottage, 6 Hart Lane, Bodham, Holt NR25 6NT

Phil Jones, 24 Church Lane, Wolstanton, Newcastle, Staffs ST5 0EG

Chris Lansdell, Meadowside, The Grove, Rectory Road, Coltishall NR12
7HG

Richard Millington, Stonerunner, Coast Road, Cley next the Sea, Holt NR25
7RZ

Pete Sewell, 28 Jerningham Road, New Costessey, Norwich NR5 0RE

John Williamson, 19 Neylond Crescent, Hellesdon, Norwich NR6 5QF

Peter Wilson, 39 Station Road, Thetford IP24 1AW

Gary Wright, 27 Ray Bond Way, Aylsham NR11 6UT

John Wright, 7 Renfrew Road, Nether Hall, Leicester LE5 1NQ

Stewart Wright, The Chalet, Low Road, Repps, Great Yarmouth NR29 5AH

Slender-billed Gulls at Cley – the second record for Norfolk

Bernard Dawson

Since moving to Holt six years ago I have tried to visit Cley Marshes at least once a week. Friday 5th May was one such visit and after a week of north-easterlies, I duly cycled down to the reserve for my usual early morning start and spent a while in the hides enjoying a good variety of birds including a drake Green-winged Teal.

By 9.00 am I had arrived at Arnolds Marsh and I carefully made my way on to one of the dunes along the northern edge of the marsh so that I could check the terns at the eastern end. I immediately noticed two strange looking gulls on the deeper water in the north-eastern corner of the marsh, an area favoured by Goldeneye in winter.

The fact that there were two dampened the thought of rarities and I pondered for several minutes on what they might be, noting the pristine white head, beady eye and black bill apparently drooping at the tip of each bird. There also appeared to be a pink suffusion to the lower breast but I thought this may have been caused by reflection as they both indulged in a peculiar feeding action, up-ending much like dabbling ducks, and bringing up material to the surface.

Having ruled out those gulls with which I am reasonably familiar I concentrated harder. The angle of bill to forehead turned my thoughts to Slender-billed Gull but I recalled from a photograph I had seen that they had red bills, not black. I had my old Heinzel-Fitter-Parslow with me, but that failed to clear up the apparent anomaly confirming the species to have a red bill. (Reference to literature later clarified the bill colour of summer-plumaged Slender-billed Gulls as deep red often appearing dark or even black at a distance).

Armed with fresh facts from my trusty field guide I crept along the back of the dune for a closer look and was rewarded with excellent views. One of the birds flapped its wings showing the white forewing blaze and a beautiful pink suffusion down its breast extending to the belly. There could be no more doubts, and as one bird seemed chunkier than the other and I assumed that this was a breeding pair.

As I set off to spread the news I noticed Roger and Margot Brownsword, with their two Afghans, at the end of East Bank but I was unable to attract their attention. I had to run along the shingle, carrying my tripod etc, and by the time I had caught up with them I was too out of breath for coherent speech. "You are joking" was the initial response when I managed to string a sentence together but nevertheless we were soon traipsing along to a suitable viewing point, where Roger, who was familiar with Slender-bills, quickly confirmed the identification.

We agreed that I should stay with the birds whilst Roger made haste to Walsey Hills, which was the closest point to report the find. Several locals arrived speedily and after a brief discussion I continued on my way around the reserve.

A Pied Flycatcher at Walsey Hills capped an exciting morning and the cycle ride home seemed considerably easier than usual.

Slender-billed Gulls remain an extreme rarity in Britain with just 6 records of 8 individuals by the end of 2000 (including this occurrence). The only previous Norfolk record coincidentally concerns a breeding-plumaged pair, also at Cley on 12th-15th May 1987. Unlike that pair those in May 2000 remained just a single day but stayed into the evening allowing many observers both local and from further afield to enjoy this almost unique occurrence!

Isabelline Wheatear at Blakeney Point – the second record for Norfolk

Andy Stoddart

White chin and uniform
pale sand underparts

Plain wing coverts with no
dark centres visible on closed
wing

Strikingly contrasting black alulas

Unvarying upright stance and
extreme tameness

Long pear-shaped body



Diffuse whitish supercilia,
buff along upper edge before eye

Uniform sandy appearance

White 'rump' only reaching
tips of tertials, constantly visible

Primary projection equal
to tertials

Reariges blackish with warm
forges and extensive black in
tail

Isabelline Wheatear (Andy Stoddart)

September 2000 had been an excellent month on Blakeney Point, capped by a superb Radde's Warbler in the fine anticyclonic conditions prevailing on the last day of the month.

These conditions persisted on 1st October when Steve Joyner and I once more approached Halfway House and noticed a lone wheatear standing bolt upright in the open area just short of the building. It drew the eye straight away having a rather uniform appearance, enhanced by a plain forewing contrasting with a prominent black alula.

This arresting combination of features made it a difficult bird to leave but fortunately it was easy to watch, being astonishingly tame and allowing views down to 10 yards. Over the next two or three hours it was watched more or less continuously and the following description compiled:-

In size and structure it was comparable to a large Northern Wheatear but appeared rather long-bodied. Its primary projection was similar in length to the tertials, with the wing tip reaching the mid point of the tail. Its posture and habits were unvarying, always remaining still and upright for long periods, interspersed with short runs after prey.

It was, however, its plumage which drew the attention. The overall impression was of a uniformly-coloured bird with no strong contrast between the upperparts and underparts, a somewhat bland face, a plain forewing showing minimal contrast with the upperparts and strikingly black alulas.

The upperparts were sandy brown with a very slight grey cast, looking more sandy in bright light. The lower border of the sandy upperparts fell level with the tips of the longest tertials, producing a very narrow white band on the lower rump/uppertail coverts. The whitish supercilia were moderately prominent both before and behind the eye and suffused slightly buff along the upper edge before the eye.

with the lores weakly marked, appearing as a dark line only when facing the observer. Ear coverts pale, as underparts, darkening slightly towards the rear. Chin whitish, extending slightly under lores and contrasting with uniform pale sand underparts fading to whitish on the vent and undertail coverts.

All the wing-coverts appeared uniform in tone with the extremely broad fringes cloaking the dark feather centres. Fringes a warm sandy cinnamon, similar in tone to the upperparts but slightly brighter. The greater coverts therefore formed a plain unmarked panel with slightly paler feather tips forming a neat straight wing bar. Nor was any real darkening visible on the centres of the median coverts, further emphasising the plain uniformity of the forewing. This was in stark contrast to the shockingly black and prominent alulas, visible at all ranges and one of the bird's most striking features. All remiges blackish, with similar warm sandy cinnamon fringes forming a pale midwing panel. Off-white crescentic tips to primaries.

At rest the tail appeared black but with white visible in the base of the tail-sides when the tail was fanned. However when tail-spreading and viewed head-on the undertail appeared largely black with minimal white visible. In flight the narrow white 'rump' contrasted with a tail showing a considerable depth of black (judged to be at least half the tail feather length) and showing a very short black 'T' stem.

It proved extremely difficult to see the bird's underwing, though flight views showed tantalising glimpses of pale-looking wing linings but shadow and the bird's short, low flights made it difficult to be 100% certain. Fortunately the bird later remained motionless for a period before obligingly stretching its right wing to show a bright white wing lining and armpit.

This was clearly an interesting bird! The combination of white underwing, plain forewing and restricted white 'rump' is shown by no Northern Wheatear. It did, however, pose a number of problems. Firstly, although it adopted an unvarying erect stance, it did not appear strikingly large-headed, large billed, or excessively long-legged. Furthermore its remiges were blackish and the feather fringes in the wing were a warm sandy cinnamon rather than creamy, neither of these features being enshrined in current perceptions of Isabelline Wheatear. Immediate resolution to this problem was clearly not going to be possible without further work and, as no more detail was to be obtained from such an obliging bird, it was eventually left in peace.

By happy coincidence I was, within a month, able to scrutinise a large number of first-winter Isabelline Wheatears in the United Arab Emirates. This revealed immediately the immense range of variation in the species, both in terms of structure and plumage. In particular birds with blackish remiges were readily found and a substantial minority of individuals had rich, warm-coloured, some even rufous, fringes to the wing coverts and flight feathers. The constant features on all birds, however, were the restricted white 'rump' (reaching the tips of the longest tertials only), extensive black in the tail, white underwings and plain wing coverts, with minimal dark in the median coverts and a strong contrast with jet black alulas. In short the Blakeney Point bird fell comfortably within the range of variation and in fact was rather typical of a sizeable proportion of birds.

Isabelline Wheatear is a somewhat subtle species, of which the limited UK records have yet to demonstrate the full range of variation. With a 'search image' based on the current popular literature they are likely to be overlooked and in this respect the excellent series of photographs of two Isabelline Wheatears in Holland in September/October 2000 will doubtless prove instructive in future.

Isabelline Wheatear is a common bird across an extremely large breeding range stretching from Turkey through Iran and Central Asia to Xinjiang and Mongolia. It winters across Central Africa, the Middle East and north-west India but vagrants have reached Japan and the Kurils in the East and Ireland and Madeira in the West. Although sharing a similar range and migratory profile to a number of species regular in Britain (eg Pied and Desert Wheatears and the Isabelline Shrike group) its recorded appearances here remain surprisingly rare.

This record represents the second for Norfolk following a bird found by Peter Allard at Winterton North Dunes on 28th May 1977. At the time it was the second (and first modern) British record and despite the increase in sightings in recent years it remains the only spring bird.

Norfolk Bird Club

The NBC was established in 1992 to provide a forum for all those interested in the county's birds and their conservation and to promote improved communication and exchange of ideas amongst birdwatchers throughout the county. The club publishes four bulletins during the year, holds indoor meetings and organises bird survey work.

Bulletin Editors:

Vernon Eve

Pebble House, The Street

Syderstone, King's Lynn PE31 8SD

Tel: 01485 578121

John Williamson

19 Neylond Crescent

Hellesdon, Norwich NR6 5QF

Tel: 01603 483123

Membership Secretary:

Bill Landells

North Haven

Marks Lane

Santon Downham

Brandon, Suffolk IP27 0TG

Annual Subscriptions:

Individual: £8.50

Joint: £11.00

The Burgh Castle Bee-eaters – a long-awaited opportunity for Norfolk birdwatchers

Paul Noakes

“Do you know anyone around here who keeps Bee-eaters?” That was the rather bizarre question that one of my neighbours in Burgh Castle, Tony Mater, greeted me with when late on the evening of the 10th May 2000 he knocked on my door. My immediate response was, “Why?” so he quickly told me that four had just flown over his garden and landed in a Poplar tree. I grabbed my bins, scope and mobile phone and rushed down the lane. Tony pointed out one bird perched high in the branches of a Poplar and I soon managed to work out that there were at least three swaying in the breeze. I immediately phoned Eddie Jones, knowing that almost all birders needed Bee-eater for their respective Norfolk lists and that there was only about half an hour before it would be completely dark. Despite having so little time, between 20 and 30 people managed to see them that night. The birds were clearly roosting so it looked as if the following morning was going to be busy.

Indeed when I walked down the lane at about 5.30 am the next day it was completely blocked by about 150 or so birders. The Bee-eaters had not moved at all. Huddled up together on a branch high in the Poplar it was only really possible to tell how many birds were present by counting their tails. After half an hour or so the group flew to nearby telephone wires and then off west over my garden enabling me to put them on my garden list, adding to the Wryneck that had been on the lawn a couple of weeks earlier; not too bad a spring really!

It took a little while to relocate them but eventually all four were found feeding along the edge of the village playing field. Here excellent views were enjoyed by everyone present as they perched in the open and sallied out to feed on bumble-bees. So obliging were they I was even able to watch them from my lounge window.

Of all European birds they surely must be one of the most attractive and were thus much appreciated even by local residents. Unfortunately I soon had to go to work and by the time I was able to get back for lunch they had headed back towards Lowestoft.

Left to reflect, we owe a debt of gratitude to Tony Mater for his speed of thought in spreading the word on these impressive overshooting vagrants. Fortunately with the group discovered coming in to roost many Norfolk birdwatchers were able to enjoy this unique spectacle in our county. Like so many other Bee-eater records they departed as the weather warmed, but were relocated over the border in Suffolk at nearby Oulton later in the day.

With over 50 birds having been recorded, it is perhaps a little surprising that prior to this spring very few birdwatchers had seen a Bee-eater in Norfolk. The last individuals to stay more than one day were a pair at Blakeney 21st-26th April 1960 and a late bird at Surlingham 21st/22nd October 1966, although two elusive birds were seen 3 times at Caister and Winterton in August/September 1973. Interestingly the first British record relates to one killed in a group of 20 at Mattishall in June 1794.

The House Sparrow in Norwich during autumn/winter 2000 – a population study

Stuart Paston

Following the request for all House Sparrow records made in the 1999 Norfolk Bird Report, I decided to carry out a survey of the species in Norwich* in order to shed light on its distribution and to give some idea of the numbers present.

The House Sparrow's recent and quite rapid decline, not only in the countryside but also in towns and cities including central London, has generated a good deal of media interest and the survey, undertaken in the last two months of 2000, found it to be very infrequent in many parts of Norwich. There was a marked north-south divide with more than two-thirds of the birds recorded to the north of the River Wensum where there is a greater extent of wild open space.

In central Norwich (within the inner ring road) it occurred at only a handful of sites with the majority again in the north of the city.

Methods

The study area was divided into blocks of streets using a 'stamina criteria' of up to three walking hours. Visits to these areas were made between 1100 and 1400 as time and weather conditions permitted. Care was taken to stop counting before the build-up of roost assemblies, enabling counts to determine daytime dispersal as faithfully as possible.

Most streets were visited once but others received more thorough treatment either en route to a new block of streets or as part of normal daily routine. Opportunities were then taken to revise estimates of bird numbers and redefine locations in the light of new evidence. When these re-visits occurred during the predominantly mild days of November and early December, they showed stability in numbers of birds (ie little variation between the first estimate and a subsequent one) as well as site fidelity. However, this seemed not to be the case during the cold spell the city endured through the Christmas period when numbers at some locations significantly increased, presumably as a result of birds leaving rural areas. Peak numbers recorded have been given in the table but it is acknowledged there is a pitfall in carrying out a census over several weeks of varying weather conditions.

Birds were located mostly by sound and once I had got used to ignoring the imitative calls of Starlings, detection was not too difficult except on routes used by heavy traffic where perseverance was needed. Many groups of sparrows occurred in pathside bushes, allowing a precise count to be made. In other instances visual evidence was incomplete or scant and estimates were needed. Other areas were less easily watched, particularly suburban streets where sparrows were heard calling from rear gardens. Here I resorted to a 'guesstimate', being guided by the knowledge that comparatively few sparrows can make a lot of noise. Where this has been done, the figures in the table are preceded by an asterisk.

Allotments were not visited as part of the survey, which will have contributed to under recording, notably at Mousehold, but some birds were located on wasteland.

I believe the risk of double counting has been minimal - not least because birds were only recorded sparsely and then in discrete groups almost throughout the study area.

The House Sparrow in Norwich, autumn/winter 2000

* Norwich being defined by the area contained within the Norwich outer ring road.

<i>Locations</i>	<i>No</i>	<i>Locations</i>	<i>No</i>
Adelaide St	8	Gildencroft	6
Adelaide St/Dereham Rd	4	Goldsmith St	1
Allens Lane	*8	Gordon Ave/Harvey Lane	8
Anchor St	10	Gordon Ave/Heriby Way	6
Angel Rd (School)	8	Gould Rd	2
Appleyard Cres	12	Half Mile Rd	14
Arlington Lane	1	Harmer Rd/Hunter Rd	18
Ash Grove	*6	Harvey Lane/Lime Tree Ave	6
Aurania Ave	5	Hasset Close wasteground	8
Bacton Rd/Margaret Paston Ave	14	Havers Rd	10
Balfour St/Morley St	13	Hill Crest Rd	12
Bishopgate	6	Hill House Rd	10
Brian Ave	6	Hillside Ave/School Ave	6
Bull Close Rd (Leopard Court)	*10	Huxley Rd	*6
Bulmer Rd	4	Ipswich Grove	6
Burges Rd/Soleme Rd	10	Jessopp Close	4
Carrow Rd/Hardy Rd	1	Jessopp Rd/park perimeter	6
Cation Grove Rd/Woodcock Rd	2	Josephine Close	4
Cavell Rd/Long John Hill	6	Keyes Close	10
Cecil Rd	20	Kinghorn Rd	10
Chamberlin Rd & assoc side streets	18	Kirkpatrick Rd/Mile Cross Rd	10
Chambers Rd/Rye Ave	8	Latimer Rd/railway path	36
Christchurch Rd/Grange Rd	4	Lawson Rd	2
Christchurch Rd/Jessopp Rd incl Meadow Rise	14	Lion Wood Rd	6
Clabon Rd & assoc Closes	20	Lubbock Close	6
College Rd, Parkside school	5	Magdalen Rd north of Albany Rd	16
Cricket Ground Rd	6	Magdalen St (Boswells Yard)	20
Crome Rd/Mousehold Ave	6	Maple Drive/Sycamore Cres	2
Cubitt Rd	14	Margaret Paston Ave/Mile Cross Rd	6
Denmark Rd	9	Marriots Way	6
Dereham Rd/Wensum School field	2	Massingham Rd	2
Dereham Rd/Winchcombe Rd	2	Maud St/St Philips Rd incl Connaught Rd	4
Douro Place incl Heigham Rd	7	Mill Close	10
Drayton Rd/Fenn Cres	24	Mitre Court	*10
Drayton Rd/Junction Rd	*6	Montcalm Rd	*8
Earlham Rd/cemetery edge	12	Morse Ave/Rd	6
Elizabeth Ave	2	Mousehold St	4
Elizabeth Fry Rd incl Gunton Rd/Ripley Close	10	Nelson St incl West End St	10
Elm Grove Lane/St Clements Hill	4	Newbegin Rd	6
Essex St	4	Oak St (Mandela Close)	14
Exeter St/Orchard St	14	Palmer Close	2
Foster Rd/Hillmead	10	Parr Rd	10
George Pope Rd	10	Patricia Rd	1
Gertrude Rd	14	Pelham Rd	4

Penn Grove/Vicarage Rd	4	St Marys Plain	1
Philadelphia Lane	*4	St Matthews Rd	1
Pinder Close/Rd	16	Stanley Ave/Thorpe Rd	6
Plaford Rd	4	Sunny Hill	1
Plumstead Rd	12	Thor Close	*8
Portersfield Rd	1	Thunder Lane	*8
Pottergate (Damocles Court)	6	Tillet Rd East	4
Primrose Cres	16	Turner Rd	2
Randolf Rd	1	Valentine St	1
Recreation Rd/The Avenues	16	Valpy Ave	24
Red Cottage Close	10	Vincent Rd	7
Regina Rd/Victoria St	1	Wall Rd	8
Rose Valley	4	Waterloo Park Ave	3
Shorncliffe Ave	8	Waterloo Rd incl Long Row, Temple Rd	14
Silver Rd	12	Wellesley Ave North/Wolfe Rd	16
Southwell Rd/Trafalgar St	14	Wessex St, Bignold School	12
Sprowston Rd	12	Wheatley Rd	12
St Andrews Ave	3	Woodcock Rd	4
St Clements Hill/Woodcock Rd	8		

Distribution

Mile Cross, which boasted the highest number of birds and locations, consists mainly of council housing with sizeable areas of wild open space and allotments. In other areas there were also concentrations of sparrows where a considerable extent of wild land was found, as at Mousehold and to the south of the city. Here the scrubby embankment of a disused railway line (now a footpath) was a strong influencing factor in the birds' distribution. Where there was little or no wild space, as in parts of south and south-west Norwich, the House Sparrow is a very scarce species.

The days when sparrows co-mingled with shoppers in the heart of the city appear to have gone and the survey found birds at only five locations within the inner ring road - at Oak Street and nearby St Mary's Plain, Magdalen Street (Boswells Yard), Bishopgate and Pottergate. It may be notable that all of these locations are close to the River Wensum and the scrubby margins found thereabouts.

The most significant aspect of the sparrow's distribution in Norwich revealed by the survey is a marked disparity in numbers between the north of the city (north of the River Wensum) and the south. North of the river 684 birds were recorded, comprising 67% of the overall total of 1018 located during the survey. Whether this disparity is the result of disproportionate rates of colony extinction in recent years or whether it precedes the sparrow's decline is unknown. It is interesting to speculate that birds may be moving northwards from unfavourable conditions in the south. From observations made there is considerably more derelict land to the north and this guarantees the birds' presence.

Another curiosity of the distribution picture was an apparent close association with schools. In some places the school environs represented one of the few areas of open space amid streets, but there is also a possibility that they are feeding stations with the birds drawn to left-over food. An attachment to schools was inferred at the following locations - Adelaide Street, Angel Road, Cecil Road, College Road, Douro Place, Hillside Avenue, Jessopp Road, Silver Road, Valpy Avenue, Wellesley Avenue North/Wolfe Road and Wessex Street.

Habitat

Very few birds were found in streets with continuous housing. Instead the majority occurred at three types of location - open space perimeter, intersection and cul-de-sac. An element of overlap inevitably occurred but overall these categories accounted for 87 of the 125 locations at which sparrows were found.

Birds frequenting 'open space perimeters' typically occurred where housing bordered waste ground, allotments or playing fields. In more cramped areas, hedging and shrubs surrounding amenity spaces or car parks were used.

The frequency with which sparrows occurred at road intersections intrigued and puzzled me until I discovered research by Peter Lack on breeding bird distribution in farmland. His study involving twelve farmland hedgerow birds (excluding House Sparrow) found that there was a statistically significant frequency of occurrence at intersection points in hedgerows. Lack concluded that intersection points offered smaller, compact areas within which to satisfy territorial needs and advantages will probably include shelter from more than one direction, energy saving in foraging and a greater number of escape routes. Here, I suspect, lies the answer in respect of the sparrow in city suburbs where it is very much a hedgerow bird.

It was also noticed early on in the survey that sparrows occurred with some frequency at the bottom of cul-de-sacs, indicating again some advantage to the bird from such locations, possibly similar to those above. This tendency towards quieter sites may reinforce the public's perception of a species declining in numbers.

Bird tables and/or hanging bird feeders were present at almost every location confirming, if it was needed, the importance of garden food provision for wintering birds. Seeds and berries also form part of the diet and I observed birds foraging amid buddleia, hawthorn, cotoneaster and honeysuckle.

As well as large areas of waste ground, many smaller patches of disused land, including unmaintained gardens were found to be important. This was notably the case on council estates and exemplified in Kinghorn Road where there were neglected gardens belonging to boarded-up houses. Here, as so often in the study area, birds were discovered amid unkempt privet hedges. This was by far the most utilised shrub for sheltering and assembly during daytime and an important component of habitat on council estates, where it is the main type of hedging and often occurs untrimmed and evidently to the sparrow's liking.

A number of factors would seem to account for the attractiveness of council estates to the House Sparrow. Spaciousness and layout (numerous cul-de-sacs) as well as a widespread lack of maintenance and the presence of tracts of undeveloped land are surely key to healthy populations. I am unaware whether bird keeping is more prevalent in these areas but the presence of aviaries and pigeon lofts would presumably increase the likelihood of sparrows occurring if seed was regularly available.

As far as housing itself is concerned, terraced streets were the least likely to be occupied but no data was collected and breeding season observations are required to shed more light on this aspect of habitat selection.

Conclusions

A total of 1018 sparrows were found at 125 locations. Given inevitable under-recording it is likely that the actual total is nearer 1150 individuals. This will doubtless represent a yearly peak as the sparrow population is stated by Lack to be around 20% higher in midwinter than at the beginning of the breeding season.

Prime habitat contains scrubby open space and a good supply of bushy intersection points within an area of semi-detached housing. It would seem reasonable to conclude on the evidence that there is more prime habitat in north Norwich and if untidiness and dereliction can be considered as indices of good quality sparrow habitat, the bias is not altogether surprising. There can be little doubt that loss of derelict land will be harmful as far as the House Sparrow's future in Norwich is concerned.

To the south of the city, where waste ground and allotments are in short supply, it would seem many colonies are occupying secondary habitat, perhaps with an over-reliance on handouts from householders and school canteens. Certainly there was evidence that a well-stocked bird table or hanging bird feeder could increase the likelihood of sparrows occurring in otherwise non-ideal areas.

Housing and open space of a certain kind and quality, together with easy to obtain food, are crucial to the urban sparrow's survival but there may be other invisible factors at work affecting populations and distribution - pollution for example. The presence of birds in cul-de-sacs might imply a withdrawal of some kind but birds were also found alongside routes of heavy traffic. Even so, the general impression is of a once highly adaptable bird now in retreat from an unsatisfactory environment.

In more ways than one the 'common or garden House Sparrow' is a bird at the crossroads.

References

- Lack PC Hedge interscctions and breeding bird distribution in farmland. *Bird Study* 35,133-136 (1988)
- Lack PC *The Atlas of Wintering Birds in Britain and Ireland*. BTO (1986)

NORFOLK MAMMAL REPORT – 2000

Editorial

In this year's report we have included some articles which explore both conservation and research into the mammals of Norfolk. Because of the publication later this year of the 'Mammals of Norfolk' as a Wildlife 2000 book we have excluded the classified lists. These records will be covered in the book to provide a basis for our understanding of the distribution of mammals in the county as we enter the new millennium.

We are fortunate in our coverage of the mammals found at Wheatfen Broad in the records left by the late Dr Ted Ellis in his lifetime of study which David Nobbs has been able to extend in the last decade. The possibility of reintroducing doormice into parts of Norfolk, the intensive study of Barbastrelle bats on the North Norfolk coast and some interesting observations of predation by cats reflect the interest that mammals hold for naturalists.

The Stoat – Rabbit Enigma

Roy Baker

Whilst walking across some closely cropped grass sward in Breckland on a sunny day in November my attention was focused upon a group of rabbits busily grazing. Two stoats appeared and at first their presence failed to disturb the feeding activities of the rabbits. Soon one stoat fixed its gaze on one of the rabbits and gave chase. We have all at some time or other in our lives attempted to catch a rabbit, either our tame pet one in our garden or a wild one, by giving chase. The rabbit in these circumstances is very elusive and extremely difficult to catch. It runs for its life and will twist and turn to evade capture. A rabbit chased by a stoat shows a different behaviour pattern. It adopts a hunched and limp response and, as in the case of the Breckland rabbit, the chase is a short one. The fatal cry of the rabbit occurs not at the moment of the stoat sinking its teeth into the nape of the neck but before the predator grasps its prey. The rabbit shows evidence of a paralysis of fear in the predator-prey behaviour pattern which seems to be peculiar to the chase by a stoat. The second stoat, sitting upright, watched its partner chase and catch the rabbit and after the kill did not join in the blood sucking. The other rabbits also ignored the chase and grazed the grass even though the second stoat was sitting amongst them.

What is the cause of this peculiar behaviour? Naturalists have commented that the rabbit seems to become hypnotised by the stoat but this does not explain, if true, how this comes about. The instinctive behaviour for escape changes for rabbits when chased by stoats. Has the stoat the ability to frighten to death an animal much bigger than itself since naturalists have observed this phenomenon on numerous occasions? The fact that other rabbits, even in the presence of stoats, ignore them whilst one of their number is being attacked is an enigma of nature.

Mammals of a Broadland Reserve – Wheatfen

David Nobbs
Warden, The Ted Ellis Trust

Wheatfen lies in the Yare river valley 10 kilometres south of Norwich. It covers an area of 59 hectares and has a rich diversity of habitat ranging from dry beech/birch woodland, wet woodland carr of ash, alder and willow leading to open broads with reed and willow fringes. Open reed swamps near the river are traversed by a tidal dyke system linking them to the river. Alder carr has been preserved and blocks adjoin open reed beds. There is also a tidal dyke running to the east of the reserve and a shallow turf pond. An extensive network of walkways link the various parts of the reserve. The whole provides a wealth of mammal habitats.

In describing the mammals which frequent the reserve they have been grouped into their habitats to give the reader a more comprehensive understanding.

The dry woodland at Wheatfen forms part of Surlingham Wood which has an undercover of brambles and bracken. There is very little ground flora since historically the wood only dates back to about 1750. Management of this area involves the felling of dangerous trees which can fall across footpaths. Only a small amount of wood is used for fuel, the rest is left to decay. A small area of hazel is coppiced. Tuck's Wood which abuts Surlingham Wood is identified by a boundary ditch and is effectively a later continuation of Surlingham Wood. The woods cover a total area of about 12 hectares. Tuck's Wood has no management and many fallen trees from past gales litter the wood. Access is difficult with neither rides nor footpaths. Both woods on the western side are fringed by open arable fields.

Mammals in the woodland are numerous. Roe deer graze in the fields and dry woodland. In winter they feed on brambles. Their population size is difficult to estimate. Chinese water deer, which have been at Wheatfen since the mid-70s can be seen frequently in both woods, especially during times of tidal flooding when they migrate to the higher ground. In severe weather of snow or heavy frost cover they graze ivy hanging from fallen boughs. Their simple stomach system enables them to obtain enough nutrient value from this poisonous plant. Ivy makes a good supplement to their diet. It has been observed that sugar beet tops left from harvesting provide a good food source in the winter. It may be a surprise but as yet the small muntjac deer has not been observed at Wheatfen. Probably there is insufficient woodland area to support them as well as roe and Chinese water deer.

Foxes can also be observed as both pheasant and woodcock in the wood are likely food sources, although as yet no fox's earths have been discovered. Scent can often be detected along the pathways. Dead deer are soon eaten and their carcasses carried off.

The invasion of the grey squirrel at Wheatfen began in the early seventies with the complete loss of the red squirrel population. This has been recorded by Ted Ellis in February 1985 (*In The Countryside*, Eastern Daily Press) as follows:-

"Speculation is still rife as to why red squirrels have disappeared from most of Britain and have been largely replaced by invasive grey ones which were introduced at the beginning of this century.

Norfolk remained a stronghold of the natives until the foreigners advanced boldly only a few years ago, but the situation has deteriorated rapidly as in other counties earlier.

There is some circumstantial evidence that grey squirrels could be carriers of a poxvirus lethal to the reds. Although the virus has been isolated and identified only recently, it has certainly been taking its toll of Norfolk's red squirrels at least since 1927, when I found newly dead animals exhibiting its myomatosis-like symptoms at Keswick Hall, near Norwich.

It was not until the 1960s that grey squirrels invaded the county in force, but there had been a few earlier introductions of them attempted on some Norfolk estates (I have notes of their presence at Northrepps in 1934 and Langley Hall in 1935) and in any case the disease could have spread from farther afield where grey squirrels were already entrenched.

Dr Ian Keymer, who has carried out important research on the poxvirus, has pointed out that the disease so far, has not affected Europe's mainland red squirrel populations and it is only in Britain, since the greys have become established, that it has been known here.

My own woods, which though predominantly deciduous, contain some Scots pines, supported a small colony of red squirrels over a period of at least 60 years. Immediately following the arrival of the grey squirrels in their territory, I found the red ones lying dead, all suffering from the poxvirus, in 1971, since then not one has survived.

If grey squirrels do in fact serve as carriers of the disease, modern techniques should make it possible to detect antibodies produced in their bodies to resist it. As matters stand, we still do not know exactly why we have lost our red squirrels so quickly since their American relatives have come on the scene."

Since their invasion grey squirrels have spread into the fens and carrs. Damage to the Wheatfen Cottage has been a problem with them since each year they take up residence in the roof space. The damage to plastic dustbins can be quite severe. In very bad winters bark can be stripped off willow trees. Some control measures are used to minimise damage and numbers are culled to prevent a population explosion. Grey squirrels, however, maintain high numbers throughout the year at Wheatfen.

Rabbits have their burrows on the side of the wood in light soils and the population remains steady through predation by foxes, weasels and stoats. The rabbits do some damage in bad winters by stripping and gnawing small trees close to ground level.

Hares live in the adjoining fields and they have been observed coming into the woods in bad winters to chew bark. The grazed marshland fields of the Yare valley continue to support good hare populations.

Hedgehogs have an ideal habitat close to the woods as a large area of grass provides earthworms, beetles etc. The woodland edge provides leaf litter for bedding during hibernation.

The brown rat frequents the buildings and sheds and can grow to quite a size. Rats can also be observed alongside ditches and dykes. Population densities at Wheatfen remain small.

The woodland habitats at Wheatfen are ideal for stoats with good food sources in rabbits, rodents and birds. Even with dykes running through parts of the woods stoats move freely throughout the habitat since they are good swimmers. Whilst stoats in Britain rely mainly

on rabbits as their primary food source, in Europe water voles form the major food. Wheatfen is an important refuge for water voles so it can be assumed that stoats exploit this food source as well as preying on rabbits. Ted Ellis reported in 1956 a stoat using an old mossy sallow in Home Marsh with a hole under the roots and dung on the bough. Sightings are infrequent and densities difficult to estimate. The smaller weasel is more commonly seen as it scampers quickly across the paths and rides. They are constantly active with their need to eat 25% of their body weight daily. Their main food sources are voles, mice, small rats and rabbits.

Moles prefer the drier parts of the woodland and the grassy areas around the cottage where there is a plentiful supply of food.

The smaller mammal populations consist of the house mouse, wood mouse, yellow-necked mouse, field vole, bank vole, common shrew and pygmy shrew. The house mouse resides mainly in Wheatfen Cottage and the adjacent buildings. The yellow-necked mouse was first recorded when a female was discovered at Wheatfen in 1984. This species resembles a wood mouse but has a characteristic yellow crossed collar on the chest. The reserve's cat brought in a specimen as recently as May 2001 but numbers remain small. They occupy the woodland herbaceous habitats and woodland glades. They are very agile and can be found climbing high into bushes. They also like to raid apple stores. The distribution of the yellow-necked mouse is mainly on a line south of the Norfolk-Suffolk border and they are probably spreading in the county. The population size at Wheatfen is unknown at present and a survey study would be a worthwhile project.

The woodmouse is Britain's most widespread mammal. Trapping is the only way to estimate numbers since they are nocturnal creatures. At Wheatfen the woods and garden provide ideal habitats.

Bank voles are active by day and night in the woodland rides where bramble thickets give good cover. Feeding is on seed, fruit buds and leaves the species can be confused with the field vole but their long tail up to 11 cms in length is a distinguishing feature. The populations are good.

Field voles frequent the woodland alongside the bank voles but they can also be found on the very marshy ground with succulent grass stems providing their main diet. They have a liking for young trees which by intensive gnawing of the bark causes the small trees to die. Populations are good at Wheatfen.

Common shrews are busy creatures with a need to find food every few hours to survive. Their presence is not immediately obvious unless trapping is done as they spend much of their time in the undergrowth searching for food - earthworms, woodlice and spiders. They can be found in drier surface vegetation and beneath fallen trees.

The pygmy shrew is Britain's smallest mammal. Individual weights varying between 2.4 and 6.1 grams, and the species is less common than the common shrew. Their habitat and their diet requirements are similar to those of the common shrew. Often dead animals are found due to their short life span and high metabolic rate.

A mammal which roosts at Wheatfen cottage in a hollow in the roof is the pipistrelle bat. This is Britain's smallest bat and can frequently be seen at dusk flying along the woodland edges and across the fens in search of moths. Noctule bats were reported flying over Wheatfen in April 1952.

The second major habitat type includes the fen, dykes and carr which extend over 40 hectares to the adjoining the River Yare which is linked to the waterways of the Fen Channel, Wheatfen Broad and Deep Waters through Rockland Broad. From the 1940's there was little management and the fens were invaded by sallow, and the open waters were becoming

silted up. Pollution from the 1950's produced a dramatic decline in water quality and it is only since the early 1990's that this process has been reversed. In the 1930's the dykes held clear water and open reed beds flourished. This is the background for a review of the mammals in this habitat

The next species to discuss is no longer with us. Some I know regret its demise. I refer to the coypu which was an accidental escape from fur farms and was introduced into Broadland in the late 1930s and left to its self. It increased rapidly in numbers and the first record from Wheatfen occurred in 1946. There are various records in Ted Ellis's writings about coypu at Wheatfen:- "An 18lb female on Home Marsh 1961." "Coypus have eaten a large patch of sweet flag (*Acorus calamus*) previously unscathed in the Backwaters. This follows a widespread attack on yellow flag (*Iris pseudacorus*) this spring." (March 1960). "At their highest densities over 2000 were trapped and killed in the fens at Wheatfen in one year.

Otters have been at Wheatfen for sometime. The first record we can trace was in 1936 (Ted Ellis). "An otter form on top of a floating mat (*Carex paniculata*) tussock on which was growing a young alder. Several runs noted, one in particular crossing the Avenue. Otters were heard whistling in the Pool swamp at low tide." In January 1948 Ted Ellis and Russell Sewell reconnoitered Pool Marsh from the North Channel to the Avenues where in the latter they found otter holts. In April 1955 two otter holts made of grasses and sedges amongst the roots of an old alder tree were discovered in the same area. These holts contained fish scales which suggests that the otters were in the habit of taking at least some of their food home. The last record was in January 1969 (Ted Ellis), "Two otters racing about, apparently making over and round a fallen ivy-covered tree trunk at the back of the Island." With the increasing problems of pollution affecting water quality, fish numbers and vegetation in the Yare river valley the otters disappeared from Wheatfen until the 1990s. The recent programmes of improvement in water quality and availability of food has resulted in their return and there are early signs that otters are recolonizing the River Yare, its fens and carrs. Otters are beginning to return to Wheatfen as we enter the new millennium. In April-May of this year otters have been heard whistling in the carrs and fens behind the Island and there have been sightings of otters swimming in the Fen Channel and Deep Waters.

Chinese water deer are in their natural habitat amongst reed and sedge beds where they spend most of their time feeding and resting. Being solitary animals they try to avoid their fellow deer except during mating and to defend territories. They are not a species which herd together. They can be seen at high tides as they move to the drier pathways. Their diet on this part of the reserve consists mainly of sedges, willow shoots and various herbs. The best signs of their presence includes droppings, which are relatively distinctive being pointed at one end and rounded at the other, hair from fighting, grazing of ivy as foliage and at certain times by their barking calls. The Wheatfen population ranges from 18-40 per square kilometre and they appear to have a steady mortality rate with some dead in dykes (they can swim) but they can succumb to cold damp winters. So the population is regulated naturally to a point. There are probably four rutting territories at Wheatfen. They make an attractive addition to the fauna of Wheatfen and cause little damage on the reserve.

A surprising mammal to find in the fens is the mole. It has dug its way into the path system and mole fortress's can be seen along such pathways. They act as breeding chambers and food stores. Also surprising are the numbers of foxes with many sightings along the paths and in the fens. Predated pheasants, casualties to deer or the odd dead swan carcass dragged off into the reeds are occasionally found a few days later.

Mink at Wheatfen is still an unknown factor in the ecological balance. To date at Wheatfen there have been only two sightings in 1999. Since no trapping of mink has occurred in the

reserve numbers are difficult to estimate. I understand that trapping has taken place at Strumpshaw on the other side of the river with eleven caught in one week. This is a worrying threat to the bank vole populations of the reserve.

The smaller mammals living in the fens and ears of Wheatfen were investigated during November 1994 through a live trapping programme. The data below are indicative of the species and numbers trapped in two of the habitats.

	<i>Alder Carr</i>	<i>Fen Litter</i>
Bank vole	8	0
Field vole	0	29
Woodmouse	4	10
Harvest mouse	15	1
Common shrew	7	13
Pygmy shrew	0	1
Water shrew	2	1

The harvest mouse is Europe's smallest mouse, and being an expert climber it lives amongst tall grass, reeds and sedges along the edges of dykes and pathways. They are nocturnal by nature in summer but are active during the day in winter. Their diet consists of insects, seeds, grass shoots and in autumn berries. Their presence is confirmed by finding their small spherical nests in the autumn. These are made of shredded and interwoven grass and sedge blades. 3-8 young are born from May to September. These nests are easily found in autumn and their numbers clearly indicate good populations at Wheatfen. In winter the harvest mouse lives in nests close to or below ground.

Water shrews are the largest shrews native to Britain. They have very distinct black dorsal surfaces and silver-white undersides. They live in extensive burrows in banks alongside dykes. They are solitary animals outside the breeding season. They hunt for worms, crustaceans, aquatic insect larvae, small fish and amphibians. Ted Ellis observed shells of the freshwater snail *Lymnaea peregra* nibbled by water shrews at Wheatfen Broad. Sightings are rare and the main signs are rising bubbles on the surface of a dyke. The habitats are ideal at Wheatfen and numbers remain good.

This also goes for our other aquatic small mammal, the water vole. At Wheatfen the habitat is ideal and this species has increased in numbers and range as the dykes have been dug out in recent years and the whole mosaic of waterways re-instated. Water voles need unpolluted waters and with the greatly improved quality of the last decade the numbers remain good. Their presence, other than by trapping, is recognized by the diving plop in the water and their swimming across the surface. They excavate burrows along the banks with some of the entrances below water level. Other signs are bare patches of soil with piled chopped reed, sedges and grass blades ready for eating. These are feeding stations. They also gnaw bark of any willow to a height of 80cms. The main diet consists of aquatic plants. 4-6 young are born in a grass and root woven, rounded chambers to make a bed above or below ground from March to October.

As you can see the reserve is the home for most of our common mammals and is a site where they continue to flourish. There is a need for regular monitoring at both species and population levels so that help with this work would be most appreciated. Ted Ellis started such studies many decades ago and we wish to see this continued into the 21st C in this wonderland known as Wheatfen.

What The Cat Brought In!

Ian Keymer

During the Spring and Summer of 1997, The Mammal Society organised a survey of 1000 cat prey items (see website www.abdn.ac.uk/mammalcatkills1.htm). Dr Robbie MacDonald of Bristol University analysed the results and estimated that Britain's cats (in excess of 9 million) could be killing 250 million creatures (mammals, birds, amphibians and reptiles) per year!

As we own a young, neutered, female Burmilla (brown ticked tabby) that was born in May 1997, I decided to record all her catches, because by the end of 1998 she had become increasingly skilled at catching her prey. The Tables 1 (mammals) and 2 (birds) show the results for 1999 and 2000. I have not recorded insects such as butterflies, moths and bees or frogs and toads. Fortunately she decided very early in her career that amphibians were not to her liking. We also have an older Burmese cat, but she has hardly caught anything for four or five years. Both cats are well fed and kept in at night after about 20.00 hours until 07.00 the next morning. The cats do not wear collars or bells.

We live in a rural environment in the north Norfolk village of Edgefield. We have a garden of about half an acre, with a garden pond. The property is adjacent to other gardens. Pasture and arable land with intensive poultry and pig units are nearby.

The Mammal Society survey showed that cats are "mammal specialists" and that young cats are more important predators than old ones. I also suspect that wet or cold weather may be important factors in reducing catches, because most cats do not like these types of adverse weather conditions and stay indoors. This survey tends to support the Mammal Society statement that once past the age of two, the kill rates of most cats drop dramatically. The Tables show a large drop in the number of prey species caught in 2000 compared with 1999, being less than half in the case of the birds. By the end of April 1999 our Burmilla cat had caught 37 mammals and 7 birds, and in 2000, 22 mammals and 3 birds. So far this year (up to the end of June, 2001) she had caught 26 small mammals, but only five birds. One of the mammals was a harvest mouse (*Micromys minutus*), the only one caught by any of our cats during the last 25 years. In 2001 she also caught three pygmy shrews for the first time since 1998, having caught none in 1999 and 2000 (see Table 1).

As can be seen from the Tables, the mammals most frequently caught in both years were field voles (75), bank voles (37) and common shrews (34). The voles were almost invariably eaten and the shrews never. I was able to release several shrews unharmed. In contrast, the Mammal Society survey showed that "mice" were the most commonly caught prey, although it is not stated which species. Surprisingly, approximately twice as many mice as voles were recorded, whereas in this survey nearly seven times more voles than mice were recorded. The water shrew catches in 1999 were a surprise; the animals apparently originated from our garden pond. A hole in the bank of the pond was found and I noticed a depletion in the stickleback (*Gasterosteus aculeatus*) population. The differences in prey species between this and the Mammal Society survey may be due to the fact that most of the Mammal Society cats lived in a suburban environment. I also suspect that cats may become more skilled at catching some species than others. For example the Mammal Society survey included "high numbers" of rabbits, whereas our Burmilla cat has apparently caught only one in two and a half years, in spite of there being no shortage of rabbits in her territory.

Table 1 Mammals caught 1999-2000 showing the totals for each month

1999													
<i>Mammal species</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Tot</i>
Mole - <i>Talpa europea</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
Common Shrew - <i>Sorex araneus</i>	0	1	4	3	1	3	2	0	0	1	2	0	17
Pygmy Shrew - <i>Sorex minutus</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
Water Shrew - <i>Neomys fodiens</i>	0	1	0	0	0	0	0	0	0	0	0	0	2
		*1											
Hare - <i>Lepus europaeus</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank Vole - <i>Clethrionomys glareolus</i>	1	2	0	1	0	2	2	3	0	2	2	0	21
							*4		*2				
Field Vole - <i>Microtus agrestis</i>	9	4	1	2	8	3	7	4	1	3	0	0	53
				**1		*2	*2		*6				
Long-tailed field mouse - <i>Apodemus sylvaticus</i>	2	0	0	1	0	0	1	1	1	1	0	0	7
House Mouse - <i>Mus domesticus</i>	0	0	0	0	1	0	0	0	0	0	0	0	1
Rat - <i>Rattus norvegicus</i>	0	0	*1	0	0	0	0	1	0	0	*3	0	5
Weasel - <i>Mustela nivalis</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
Unidentified mammals	0	0	1	2	1	4	10	5	12	8	8	1	52
Total 1999 = 158													

2000													
<i>Mammal species</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Tot</i>
Mole - <i>Talpa europea</i>	0	0	0	0	0	*1	0	0	0	0	0	0	1
Common Shrew - <i>Sorex araneus</i>	2	0	1	2	1	2	1	0	4	0	0	0	13
Pygmy Shrew - <i>Sorex minutus</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
Water Shrew - <i>Neomys fodiens</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
Hare - <i>Lepus europaeus</i>	0	0	0	0	0	0	0	*1	0	0	0	0	1
Bank Vole - <i>Clethrionomys glareolus</i>	1	0	1	4	0	*1	1	0	2	1	1	1	15
	*1									*1			
Field Vole - <i>Microtus agrestis</i>	0	1	0	1	0	3	5	3	0	1	1	0	17
						*1				*1			
Long-tailed field mouse - <i>Apodemus sylvaticus</i>	0	0	0	0	2	0	0	0	3	1	0	1	8
									*1				
House Mouse - <i>Mus domesticus</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
Rat - <i>Rattus norvegicus</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
Weasel - <i>Mustela nivalis</i>	0	0	0	0	0	0	0	0	0	1	0	0	1
Unidentified mammals	4	0	4	0	5	3	2	1	7	5	0	1	32
Total 2000 = 88													

Key: * = immature; others adults; ** = pregnant

Indeed our 13 year-old Burmese used to catch young rabbits frequently when she was younger and also occasionally hares and grey squirrels.

Table 2 shows that at least 14 different species of birds were caught, the vast majority being small passerines, with hedge accentors (dunnocks) and wrens being the most frequent.

The Mammal Society survey “demonstrated that cats, whose owners feed the birds in their gardens, killed fewer birds”. The reason was believed to be because “many watchful eyes of birds attracted to food in one place, will spot hunting cats more readily”. We feed garden birds but do not use nest boxes, because young fledglings would be very vulnerable to our cats.

Table 2 Birds caught 1999–2000 showing totals for each month

<i>Bird species 1999</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Tot</i>
Moorhen			1										1
Swallow							1						1
Wren			1	1	1	1		1					5
Hedge Accentor			1		1	2					1		5
Robin					1	1				1			3
Goldcrest			1										1
Blue Tit											1		1
Great Tit						2							2
Starling						1							1
House Sparrow		1				1	1						3
Chaffinch							1						1
Greenfinch				1			1						2
Unidentified passerines							2						2
Total 1999 = 29													

<i>Bird species 1999</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Tot</i>
Pheasant					1		1						2
Wren						1							1
Hedge Accentor						1	1	1					3
Robin						1							1
Long-tailed Tit				1									1
Blue Tit	1										1		2
House Sparrow							1						1
Greenfinch	1										1		2
Total 2000 = 12													

This small survey has been an interesting exercise, which I thoroughly recommend. Recording cat prey is an important way of obtaining information about the distribution of small mammals, many species of which, especially mice, voles and shrews, would otherwise go unnoticed except in owl pellets or on the rare occasions when zoologists or others use traps specifically for small mammals. More information is badly needed regarding the distribution of these small mammals, therefore please identify the prey caught by your cat and send in the records for the *Norfolk Bird & Mammal Report*.

The Hazel Dormouse in Norfolk

David Stapleford

A wildlife photographer who came to film my dormice commented, "with many animals, after seeing coloured pictures of them, there can be a tinge of disappointment when you first see them in the flesh, but with dormice its quite the reverse, they are far more enchanting than one can ever imagine." A common reaction on a first sight is "Wow!"

This charming little rodent (*Muscardinus avellanarius* L) with its orange yellow fur and its distinctive furry tail belongs to the family Gliridae and as it spends most of its life in trees and hedgerows has more in common with squirrels than mice. In fact I think of it as a 'little squirrel'. It is one of the main target species for conservation of the newly launched U K Mammals Trust and their main caption reads: "due to widespread loss of ancient woodland and hedgerows, dormice have been fighting for survival. In many northern counties they have disappeared altogether." The fragmentation of woodland into isolated pockets and the wholesale disappearance of hedgerows clearly seems to have been the main reason for its decline and loss in a significant number of counties. Even management of what hedgerows remain has contributed to the decline. Too often since the early 1980s excessive hedge trimming has left far too few berries for dormice to eat in winter. A research team led by Dr

Paul Bright of Royal Holloway College, University of London estimated the disappearance of dormice in 68% of hedgerows where they existed twenty years previously.

Dormice gnaw a hole in the shell of a hazel nut then enlarge it by scooping along the cut edge with their teeth. This leaves a hole with a smooth rim, but with tooth marks on the surface of the shell. The cut face characteristically slopes steeply inward towards the centre of the nut. Woodmice and bank voles also open hazel nuts, but the hole they leave has tooth marks across the cut edge of the shell. Moreover, bank voles (unlike dormice and woodmice) do not leave tooth marks on the shiny outer surface of the nut.

Nuts attacked by squirrels, woodpeckers and nuthatches are usually left in jagged pieces, not with a neat hole in them.



Hazel nuts opened by (from the top)
Bank Vole, Woodmouse and Dormouse.

In 1885 G T Rope published a paper in the *Zoologist* on the range of dormice in England and Wales and his comment was that it "it seems to be scarce in Norfolk, Suffolk and Lincolnshire."

Paget's *Natural History of Yarmouth*, 1834 comments "this species is occasionally seen in small woods." In 1838 an article in the *Edinburgh Journal of Natural History* entitled "Sketch of the natural history of the neighbourhood of Norwich" by J McGillivray refers to the dormouse as "one of the less common quadrupeds met with at Cossey." Certainly a trawl through the Costessey area now reveals that the 19th C habitat here must have been likely

dormouse territory before separation of small woods occurred through house building. Additionally the 1884 *Transactions of the Norfolk and Norwich Naturalists' Society* reports a comment by Thos Southwell that “forty or fifty years ago the dormouse was found in Norfolk.”

In my own research for the Norfolk dormouse such comments as “I had one on my bird table yesterday” and “I found one in my kitchen under the fridge” are clearly cases of mistaken identity, especially as subsequent questioning lead to descriptions of ‘a long tail, large prominent ears and dark brown colour.’ However, three particularly tantalising cases are worth relating and cannot easily be dismissed. The first concerns a farmer at Ashwicken, south of King’s Lynn, whom I met with twenty years ago. He always carried a notebook with him so that he could sketch anything unusual that he came across. He showed me a beautiful drawing of a mouse which he discovered under a log. It remained immobile long enough to quietly sketch it. His accurate drawing was undoubtedly a dormouse.

The second was also a farmer from Great Snoring who, as a lad during the Second World War, clearly remembers his grandfather showing him a little sandy coloured round mouse in the palm of his hand with the words “Look lad, a dormouse” and pointing out that this was a special event to sight one.

Now last of all, I was recently chatting with a farmer’s wife from Sculthorpe who when I mentioned dormice immediately replied, “Oh some years ago we found one in a bale of hay. It was very round in shape, sandy coloured and had a dear little white bib.” The last four words would perhaps only be phrased by a lady, but was specifically accurate and could only relate to the dormouse, as woodmice and harvest mice are completely white on their underside and house mice do not have any white underneath.

Rope in 1885 recorded live sightings of dormice in Warwickshire, Staffordshire, Cheshire, Yorkshire, Derbyshire, Lincolnshire and Norfolk, but Hurrell and McIntosh found no evidence of dormice in these counties in the late 1970s pointing to a significant decline in the Midlands and North. Positive records did emerge for the Lake District and three in Northumberland. Hurrell and McIntosh found no areas where dormice could be said to ‘commonly occur’ or ‘be easily found’, words often used by Rope. Their conclusion was that the swift rate of destruction of suitable habitats as root cause of dormouse decline. 30-50% of all ancient semi-natural woodland in Britain has been lost since 1947 and 65,000 kilometres of hedgerows lost since 1945 (King and Conway 1980) and woodland coppicing seems to be a thing of the past.

A biodiversity action plan has been set up for the dormouse and a re-introduction scheme for counties where they seem to be extinct has been underway since 1995. Releases have been made in seven counties and results have been very encouraging in six (Cambridgeshire, Cheshire, Buckinghamshire, Warwickshire, North Yorkshire and Suffolk) of the seven. Breeding has taken place into the second summer and in some counties there have been clear signs of dispersal. Last year’s re-introduction in Suffolk has proved very successful so far with a very good breeding season having taken place, as discovered by the October count. Hopefully, this should be an incentive to us - we cannot let Ipswich Town have all the kudos!

A national captive breeding programme for dormice was set up in 1994, with involvement of English Nature and most of the animals for re-introduction have been supplied by this group. As a group member I am naturally keen that Norfolk should not miss out in this rolling programme. An entry in the 1884 *Transactions* could be an encouragement for a Norfolk release: “Mrs Bazzett Haggard of Kirby Cane Hall reported a dormouse she had found in a dormant state in some dead leaves amongst some stumps of hazel.” Subsequent enquiring has shown that this species is met with in the parishes of Gillingham, Gelderstone

and Stockton, all situated in the south-eastern corner of Norfolk. Forty years previously Mr J Kerriek released six or seven dormice from Surrey, but the recorder felt that because the animals were so common at Gelderstone he doubted whether they all have descended from the Surrey releases. He cited the considerable spread of dormice in support of this view. Since no reports from the area have been received in the late 20th C one can only conclude that loss of habitat has led to their extinction.

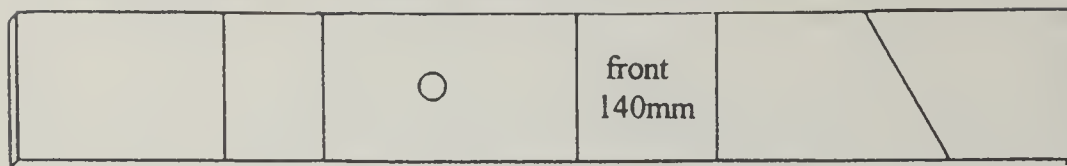
The ideal habitat for dormice is clearly hazel coppice with honeysuckle, but Elaine Hurrell's Mammal Society survey undertaken 1975-1979 lists deciduous woodland with scrub and hedgrows as two important habitat sites for dormice as well as coppice and she adds "these sites seem to be the very ones that are most threatened." The main factor in good dormouse habitat is a good tangle of vegetation such as hedge, bramble clumps or gorse bushes, which provide security for nesting, lying up during the day and a rich food supply. Valuable tree species include hazel, oak, bramble, wayfaring tree, honeysuckle and ash. Sycamore is useful in small numbers because it supports a large number of some species of insects (ie aphids) that the dormouse eats and also its flowers. It is important that trees are well mixed and physically interlinked. Honeysuckle is particularly valuable as a preferred nesting material; entanglements provide secure places to nest and support against wind; it also provides food for a long period. Flowers provide nectar and unripe seeds and berries food in Autumn.

Initially dormice proved difficult to breed in captivity, but improved husbandry specific to their needs and shared expertise among the captive breeding group has proved greatly beneficial. Some years ago Elaine Hurrell with her father H G Hurrell did sterling work in this respect and their working study of dormice in Devon has been built upon by the current breeding group and good numbers are being bred to provide sufficient stock for release projects.



Woodland features that are good for dormouse – a good mixture of tree and shrub species intermixed (*top*); honeysuckle entanglements (*bottom*).

Softwood plank, 25 x 1040mm (including 10mm cutting allowance)



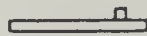
lid
200mm

floor
100mm

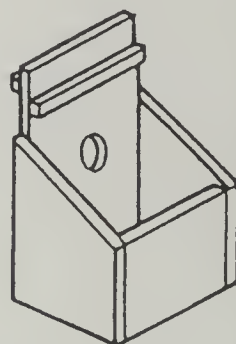
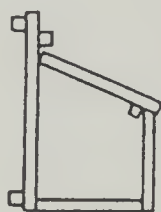
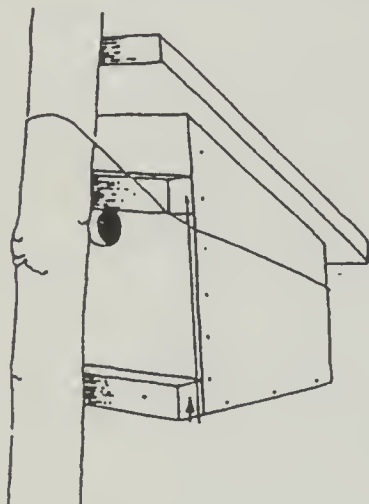
back
250mm

200mm

140mm



lid 111mm



entrance 30mm diameter

A Dormouse nesting box is like a bird box, but it has the entrance facing the tree or coppiced pole.

Prospective release sites are surveyed carefully for suitable habitats and there is a necessity for a band of suitable volunteers to provide a systematic check to monitor each project. Nest boxes are an essential part of any release and at least fifty are needed for each site.

My own interest in dormice began in the 1960s when I was given three young to study. Only one of these proved to be female, not the best sex ratio and for two years there was no breeding. At the time I lived in Barnet and I heard that a young dormouse had strayed into a child's sleeping bag at the school camp in Northaw Great Wood. It was taken to the Natural History Unit on site and I managed to persuade the resident staff to allow me to add it to my colony on condition that I release any progeny back into the wood. In spite of the newcomer being another male its introduction sparked off immediate breeding and the following year I was able to release four dormice into the Great Wood. I fixed a box to a tree and provided food in the vicinity. When I put the box in place I was astonished to see one of the dormice emerge and immediately climb a tall tree quite effortlessly. I observed it for some time amongst the twigs in the canopy. This little incident reinforced the work done recently by Tim Shepherd discovering the importance of dormice in oak trees by eating spangle galls and harmful caterpillars.

Dr Pat Morris recently described the dormouse as a "flagship species." In the woodland habitat it needs to have a diversity of trees and shrubs which will attract other species. Thus if we come to the aid of this incredibly attractive mammal we are not singling out the dormouse for its own sake, though that could be arguably justifiable, but we would be tipping the balance ecologically in favour of others species into the bargain. Surely this project needs our wholehearted and united support. The future for dormice in Norfolk is in our hands.



Red Squirrel killed by virus 1974 (*Ted Ellis collection*); Grey Squirrel

Hedgehog; Water Shrew





Pygmy Shrew

Stoat caught by cat (1979)





Nest of Harvest Mouse; Apple bark gnawed by Bank Voles

Bank Vole; Water Vole





Dormouse – on favoured honeysuckle

Dormouse hibernating



Barbastelle Bats at Paston Great Barn – 1998-2000

S M Parsons, B P George and E L George
Norfolk Bat Group

Background and Introduction

The western barbastelle bat, *Barbastella barbastellus*, has its main distribution in Europe, ranging from England and Wales to the Caucasus States. The barbastelle is considered to be a rare and declining species throughout western Europe and is currently listed as endangered or vulnerable in most European Countries. It is protected in Great Britain under the Wildlife and Countryside Act, 1981 and the Conservation (Natural Habitats, &c) Regulations 1994. It is also a UK Biodiversity Action Plan species with its own Species Action Plan including obligations for its conservation on a range of national and local government organisations.

Although barbastelles have been positively identified in at least twenty-two counties of southern England and Wales since the mid 1970s, most of these records reflect their occurrence in regularly monitored hibernation sites. In Norfolk there have been occasional records of individuals most years, in particular along the northern coast and in Breckland.

Paston Great Barn in north Norfolk was first found to contain a breeding colony of the barbastelle bat in August 1996. At that time it was the only maternity colony known in the UK. Four other localities have subsequently been confirmed in Somerset, West Sussex, west Wales and Hampshire but these are all located in areas of mature woodland. The barbastelle colony at the barn is still the only one known from a building in the UK: although the use of buildings by barbastelle bats is a more common phenomenon in mainland Europe.

At the end of the summers of 1998 and 2000 members of the Norfolk Bat Group carried out ringing and radio tracking activities in order to improve the understanding of the behaviour and conservation requirements of this species. This report presents the results of radio tracking and other observations of barbastelles made over this time.

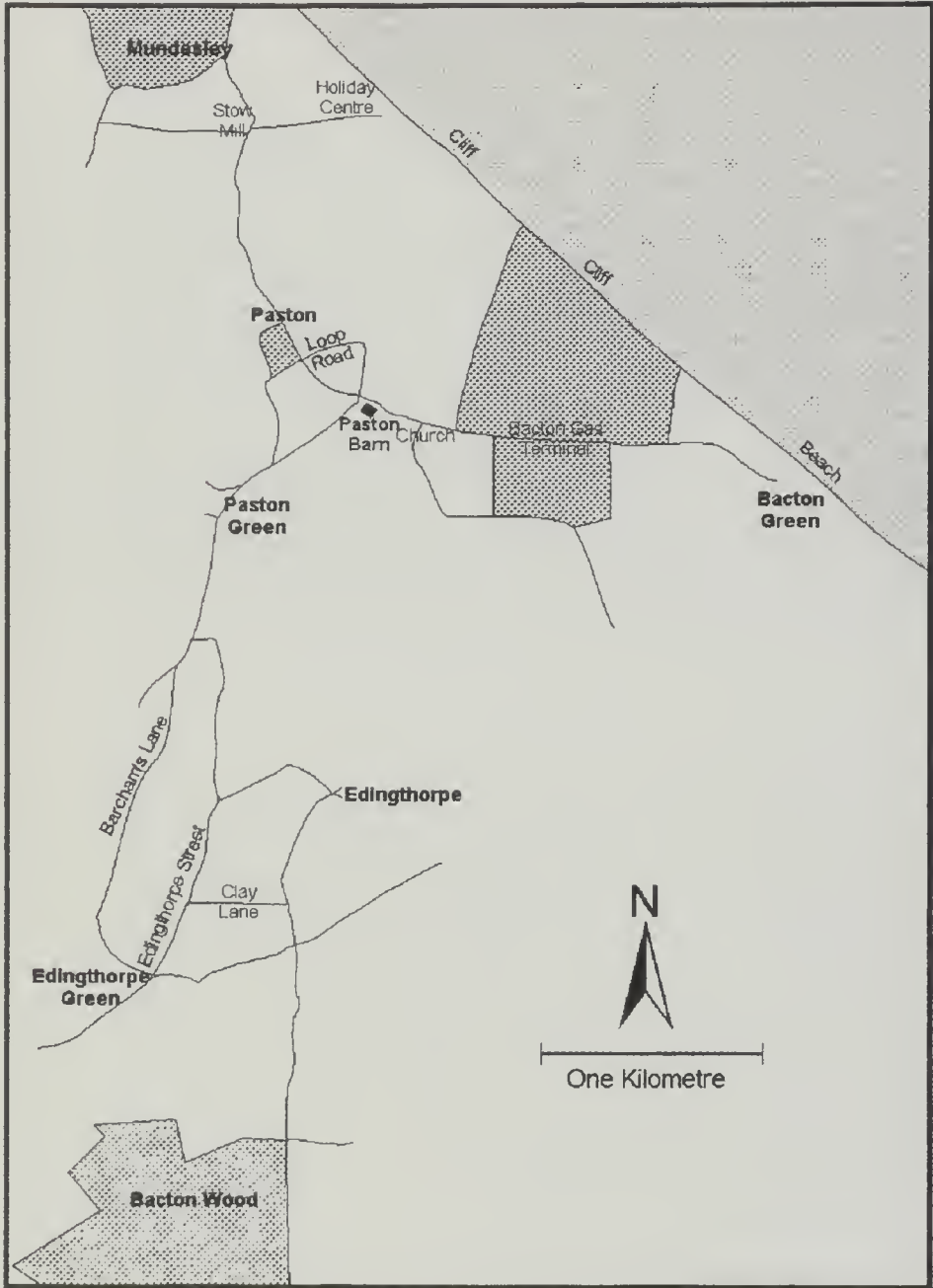
The following objectives were set for the work being carried out:

- 1 Identification of additional roost sites
- 2 Identification of key foraging areas
- 3 Identification of key flight lines
- 4 Identification of hibernation sites

Site Description and Designation

Paston Great Barn is located in the north east of the county between Bacton and Mundesley. It is thought to have been built in 1581 and comprises a central thatched barn approximately 70 metres long and 16 metres tall at its apex. This building is surrounded by lower outbuildings and open barns which have been added over the years. The barn is a Scheduled Ancient Monument and some adjacent buildings are Grade II* listed. The barn and surrounding area was notified as a Site of Special Scientific Interest (SSSI) in December 1999 and in February 2001 it became a candidate Special Area of Conservation (cSAC) due to the presence of breeding barbastelle bats. The barn is located just over 1km from the coast (parts of which are also notified as SSSIs) and it is within the Norfolk Coast Area of Outstanding Natural Beauty (AONB).

In addition to the barbastelle colony the barn is also known to be a summer roost location for 4 other species of bats; pipistrelle (both *Pipistrellus pipistrellus* and *P. pygmaeus*), brown long-eared (*Plecotus auritus*) and Natterer's (*Myotis nattereri*). Noctule bats (*Nyctalus noctula*) may also occur.



Methods and Equipment

Capture and Ringing

The main emergence points for barbastelles from the roost within the barn are from a gap in one of the large barn doors and also a window slit which opens into one of the adjacent open

fronted sheds. Observations on previous nights using bat detectors identified the main flight lines used by the bats. Mist nets and a harp trap were set across the flight lines within surrounding open fronted buildings before it got dark. The nets and trap were checked and emptied regularly during the main period of bat emergence and then removed to minimise any further disturbance of bat activity.

The species of all captured bats were recorded. In 2000 the weight (to within 0.5g), forearm length, sex, age and reproductive state of the barbastelles caught was noted. (In 1998 only the sex was recorded.) Barbastelle females were classified as juvenile or post-lactating adults. Barbastelle males were classified as juvenile or sexually active males. All barbastelles were ringed using Mammal Society rings.

Radio Tracking

In each seasons monitoring two adult bats weighing over 8g were fitted with radio transmitter tags. These tags, weighing 0.5g, were secured to the back of the bats using a non-toxic adhesive and had a battery life of approximately 14 days. After this time due to natural hair growth the tags fell off the bats.

Each tag transmits a pulsed radio signal on a fixed frequency approximately every 5 seconds. Signals from the tags were received using a receiver and 3 or 5 element Yagi aerial. The aerials were either hand held or mounted on carbon fibre extension poles through the sun roof of a vehicle. When the aerial was hand held the typical tag to aerial range was up to 0.75km over open ground and when the aerial was mounted on the extension poles the tag to aerial range increased to 3km over open ground. Prior to commencement of tracking the influence of topography on reception was checked by monitoring a tag fixed to a vehicle moving between known locations.

The bats were monitored every night whilst the tags remained operational, from 19.30 in the evening on emergence from the roost site to day break around 05.00 the next morning. Some daytime visits were also made to meet landowners and confirm locations of new roost sites.

Where possible the position of the bat was determined using triangulation and when not possible the location was estimated based on signal strength. In 2000 information relating to the activity of the bat was recorded regularly, ideally at 5 minute intervals throughout the monitoring period. (In 1998 observations were recorded at 15 minute intervals). The location of the observer, the location and direction of movement of the bat and an estimate of the confidence in the location of the bat were recorded. Confidence estimates were classified as Static (Bat in known roost location), High (location known to be within 50m of stated location, either flying or stationary), Low (location known to be within 200m of stated location) and V Low (location known to be within 500m of stated location).

On both occasions catching, ringing and tagging were undertaken by individuals with appropriate experience and English Nature licenses.

Observations

Trapping took place on 16th August in 1998 when a total of 20 bats of three species were caught, 14 of these were barbastelles. In 2000 eight bats were caught on 26th August but as these included only two juvenile barbastelles (considered unsuitable for radio tagging) a second trapping session took place on 29th August. On this occasion 34 bats of 5 species were caught which included 5 adult barbastelles and 7 juveniles.

In 1998 the two adult barbastelles caught were female and the sex of the juveniles was split 50/50. In 2000 one of the five adults caught was a male in breeding condition. This was

the first record of an adult male occurring at the barn. Of the juveniles 6 were male and three were female. The weight and forearm length measurements of this sample of the population (ranging from 8-10g and 36.5-40.3mm) indicated normal levels of development. As expected the females were larger and heavier than the males (see Appendix 1).

To distinguish between individuals the two females tracked in 1998 were identified as F1-98 (previously referred to as M) and F2-98 (previously J) and the male and female tracked in 2000 were identified as M1-00 and F1-00.

In 1998 tracking took place on nine nights, during the first four 2 tracking teams were involved allowing both bats to be monitored. The transmitter on F2-98 fell off prematurely after the fourth night, the transmitter on F1-98 was starting to fail when it fell off after the ninth night.

Tracking took place for 15 nights in 2000 with 2 teams tracking for the first two nights. Tracking on the final night was curtailed by fuel shortages, however the tags were not expected to remain active for much longer.

The barbastelles roosting in the barn flew up and down within the building for up to 10 minutes before actually emerging. The timing of the bats emergence from the roost was always after sunset but quite variable, no obvious link with weather conditions could be established but temperature and light levels on emergence were not measured.

F1-98 was active for over 6 hours on most nights, but the bat usually returned to the barn at some time during the night for an average of a hour each evening.

In 2000 the male barbastelle was not tracked returning to its tree roost location during the night time activity, however it was tracked to the barn on 5 occasions. The longest single period spent in the barn was 45 minutes. The visits appeared to reduce half way through the monitoring period and no visits were recorded over the last 7 nights of tracking.

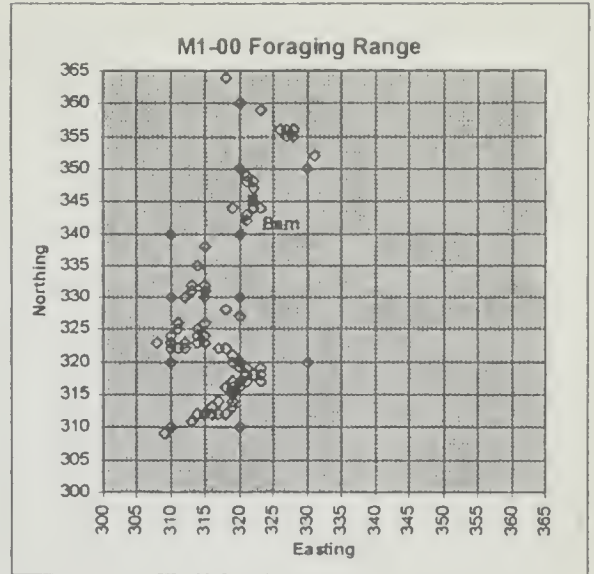
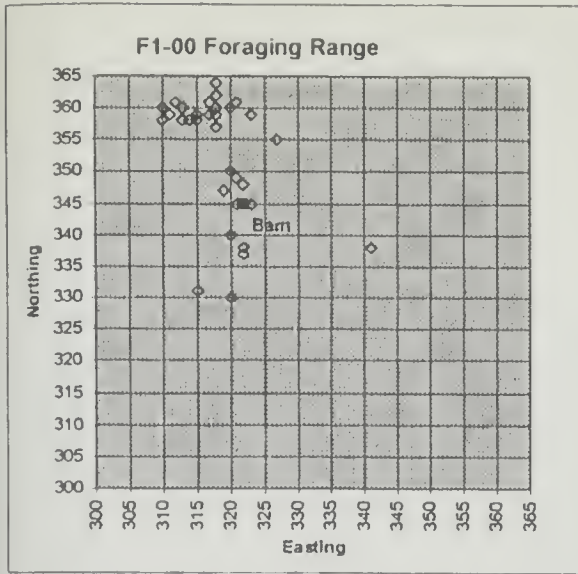
In both years the longest single continuous foraging period monitored was over two and a half hours.

The effect of prevailing weather conditions on the behaviour of the bats was noted on a number of occasions: On 31/08/00 the male was tracked flying in the rain in the shelter of overhanging trees/hedges for one hour. It then moved off to roost in the barn when the rainfall became particularly heavy. On one occasion (02/09/00) the female was tracked flying inland from the barn when particularly strong winds were blowing on the coast. On 07/09/00 both male and female were foraging along the cliffs with a light wind blowing from the land. Just after 01:30 fog came along the coast and both bats ceased feeding. The female returned to the barn, but later when the fog turned to rain it was rediscovered feeding in the shelter of trees. The male spent the majority of the night on 11/09/00 foraging under tree cover near to roost sites, conditions were dry but light with a full moon.

The female barbastelles were recorded travelling a maximum of 2.75km from their roost site to forage, in both 1998 and 2000. The male barbastelle was tracked foraging over 4.75km from it's roost location on a number of occasions, however it's main feeding areas were within 1.5km of its roost. In 1998 a bat was timed taking 3 minutes to cover 1.3 kilometres which equates to an approximate speed of 14 miles per hour.

The plot of grid referenees opposite illustrate the differences in range between the female and male bat tracked in 2000.

The total area of M1-00 foraging range is just over 7 km² whereas that of F1-00 is approximately 6.5km². However it should be borne in mind that bat activity is channelled along flight lines to suitable foraging locations within this range, generally avoiding the more open arable areas.



Interpretation of Results and Comparison with Objectives

Objective 1: Identification of additional roost sites

All the new daytime roosts found were being used by M1-00 and were located within mature trees. On no occasion was the male found to have remained in the barn during the daytime. The use of tree roosts by the male is a behaviour more typical of bats of both sexes in other barbastelle colonies which have been observed in Britain.

All radio tagged bats in both years were found to use the barn as a night roost location. On a few occasions M1-00 and F1-00 were both present at the same time and it is the only location where this is known to have occurred.

The two years tracking has still not provided evidence of any other daytime roost locations used by female barbastelles in the Bacton area, re-emphasising the importance of the Paston Great Barn site.

Table of New Roosts Confirmed by Radio Tracking

<i>Location</i>	<i>Type</i>	<i>Use</i>	<i>Used by</i>
Bacton Woods area	Cherry tree	Day Roost	M1-00
Bacton Woods area	Oak tree	Day Roost	M1-00
Paston Green roadside	Oak tree	Day Roost	M1-00
Clay Lane	Oak tree	Night	M1-00
Paston Barn	Building	Night	F1-98, F2-98, M1-00, F1-00

A number of additional night time roosts (or occasions when the bat was stationary) were identified during the tracking sessions but the locations have not been exactly pinpointed. At the Edingthorpe Street west location there were definitely other bats present although the species was not confirmed.

Table of Possible Roosts Identified by Radio Tracking

<i>Location</i>	<i>Probable type</i>	<i>Use</i>	<i>Used by</i>
Edingthorpe Street west	Building	Night/ Breeding?	M1-00
Edingthorpe Street east	Tree/Building	Night	M1-00
Water Lane	Tree/Building	Night	F2-98

Objective 2: Identification of key foraging areas

Monitoring in 1998 resulted in the surprising discovery that the coastline between Mundesley and Bacton gas terminal was an important foraging area for bats including barbastelles. It was found that bats F1-98 and F2-98 spent 58% of their observed foraging time in this area. The importance of this area was confirmed from monitoring bats F1-00 and M1-00 both of which also used this location. Monitoring of F1-00 and M1-00 also showed that the bats are feeding over the beach at low water as well as the grassy cliffs. In both years barbastelles were also tracked flying on the seaward side of the gas terminal. Previously it had not been anticipated that the bats would fly past the site as it is highly illuminated at night, however the lighting does not shine down the cliff side and the base of the cliff remains comparatively dark.

A number of other regularly used foraging areas were also identified:

Main Foraging Locations Identified by Radio Tracking

<i>Location</i>	<i>Type</i>	<i>Percentage use</i>	<i>Used by</i>
Cliff and Beach	Boulder clay cliff, rough grass, shingle sand marram grass, concrete	M1-00 12.7% F1-00 23.7% F1 and 2-98 58%	M1-00, F1-00, F1-98, F2-98
Churchyard and Hall Grounds	Part mown grass and overhanging trees	F1 and 2-98 28%	F1-98, F2-98
Fields by Holiday Centre/Stow Mill	Sugar beet field, rough grass, hedge lined path, pasture, overhanging trees	F1-00 14%	F1-00
Barcham's Lane, Edingthorpe Street	Hedge/ tree lined path and lane, pasture	M1-00 19.9% F1-00 0.4%	M1-00, F1-00
Bacton Wood area	Tree belts, tracks in woodland, hedge lines, rough grass, pasture	M1-00 26.7%	M1-00

Greater activity was noted around the churchyard in 1998 and around Stow Mill area in 2000 (however this may in part have been due to tracking techniques). A bat was only once tracked to the Bacton Wood area in 1998.

Objective 3: Identification of key flight lines

Due to the speed travelled by the bats and the limitations of the recording techniques (identifying a bats location once every 5 minutes) the recorded data could not be used to plot

flight-lines. However descriptions of the movement of tagged bats recorded by observers have confirmed a number of frequently used routes.

Bats flying from Paston Barn in the direction of Mundesley were tracked following a route parallel with the main road B1159 although not necessarily directly along it. The road is bordered by some sections of hedge, grass banks and gardens.

The southern section of the Loop Road in Paston village was a frequently used route to travel between Paston Barn and the coast. The lane is sunk between banks and hedges. The bats were tracked flying in the field beside the hedge; once the hedge cover ceased the bats flew directly over the open arable field to the cliff edge (a distance of approximately 800m).

A third route which was identified followed the road through Paston Green and along Barcham's Lane linking Paston Barn and Edingthorpe Green. The road and path are predominantly edged by trees, hedges and/or sunken between grassy banks. A recording of bat calls made part way along the path one night during the tracking period confirmed the presence of barbastelles in addition to both species of pipistrelle bat and Natterer's bat.

Objective 4: Identification of hibernation sites

Bats were not tracked to a hibernation site during the tracking period, however cellars were discovered about 3km from the barn which had potential to provide appropriate conditions for hibernating bats. Subsequent visits in January and February revealed the site was being used by Natterer's and Daubenton's bats but no barbastelle bats were observed.

Discussion

Hibernation Sites

Radio tracking investigations of the colony took place too early in the season to track individuals back to a hibernation site. Night time weather conditions were sufficiently warm enough to allow night flying insects to be active and the bats could feed for all of the night time period if wind and rain did not affect their activity.

Observations following the period of radio tracking revealed that barbastelles were still visible in crevices within the barn after September when they had dispersed from the maternity roost locations. Torpid barbastelle bats were still visible in the barn on the 30th November when the last visit in 2000 was made. In the New Year, weather conditions became colder with frosts and snow, and the bats had moved from their previous open roost location. A recording of bat calls on the 10th March 2001 confirmed the presence of barbastelles in the barn.

Barbastelles are considered quite a 'hardy' species, and can hibernate in above ground locations such as old buildings and in cracks in tree trunks until conditions become particularly cold when they resort to underground locations such as cellars and ice houses. Studies of a barbastelle colony at Baruther, Germany also record the presence of individuals overwintering in the same building used as a maternity colony (Doleh 1997).

It would appear, that for at least parts of the winter period the barn provides suitably stable temperature and relative humidity conditions required by hibernating barbastelles, Natterer's and pipistrelles.

Use of Paston Great Barn as mating site

Prior to the trapping of a sexually active adult male in 2000, Paston Great Barn had only been considered a maternity roost and most of the monitoring at the site has concentrated on this aspect. (Parsons & Goldsmith 1998, Parsons & Hutson 1999 and 2000.)

Little research appears to have taken place about the mating process in barbastelles. It is generally assumed that mating occurs in late summer and early autumn (which includes the period of our radio tracking studies) and possibly on occasions during the winter.

The presence of bat M1-00 in the barn on five occasions over a period of seven nights at the start of the monitoring period, in conjunction with its total avoidance of the site as a day roost, could suggest the possible use of the site for mating. Further evidence for this includes the length of the visits - between 20 and 40 minutes, compared with other night time roosts which were always visited for shorter periods, and the continued presence of adult females at the barn after the young were flying and the colony had dispersed.

Reference has been made to a disused magnetite mine in the Swiss Alps being used as a mating site (Sierro 1999) but little is generally known about the environmental requirements barbastelles have for mating sites. The size and extent of the barn does provide a range of micro-environments, from cracks and fissures in stonework to holes in woodwork, and it is possible that one of these environments meets these mating requirements.

Selection of Foraging Locations

The foraging range of the female barbastelles tracked in both years, centred on the barn and did not usually exceed 3km. The range of the male extended over 5 km with two centres of activity; the first around the roost locations to the south, and the second around the barn and the coast to the north. The foraging areas of all the tracked bats overlapped to some degree but where two bats were feeding at the same time (on the cliffs for example) they appeared to confine their activity within discrete areas and did not overlap.

Radio tracking studies in West Sussex have shown bats travelling up to 18 km, and individuals having discrete foraging areas, however these observations were made in the summer when the females were hunting to find sufficient food to sustain themselves and their young. Observations of the same colony in the winter showed foraging distances reduced to 2km around the roost location (Greenaway 2001). All radio tracking of bats from Paston Great Barn has been carried out in late August and early September. It is not known if the observed range of forage locations is typical of those used by the bats throughout the remainder of the year. Unless individuals from the Paston colony are radio tagged and tracked at other times of year it cannot be assumed that these are the only foraging areas used by these bats.

The types of habitat in which the bats from the Paston colony were foraging ranged from woodland, and tree lined lanes and paths, to grassy cliffs and beaches. Barbastelles tracked in the Swiss Alps have been found foraging predominantly above pine woodland (Sierro 1999). Individuals tracked from the West Sussex colony were found to be consistently foraging within 250m of a watercourse (Greenaway 2001) and an individual from the barbastelle colony in Somerset has been tracked foraging over scrub moorland and gardens (G Billington, pers obs).

In contrast to this apparent diversity of habitat, it has been established that the diet of barbastelles is quite specialised, consisting predominantly of micro moths (Rydell *et al.*, 1996). These findings have been confirmed by some preliminary studies of barbastelle droppings collected from the barn between June and August in 1997 (See Appendix 2). In all of the samples analysed *Lepidoptera* (moths) formed a major element of the prey items identified. At the end of June, moths appeared to be a particularly large component of the diet, but by the end of August *Chrysopidae* (lacewings) appeared to be of equal importance. *Scathophagidae* (dung flies) and *Tipulidae* (crane flies) occurred in all samples, as did *Arachnida* (spiders). The presence of the latter, indicates that barbastelles may occasionally glean prey as well as catch flying insects (possibly within the roost). It has been suggested that barbastelles cannot bite through the hard covering of beetles because of their weak jaws, however, beetle remains were identified in some of the analysed droppings.

On 24 July 1999 members of the Norfolk Moth Survey set up moth traps on the cliff

where the barbastelles were known to forage. Seven traps were monitored between dusk and 2.00am to establish what night flying invertebrates might be present. This work identified over 100 species of moth in a single nights trapping. Further work needs to be undertaken to investigate micro moth availability in known barbastelle foraging locations to increase understanding of the comparative invertebrate flora of different habitat types.

A comparison of vegetation habitat types used by barbastelles in the North Norfolk and West Sussex colonies may also provide additional useful information, as would monitoring the forage behaviour of barbastelles by radio tracking at different times of the year.

References

- Greenaway, F 2001. The barbastelle in Britain. British Wildlife, *in press*.
- Doleh, D, Thiele, K, Teubner, J and Teubner, J 1997. Beobachtungen an einer Wochenstube der Mopsfledermaus, *Barbastella barbastellus* (Schreber 1771). Nactylus (N F), Berlin 6 (1997), Heft 3, S.211-213.
- Parsons, S M and Goldsmith, J 1999. Barbastelle Bats at Paston Barn, Norfolk. The Norfolk Bat Group.
- Parsons, S M and Hutson, A M 1999. Behaviour of Barbastelle Bats (*Barbastella barbastellus*) at Paston Barn, Norfolk. The Bat Conservation Trust, London.
- Parsons, S M and Hutson, A M 2000. Behaviour of Barbastelle Bats (*Barbastella barbastellus*) at Paston Barn, Norfolk. The Bat Conservation Trust, London.
- Rydelle, J, Natuschke, G, Theiler, G and Zingg, P E 1996. Food habits of the barbastelle bat *Barbastella barbastellus*. *Ecography* **19**: 62-66.
- Sierro, A 1999. Habitat selection by barbastelle bats (*Barbastella barbastellus*) in the Swiss Alps (Valais). *Journal of Zoology*, London, **248**: 429-432.

Acknowledgements

Norfolk Bat Group Members: Norfolk Moth Survey Members: English Nature staff in Norwich and Peterborough: North Norfolk Historic Buildings Trust: Mundesley Holiday Centre: Geoff Billington: Frank Greenaway: Bill Landells: Mark Robinson: Caroline Shiel: Maurice Webber: Nick Woods: Other individuals who have allowed access on to their land.

Dedicated to the memory of Kim Dyble

Appendix 1: Biometric Data

Date	Time	Species	Sex	Age	Weight (gms)	F arm length	Ring No	Net location and Other Comments
1998								
16/08	21:00							Ringling females right males left. 2 adults 14 juv Barbs
16/08		Barbastelle	F	Adult			T6214	13 day tag 173-237 223-1163 "J"
16/08		Barbastelle	M	Juv			T6215	
16/08		Barbastelle	F	Juv			T6216	
16/08		Barbastelle	M	Juv			T6217	
16/08		Barbastelle	F	Juv			T6218	
16/08		Barbastelle	F	Juv			T6219	
16/08		Barbastelle	F	Juv			T6220	
16/08		Barbastelle	F	Juv			T6221	

16/08	Barbastelle	F	Juv				T6222	
16/08	Barbastelle	M	Juv				T6223	
16/08	Barbastelle	M	Juv				T6224	
16/08	Barbastelle	F	Adult				T6225	9 day tag 173-273 320-1162 "M"
16/08	Barbastelle	M	Juv				T6226	
16/08	Barbastelle	M	Juv				T6227	
16/08	Barbastelle	F	Juv				T6228	
16/08	Barbastelle	M	Juv				T6229	
16/08	B long-eared	F	Adult				T6248	
16/08	B long-eared	F	Adult				T6249	
16/08	Pipistrelle	M	Adult				T6213	45?
16/08	Pipistrelle	M	Adult					45? Not ringed
2000								
26/08	23:20							Ringing males right females left Two juv barbs
26/08		B long-eared						
26/08		B long-eared						
26/08	23:50	B long-eared	M	Adult				
26/08	23:20	Barbastelle	M	Juv	8.3	38.6	T9210	
26/08	23:50	Barbastelle	F	Juv	8.5	39.4	T9211	
26/08		Natterer's						
26/08	23:20	Pipistrelle	F					
26/08	23:50	Pipistrelle	M	Adult				
29/08								Ringing males right females left Five adults (one male). Barbs 7 juv. Barbs
29/08		Barbastelle	F	Adult	9.5	39	T6221	Harp trap southern barn door. Retrap from 1998
29/08		Barbastelle	M	Juv	8.5	37.4	T9212	End southern courtyard
29/08		Barbastelle	M	Juv	8	36.5	T9213	Central wing, north side
29/08		Barbastelle	M	Juv	8.5	40.3	T9214	Southern courtyard. Nycteribid removed. Large fore-arm
29/08		Barbastelle	F	Juv	8.5	39.8	T9215	End southern courtyard
29/08		Barbastelle	F	Adult	8.5	37.9	T9216	Central wing, south side. 13 day tag 173-350
29/08		Barbastelle	M	Juv	8	36.9	T9217	Central wing, south side
29/08		Barbastelle	F	Adult	9.5	39.3	T9218	Central wing, south side
29/08		Barbastelle	F	Adult	9	39.1	T9219	Central wing, south side. Damage (healed) to third finger
29/08		Barbastelle	F	Juv	8.5	39.8	T9220	Wall between buildings to south
29/08		Barbastelle	M	Juv	8	37.4	T9221	Harp trap in front of southern barn door
29/08		Barbastelle	F	Adult	10	40.2	T9222	Central wing, north side. 13 day tag 173-318
29/08		B long-eared						Leading to church
29/08		B long-eared	M	Adult				Leading to church. Damaged thumb
29/08		B long-eared	F	Juv				Harp trap in front of southern barn door
29/08		B long-eared	F	Juv				Harp trap in front of southern barn door
29/08		B long-eared		Juv				Harp trap in front of southern barn door. Not checked
29/08		Natterer's	F	Adult				Leading to church
29/08		Natterer's	M	Juv				Wall between buildings to south
29/08		Natterer's	F	Juv				Wall between buildings to south

29/08	Natterer's	F	Juv	Wall between buildings to south
29/08	Natterer's	F	Juv	Wall between buildings to south
29/08	Natterer's	F	Juv	Wall between buildings to south
29/08	Natterer's	F	Juv	Wall between buildings to south
29/08	Natterer's	F	Juv	Wall between buildings to south
29/08	Natterer's	F	Adult	Harp trap in front of southern barn door
29/08	Natterer's	F	Juv	Harp trap in front of southern barn door
29/08	Natterer's	F	Juv	Harp trap in front of southern barn door
29/08	Natterer's	F	Juv	Harp trap in front of southern barn door
29/08	Natterer's	F	Juv	Harp trap in front of southern barn door
29/08	Natterer's	F	Juv	Harp trap in front of southern barn door
29/08	Pipistrelle	F	Adult	55 Wall between buildings to south
29/08	Pipistrelle	M	Adult	45 Harp trap in front of southern barn door
29/08	Pipistrelle	M		Harp trap in front of southern barn door

Appendix 2: Dietary Analysis 1997

<i>Prey Category</i>		<i>June 24-28</i>	<i>28 Jun- 11 Jul</i>	<i>11 Jul- 2 Aug</i>	<i>Aug 2-15</i>	<i>Aug 15-23</i>
Delphacidae	plant hopper	0	0	0	0.31	1.53
Hemerobiidae	brown lacewing	0	0	3.55	0	1.74
Chrysopidae	green lacewing	1.4	9.73	34.8	48	48.15
Scarabaeoidea	(dung?) beetle	0	9.09	2.03	0.61	0
Unidentified Beetle	beetle	0	0.8	0	0	0
Tipulidae	crane fly	0.93	1.44	4.9	2.35	2.4
Anisopodidae	gnat	0	3.51	0.51	0.1	0
Culicidae	mosquito	1.87	0	0	0	0
Syrphidae	hoverfly	0.47	0	3.55	4.2	0
Sphaeroceridae	small dung fly	0	0	0	0	0.87
Scathophagidae	dung fly	2.34	0.16	0.84	0.61	1.74
Unidentified Diptera	fly	0	2.23	0.84	1.23	0.44
Lepidoptera	moth	91.12	71.61	47.64	39.2	41.18
Unidentified Trichoptera	caddisfly	0	0.8	0	0	0
Arachnida	spider	1.87	0.48	1.35	3.38	1.74
Acari	mite	0	0.16	0	0	0.22
Totals		100	100.01	100.01	99.99	100.01
Number of pellets		20	40	40	40	40

The figures given here are 'percentage items'. The number of items in the faecal pellets attributed to each prey taxon is expressed as a percentage of the total number of identifiable fragments of all taxa, ignoring items which could not be identified (total = 100%)

Mention of any locations in this report do not confer a right of entry.

Birdline East Anglia



09068
700 245

Listen to the latest East Anglian & UK rare bird news,
by dialling **09068 700 245**

Please report your sightings to freephone
0800 083 0803 or **01603 763388**

You can fast forward to different parts of the bird news
broadcast on Birdline East Anglia. Simply press the **star**
button on your telephone followed by the numbers indicated
below, while listening to any part of our message

Today's UK rare bird news press	12
Yesterday's UK rare bird news	16
Essex bird news only	17
Cambridgeshire bird news only	18
Bedfordshire bird news only	19
Yesterday's East Anglia bird news	14

www.birdnews.co.uk

www.birdlineeastanglia.co.uk

online soon

CALLS TO 09068 NO CHARGED AT 60P/MIN



Harlequin Pictures

Birds, Wildlife, Nature and Landscape Photographs

Wildlife transparencies, inc plants, by Robin Chittenden
Competitive reproduction rates, no search fees.

Beautiful photographs, tastefully framed, for sale

For a species list, UK rare bird print list and a list of
fabulous framed photographs including exhibition details
please contact us

Harlequin Pictures, PO Box 740, Norwich, NR2 3SH.

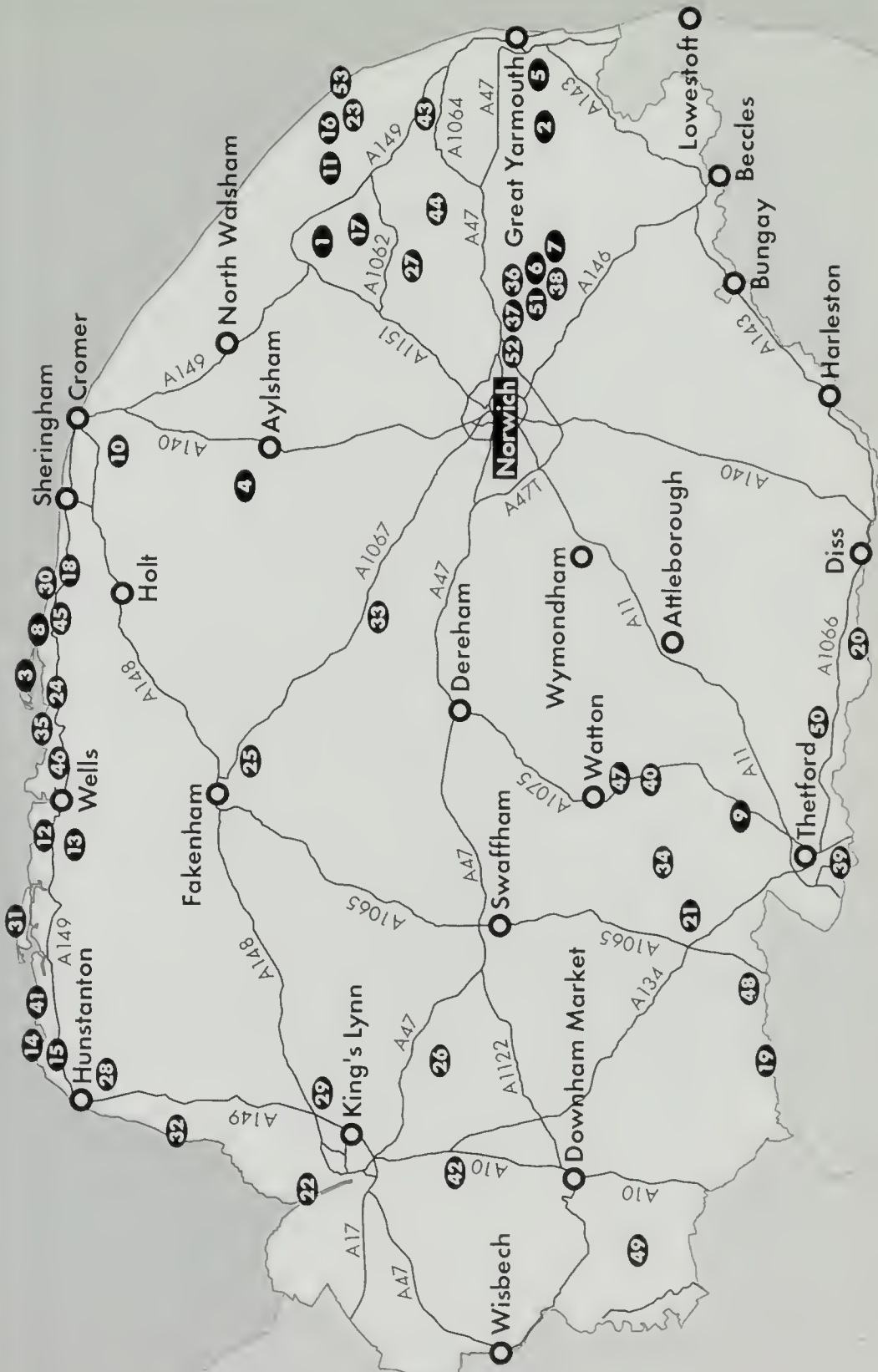
Telephone **01603 633326** email chittenden.rob@virgin.net

www.harlequinpictures.co.uk online soon

Principal Sites and Reserves

1	Barton Broad	NWT	21	Lynford Arboretum		41	Titchwell Marsh	RSPB
2	Berney Marshes	RSPB	22	Lynn Point		42	Tottenham GP	
3	Blakeney Point	NT	23	Martham Broad	NWT	43	Trinity Broads:	BA
4	Blickling Park	NT	24	Morston/Stiffkey Marshes	NT		Filby Broad	
5	Breydon Water	LNR	25	Penshorpe	PWT		Lily Broad	
6	Buckenham/Cantley Marshes	RSPB	26	Pentney GP			Ormesby Broad	
7	Cantley Beet Factory	BS	27	Ranworth/Cockshoot Broads	NWT		Ormesby Little Broad	
8	Cley Marsh	NWT	28	Ringstead Downs	NWT		Rollesby Broad	
9	East Wretham Heath	NWT	29	Roydon Common	NWT	44	Upton Fen	NWT
10	Felbrigg Park	NT	30	Salthouse Marshes	NWT	45	Walsey Hills	NOA
11	Hickling Broad	NWT	31	Scolt Head Island	EN	46	Warham Greens	EN
12	Holkham NNR	EN	32	Snettisham Pits	RSPB	47	Wayland Wood	NWT
13	Holkham Park	HE	33	Sparham Pools	NWT	48	Weeting Heath	NWT
14	Holme Bird Observatory	NOA	34	Stanford Training Area (TA)		49	Welney Washes	W&WT
15	Holme Dunes	NWT	35	Stiffkey Fen		50	West Harling	
16	Horsley Mere	NT	36	Strumpshaw Fen	RSPB	51	Wheatfen	TET
17	How Hill	BA	37	Surlingham Broad	NWT	52	Whittingham Lane GP	
18	Kelling WM		38	Surlingham/Rockland Marshes	RSPB	53	Winterton Dunes	EN
19	Lakenheath Washes	RSPB	39	Thetford Nunnery Lakes	BTO			
20	Lopham Fen	SWT	40	Thompson Water	NWT			

BA	=	Broads Authority	NT	=	National Trust
BTO	=	British Trust for Ornithology	NWT	=	Norfolk Wildlife Trust
BS	=	British Sugar	PWT	=	Penshorpe Waterfowl Trust
EN	=	English Nature	RSPB	=	Royal Society for Protection of Birds
HE	=	Holkham Estate	SWT	=	Suffolk Wildlife Trust
LNR	=	Local Nature Reserve	TET	=	Ted Ellis Trust
NOA	=	Norfolk Ornithologists Association	W&WT	=	Wildfowl & Wetlands Trust





Price
£8.00